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What Deters and Why

Applying a Framework to Assess Deterrence of Gray
Zone Aggression



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Preface

This report documents research and analysis conducted as part of a project entitled *What Deters and Why: North Korea and Russia*, sponsored by the Office of the Deputy Chief of Staff, G-3/5/7, U.S. Army. The purposes of the project were (1) to provide the Army with improved and new frameworks for evaluating the deterrence of aggressor activities for both interstate aggression and aggression short of that threshold and (2) to apply those two frameworks to assess the United States' conventional and nonconventional deterrence relationships with Russia and North Korea. In the latter case, for comparative purposes, the authors also examine U.S. efforts to deter Chinese aggression.

The research and writing for this report were completed in mid-2019. Events and developments since that time are not captured in this narrative. However, although some facts may have changed or new circumstances developed, we believe that the general interpretations, findings, and recommendations remain valid.

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Summary

The research reported here was completed in July 2019, followed by security review by the sponsor and the Office of the Chief of Public Affairs, with final sign-off in March 2021.

The challenge of deterring major conventional aggression is taking on renewed importance in an era of strategic competition. But the nature of that competition, which is primarily playing out below the threshold of major war (at least so far), has created a more immediate and persistent challenge for deterrence: the rise of gray zone aggression, as opposed to conventional interstate aggression. We define *gray zone aggression* as an integrated campaign to achieve political objectives while remaining below the threshold of outright warfare. Typically, such campaigns involve the gradual application of instruments of power to achieve incremental progress without triggering a decisive military response.¹

To help establish how to deter gray zone aggression, we first identified its unique characteristics. Eight distinctive characteristics of gray zone activities are as follows:

1. falls below the threshold for military response
2. unfolds gradually
3. is not attributable
4. uses legal and political justifications
5. threatens only secondary national interests
6. has state sponsorship
7. uses mostly nonmilitary tools
8. exploits weaknesses and vulnerabilities in targeted countries and societies.

In addition, we developed a framework for assessing the health of deterrence in the gray zone. Because many low-end (less-aggressive) gray zone activities cannot be deterred, we identified criteria for deterring high-end (more-aggressive) gray zone activities. Eight general categories of criteria for deterring high-end gray zone aggression are as follows:

1. intensity of the aggressor's motivations
2. attribution of the aggressor's role

¹ The research and writing for this report were completed in mid-2019. Events and developments since that time are not captured in this narrative. However, although some facts may have changed or new circumstances developed, we believe that the general interpretations, findings, and recommendations remain valid.

3. level of aggression
4. U.S. and partner alignment on unacceptable outcomes
5. U.S. and partner alignment on deterrent responses
6. U.S. and partner proportionate response capabilities
7. regional and global support for deterrence
8. the aggressor's expectation of meaningful responses.

Using the eight categories of criteria for deterring high-end gray zone aggression, we considered specific deterrence requirements that might apply to the three countries of focus in this analysis: China, Russia, and North Korea. We assessed the status of the current U.S. and allied deterrent postures against gray zone aggression by each of these countries, the prospects for strengthening the three deterrent postures, and the implications for the U.S. Army.

Deterring China's Gray Zone Aggression Against the Senkaku Islands

Applying the assessment framework to the case of Chinese aggression in the Senkaku Islands highlights strengths and weaknesses of the U.S. and Japanese deterrence message and posture for that territory. Table S.1 summarizes the assessment for each category of criteria. The color-coding of each category represents our judgment of the level of deterrence based on the evidence gathered in the research. Green represents strong deterrence—clear evidence that the specific criterion is being met. Gray represents mixed deterrence—some evidence that there may be holes or challenges in how well the criterion is being met. And red represents weak deterrence—clear evidence that the criterion is not being met in important ways.

As identified in the table, China's national interest in the Senkaku Islands is extremely high and nonnegotiable. However, its motivation to use force to take these islands appears to be very low, suggesting that Japan's current deterrence posture might be sufficient to prevent a Chinese attack. China is dissatisfied with the status quo and the strategic environment, but there is no indication that it feels any sense of urgency or desperation to act.

China's aggressive role can be clearly identified and proved in most activity around the islands. China has acquired a reputation for bending international legal norms and conducting hostile gray zone aggression in both the East and South China Seas. Although China tends to rely on state-owned assets to harass Japan, it occasionally employs irregular forces that blur attribution.

The actions that China has taken against Japan do not necessarily represent a territorial change in the status quo, but the actions directly encroach on Japan's territorial integrity. China's salami-slicing actions are meant to call into question Japan's administrative control of the islands.

Table S.1
Assessment of High-End Gray Zone Deterrence: Chinese Aggression Against the Senkaku Islands

Criterion	Level of Deterrence	Details
1 Intensity of the aggressor's motivations	Mixed	China has strong, nonnegotiable interests in the islands but exhibits no sense of urgency to act.
2 Attribution of the aggressor's role	Mixed	China openly claims the islands and has a regular presence of coast guard ships operating near the islands. There is increasing Chinese military activity, including that of irregular forces, in the waters and air around the islands and in other places around Japan.
3 Level of aggression	Mixed	China's actions do not attempt a physical change in territory, but they directly encroach on Japan's territorial integrity. China's actions are meant to undermine Japanese administrative control.
4 U.S. and partner alignment on unacceptable outcomes	Strong	Tokyo provides clear statements on its commitment to the islands. There is clear U.S. messaging on its commitment to the U.S.-Japanese alliance and on the fact that the nations' security treaty applies to the islands.
5 U.S. and partner alignment on deterrent responses	Mixed	The United States and Japan are strongly aligned in their opposition to Chinese behavior. Despite the creation of an institutional mechanism to deal with Chinese aggression—including gray zone activities—the allies have no history of combined responses to provocations anywhere in the world. Japan is bolstering its defenses, but the Japan Self-Defense Forces have never engaged in any combat.
6 U.S. and partner proportionate response capabilities	Strong	U.S. forces are forward-based in Japan. The United States and Japan have an extensive suite of capabilities in all domains. Japan's systems across all domains are well developed and postured for rapid responses to Chinese gray zone activity around the islands. There are no clearly identified gaps that would tempt gray zone aggression.
7 Regional and global support for deterrence	Strong	The United States and Japan are able to leverage regional dissatisfaction with China's actions elsewhere in Asia, particularly among South China Sea littoral states that also view Chinese behavior as illegal and bullying.
8 Aggressor's expectation of meaningful responses	Strong	It is unclear whether the U.S.-Japanese interaction has created an expectation of responses in China, but the interaction has served to force Chinese planners to consider possible U.S. involvement.

It is unclear whether the United States and Japan have specific and agreed-upon decisions about outcomes that they will not accept, but there are clear outcomes that Japan will not accept. Tokyo has issued clear and consistent statements signaling its firm defense of its territory, has sent clear signals on its ability to back up its interests through a considerable buildup of defense assets, and has declared a policy of a 100-percent response to Chinese activity around the islands.

The United States and Japan are fully aligned on the need to respond to Chinese high-end gray zone provocations, speak the same language on the security treaty covering the islands, share coordinating mechanisms designed to respond to gray zone activities, and conduct several exercises to improve their ability to conduct a joint amphibious operation. Despite all this, it is not clear whether the allies are fully aligned on the means of responding to Chinese provocations; they lack any history of combined responses to provocations.

With U.S. forces forward-deployed in Japan and Japan bolstering its force posture and capabilities to respond to China's gray zone activities, the allies have proportionate means of rapidly responding. Because China's activity takes place below a threshold of force, however, responses to Chinese actions have been taken by Japan alone. Should the actions escalate to conflict, Japan has scalable and flexible response options available and can quickly respond. With U.S. forces stationed in Japan, it is assumed that the United States can do the same, but there is nothing explicitly demonstrating this availability.

One of the greatest strengths for the United States and Japan is their ability to generate significant regional and global support for their response options. Because China's actions elsewhere in Asia are viewed skeptically by states that see its behavior as illegal and bullying, China faces difficulty in trying to generate any legal or political basis for action that could strengthen its case against Japan. The support among other nations also means that China does not control the narrative.

It is unclear whether the history of interaction has created an expectation of responses to high-end gray zone acts. But, given the history of the United States and Japan becoming more aligned in their opposition to Chinese activities and the history of efforts to bolster their alliance, China has been forced to consider possible U.S. involvement against any possible high-end gray zone act. This fact disturbs Beijing. Yet there is little evidence that the interaction has fostered an expectation in Beijing of meaningful, decisive responses. On the contrary, Chinese statements tend to suggest a long view that historical wrongs will be righted.

Detering Russia's Gray Zone Aggression Against the Baltic States

Applying the framework to the case of Russian aggression in the Baltic states highlights strengths and weaknesses of the Baltic and North Atlantic Treaty Organization (NATO) deterrence message. Table S.2 summarizes our assessment.

The table shows a deterrent picture of mixed effectiveness, with only two indicators in green: (1) the absence of motivations so extreme, on the part of Russia, that it would feel compelled to use high-end gray zone attacks and (2) the availability of proportionate means of rapidly responding with military or nonmilitary means. Half of the eight indicators are gray, indicating mixed effectiveness: Attribution largely depends on

Table S.2
Assessment of High-End Gray Zone Deterrence: Russian Aggression Against the Baltic States

Criterion	Level of Deterrence	Details
1 Intensity of the aggressor's motivations	Strong	Russia appears unlikely to take risks to gain an advantage in any country that it does not consider to be an essential national interest, especially because it can resort to a whole range of lower-level gray zone measures instead.
2 Attribution of the aggressor's role	Mixed	Attributability depends to a great extent on the type of attack being carried out and the individual characteristics of the attack. Because Russia has both the means and the motives to carry out high-end gray zone attacks in the Baltic states, it is a prime suspect when such attacks happen. However, Russia simply having these capabilities and inclinations might not provide sufficient grounding for the Baltic states, the United States, or NATO to launch a meaningful response and to secure broader support for it.
3 Level of aggression	Mixed	Most of Russia's high-end gray zone activities examined here meet this criterion for deterrence, but a small subset of these activities—particularly cyberattacks—create neither a physical change in the status quo nor an encroachment on territorial integrity.
4 U.S. and partner alignment on unacceptable outcomes	Weak	The Baltic states and the United States have been communicating almost exclusively about conventional threats. With regard to high-end gray zone acts, there have been no clear and consistent statements about which outcomes would be considered unacceptable, and there is no evidence that the parties agree on what they are trying to deter.
5 U.S. and partner alignment on deterrent responses	Weak	The Baltic states and their NATO allies have not made clear how they would respond to high-end gray zone acts. Targeted states will be largely responsible for crafting a response and might ask for support from their allies on an ad hoc basis. This provides the targeted states with some degree of flexibility to provide the most appropriate response, but it muddles the deterrent message to Russia.
6 U.S. and partner proportionate response capabilities	Strong	The range of responses to gray zone attacks is about as wide as the range of gray zone attacks themselves.
7 Regional and global support for deterrence	Mixed	There is some evidence that retaliation against Russia can garner significant regional and global support. Yet such support will likely be provided on a case-by-case basis. Any perception of the United States overreacting against Russia or overreaching in the internal affairs of an ally might backfire and potentially threaten ally solidarity.
8 Aggressor's expectation of meaningful responses	Mixed	Although responses to the gray zone attacks themselves have hardly been meaningful, they have prompted the development of additional capabilities and defense mechanisms, making future attacks more difficult. They have also created a sense of threat over the Baltic states that has led to further conventional reinforcements—a negative development from Moscow's viewpoint.

the type of attack that is carried out; some attacks might be more difficult to identify than others; regional and global support for responses to the attacks will likely come on a case-by-case basis; and past responses to Russia's gray zone attacks will likely give it a sense of impunity, although the long-term effects overall will reduce Russia's leverage on the Baltic states and shift the European balance of power away from Russia.

Two indicators are in red, indicating a failure of deterrence: The United States and its local partners have not clearly communicated which outcomes they will not accept, making it unclear what they are trying to deter. In addition, there does not appear to be much coordination, or even a common understanding, of the type of actions that the allies will take in response to an attack. In short, Russia is not being told what it cannot do or what the price will be for doing it. Yet maintaining some uncertainty has its benefits. NATO mentioned that aggressive actions might trigger collective defense but did not communicate clear thresholds for such action, which keeps Moscow guessing about how far it can safely go.

Overall, this assessment of mixed deterrence effectiveness reflects the general difficulty of deterring high-end gray zone attacks. While it is easy for states or sets of allies to know what they are trying to prevent with interstate aggression, it is much more challenging to pinpoint exactly what needs to be prevented in the gray zone and to distinguish between what is worth deterring and what is not. If the deterrent message is too broad, it will not be effective because the United States or NATO cannot commit to stopping all gray zone threats. If the message is too specific, Russia will easily circumvent it by employing different methods to achieve the same political or strategic objectives.

The focus of the United States and NATO has been to help states help themselves—a choice that recognizes that gray zone attacks often touch on sensitive issues that targeted states might prefer to handle themselves anyway. Interference by the United States or NATO might also backfire by creating internal discontent and calling into question the ability of national governments to handle their own issues, potentially triggering precisely the type of social or political destabilization that Russia hopes to achieve.

Making the Baltic states more resilient can be accomplished through several means. Improving the resilience of computer systems and critical infrastructure can help protect against cyberattacks. The manipulation of Russian minorities by pro-Kremlin propaganda might be preempted through targeted communication campaigns or through the adoption of political, economic, or social measures to build the loyalties of these minorities to the central government. If the Baltic states make themselves less attractive targets for high-end gray zone attacks, Russia might reconsider the benefit of using these methods at all, for they have so far failed to translate into major political or strategic benefits for Moscow. Even in eastern Ukraine, employing these methods did not allow Russia to fulfill its objectives while remaining below the threshold of war.

In the Baltic states, Russia's use of high-end gray zone attacks only helped convince NATO that serious reassurance measures were warranted and brought back to

Europe some of the U.S. forces that had left in the decade following the end of the Cold War. Employing gray zone methods also led to increased military engagement on the part of various NATO members and an overall increase in NATO members' defense expenditures by almost 5 percent between 2016 and 2017. If high-end gray zone attacks, from Moscow's viewpoint, are not particularly effective, risk backfiring, and are made harder by more-resilient societies, then there will be little incentive for Russia to continue resorting to these tactics to pursue its strategic goals.

Deterring North Korea's Gray Zone Aggression Against South Korea

Applying the framework to the case of North Korea's aggression against South Korea highlights strengths and weaknesses of South Korean and U.S. deterrence posture. Table S.3 summarizes our assessment.

Overall, Table S.3 depicts a moderately effective deterrence posture on the Korean Peninsula. From a diplomatic and messaging standpoint, two of the most important elements of this posture are ensuring and maintaining the close alignment between the United States and South Korea and their commitment to respond to aggressive gray zone actions. To the degree that the allies can present a unified front about which actions will not be tolerated and which actions will be taken in response, the allies can lay a strong foundation for deterrence.

The experience since 2010 provides some hope that the scope of North Korean gray zone aggression can be bounded by a strong South Korean commitment to respond. Although it would be dangerous to make overly optimistic assumptions about the degree to which the powerful South Korean posture of disproportionate retaliation has been key in preventing more episodes like the 2010 sinking of the *Cheonan* warship, there is at least some possible causal relationship between the two.

On the other hand, North Korean provocations are also tied to broader geopolitical realities, including the status of inter-Korean relations. For the moment, North Korean leader Kim Jong Un has been on a charm offensive to reduce tensions with the Moon Jae-in administration and, presumably, set the stage for boosted economic contacts between the two nations. In such an environment, new high-end gray zone aggression seems unlikely, but these motives could change quickly.

This assessment also underscores that a U.S. forward presence is valuable to providing on-the-ground capabilities that reinforce the deterrent messages. It points to the equal importance of training, exercising, and advising, as well as arms sales and other forms of deep cooperation that help the United States reinforce South Korean capabilities, including against gray zone activities. And the assessment reemphasizes the range of capabilities that could be required to deter aggression in this region—a reality that demands a broad mosaic of ground force capabilities for the gray zone.

Table S.3
Assessment of High-End Gray Zone Deterrence: North Korean Aggression Against South Korea

Criterion	Level of Deterrence	Details
1 Intensity of the aggressor's motivations	Mixed	North Korea's motives for aggression are minimal; there is no sense of desperation. However, gray zone provocations can be the result of domestic political incentives, which can change rapidly.
2 Attribution of the aggressor's role	Strong	Many North Korean gray zone actions are too obvious to conceal. Past instances (e.g., Cheonan sinking, Sony Pictures cyberattack) might suggest to North Korea that it will have a hard time concealing its role in gray zone actions, but the activities of local commanders and proxies could cloud its role.
3 Level of aggression	Strong	Key gray zone options for North Korea are very aggressive and risk significant escalation.
4 U.S. and partner alignment on unacceptable outcomes	Strong	Clear messaging abounds on the commitment to the U.S.–South Korean alliance and the fact that it applies to both provocations and major aggression. There is especially strong post-2010 positioning on responses to high-end gray zone aggression.
5 U.S. and partner alignment on deterrent responses	Mixed	There are strong and consistent institutional mechanisms for coordination and alignment between the United States and South Korea, plus a strong roster of exercises to sustain readiness. But there are intermittent gaps in the U.S. and South Korean alignment on provocations, and South Korea's Moon Jae-in administration is possibly divergent from U.S. views.
6 U.S. and partner proportionate response capabilities	Strong	The United States and South Korea have an extensive suite of capabilities in all domains. The South Korean systems across many domains are well developed, offer a wide range of proportionate responses, and are deployed on the peninsula. There are no clearly identified gaps that would tempt gray zone aggression.
7 Regional and global support for deterrence	Mixed	The general global consensus against provocations is strong, but there is a limited willingness to engage, and not much more can be done with sanctions. China has shown an unwillingness to attribute actions to North Korea, and the rising global competition with China and Russia reduces the chances for support from other nations.
8 Aggressor's expectation of meaningful responses	Mixed	The history of responses has been mixed: some strong, some minimal at first (after 2010), some nonexistent. North Korea has room for wishful thinking.

Implications for the U.S. Army

The general requirements for deterrence in the gray zone and the specific suggestions from the three case studies outlined in the previous section point to the following implications for the U.S. Army:

- *Maintaining a local presence and posture plays an important role in conveying likely responses to aggression, reaffirming their credibility.* Having ground forces stationed in Japan, the Baltic states, and South Korea is a major signal of resolve that underscores the U.S. promise to respond to aggression at various points on the conflict spectrum.
- *Clear statements of shared intent to respond to specific actions are critical.* To the extent possible, the United States and its local partners should be as explicit as possible about the aggressive actions that will provoke a response.
- *The leading edges of the U.S. response will be training, advising, and security assistance missions, as well as military sales missions.* U.S. partners will be the first responders in all cases of gray zone aggression, and local exercises and partner engagements will be key to reinforcing these agreements and commitments. One or more of the Army security force assistance brigades could be specifically dedicated to gray zone partner assistance missions.
- *Special forces capabilities can offer an important tailored policy option for gray zone contingencies.* In cases where large-scale conventional force presence or even rotational operations may be infeasible for political or logistical reasons, the capabilities of special operations forces can provide an ongoing or intermittent capacity to signal U.S. engagement, enhance local partner capabilities, and build local awareness to improve gray zone responsiveness.
- *Awareness is critical for response, magnifying the importance of intelligence, surveillance, and reconnaissance.* Army intelligence, surveillance, and reconnaissance assets will be especially useful in detecting and anticipating potential gray zone aggression.
- *The integration of multiple instruments of power is critical to deterrence in the gray zone.* The Army would be well served to devote resources to liaison elements that would link its commands with the U.S. State Department, the National Security Council, and other government entities involved in gray zone deterrence. Building gray zone fusion centers inside Army regional commands could be another way to improve coordination.

These findings generally support the basic emphasis of several recent RAND studies on Army and broader defense capabilities in relation to the gray zone: The United States needs a complex and modular mosaic of capabilities for this realm. National decisionmakers will need a wide menu of tools to choose from, suited to the

severity of the gray zone provocation, the risk tolerance of the U.S. partner(s), and the general geopolitical context.

In an era of rising global competition, U.S. challengers and rivals are increasingly looking to campaigns of gray zone actions to achieve competitive advantage. This analysis has taken the first step toward assessing a set of criteria that can gauge the strength of deterrent relationships in this realm of competition. If the United States wants to succeed in this realm, it will have to take gray zone aggression seriously as a distinct area of strategy and create concepts, capabilities, and technologies for the purpose of deterrence unique to this arena. These recommendations offer an initial road map toward achieving that goal.

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Abbreviations

ASW	anti-submarine warfare
DMZ	demilitarized zone
EU	European Union
FY	fiscal year
ISR	intelligence, surveillance, and reconnaissance
JASDF	Japan Air Self-Defense Force
JCG	Japan Coast Guard
JGSDF	Japan Ground Self-Defense Force
JMSDF	Japan Maritime Self-Defense Force
JMOD	Japan Ministry of Defense
KMPR	Korea Massive Punishment and Retaliation
MND	Republic of Korea Ministry of National Defense
NATO	North Atlantic Treaty Organization
PLA	People's Liberation Army
ROK	Republic of Korea
SDF	Self-Defense Forces

A Framework for Evaluating Gray Zone Deterrence

The challenge of deterring major conventional aggression is taking on renewed importance in an era of strategic competition. But the nature of that competition, which is primarily playing out below the threshold of major war (at least so far), has created a more immediate and persistent challenge for deterrence: the rise of gray zone aggression, as opposed to conventional interstate aggression. We define *gray zone aggression* as an integrated campaign to achieve political objectives while remaining below the threshold of outright warfare. Typically, such campaigns involve the gradual application of instruments of power to achieve incremental progress without triggering a decisive military response.¹

In this report, we seek to assess the status of the current U.S. and allied deterrent postures against gray zone aggression and evaluate strategies to deter such aggression. To help do so, we develop a framework for assessing the health of gray zone deterrent relationships. First, we review analysis of the deterrence of interstate aggression *in general* and the criteria for the success of *any* deterrent relationship. We then examine the unique aspects of gray zone aggression to determine ways in which successful deterrence of such activities might differ from deterrence of interstate aggression. Finally, we propose a modified framework of criteria likely to be associated with the deterrence of major acts of gray zone aggression.

Gray zone aggression can be distinguished from two other major categories of conflict. As Figure 1.1 suggests, unconventional conflict or *irregular warfare* refer to insurgencies and forms of large-scale terrorism. *Hybrid warfare*, in Frank Hoffman's concept, is a form of conflict in which unconventional types are mixed with traditional *conventional warfare*. Gray zone competition falls into the space of *measures short of armed conflict*. It can involve coercion and some minimal violence but is generally non-military and nonviolent in character. Some analyses refer to elements of that spectrum

¹ Some of the official and unofficial statements on gray zone activities in the past few years include International Security Advisory Board, *Report on Gray Zone Conflict*, Washington, D.C.: U.S. Department of State, January 3, 2017; Nathan P. Freier, *Outplayed: Regaining Initiative in the Gray Zone*, Carlisle, Pa.: U.S. Army War College, Strategic Studies Institute, June 2016; and Michael J. Mazarr, *Mastering the Gray Zone*, Carlisle, Pa.: U.S. Army War College, Strategic Studies Institute, December 2015.

Figure 1.1
Typology of Conflict



SOURCE: Frank G. Hoffman, “Examining Complex Forms of Conflict: Gray Zone and Hybrid Challenges,” *Prism*, Vol. 7, No. 4, November 2018, p. 31.

as *political warfare*, which is, in essence, a subset of gray zone conflict as conceived here.²

The concept of the gray zone has become an expansive catchall notion, however, encompassing many different forms of activity, from relatively common, day-to-day forms of covert action or information dissemination to military actions that push the boundaries of conventional conflict. Many of these activities cannot be deterred, and the United States would not normally seek to try. Instead, it would undertake a parallel campaign of response actions designed, in part, to neutralize the effect of the gray zone aggression.

When considering the requirements for effective deterrence, then, we are primarily concerned with a specific form of gray zone aggression—what we are terming *high-end* (or more-aggressive) gray zone activities (e.g., shows of force, assassinations and sabotages, and disruptions of energy supplies or other strategic resources). These are the only forms of gray zone aggression that might be subject to deterrence policies by the United States and its allies.

Table 1.1 represents three categories of such aggression. High-end is shown here as Type 1: Aggressive. The dividing lines between the categories are not precise, but the table provides the typical characteristics that distinguish *high-end gray zone aggression* as we define it: using military or quasi-military capabilities to achieve a sudden *fait accompli* with real threat to territorial norms, even if the threat stops short of what would normally be considered outright territorial aggression.

² See, for example, Linda Robinson, Todd C. Helmus, Raphael S. Cohen, Alireza Nader, Andrew Radin, Madeline Magnuson, and Katya Migacheva, *Modern Political Warfare: Current Practices and Possible Responses*, Santa Monica, Calif.: RAND Corporation, RR-1772-A, 2018.

Table 1.1
Categories of Gray Zone Aggression

Category	Characteristics	Examples
Type 1: Aggressive (high-end)	• Direct quasi-military or military action • Usually attributable • Significant threat to territorial integrity norms • Forces a binary choice in response at a moment in time • Often a clear violation of international law • <i>Can deter in advance with warning; can punish after the fact</i>	• Russia's preparatory nonmilitary or nonmilitia actions in Georgia in 2008 and Ukraine in 2014 • Chinese actions in Scarborough Shoals
Type 2: Moderate	• Direct action though often in nonmilitary form • Usually attributable • Goal is establishing claims and coercion; does not immediately threaten territorial integrity • Legal status of actions is highly contested • <i>Difficult to deter because it falls below most treaty and legal thresholds, will seldom offer warning, or emerges as a reaction to events; may demand retaliation</i>	• Russian-based cyberattack against Latvia in 2007 • Ramming and water cannon attacks on vessels • Aggressive fishing boat swarms • Threats to enforce air defense identification zones • Economic coercion (energy, trade, rare earth) and sanctions
Type 3: Persistent	• Broad-based, low-level actions as part of a campaign • Not clearly in violation of any international laws or norms • Ongoing pattern rather than individual events • Often done in way that clouds attribution • <i>Very difficult to deter and difficult to punish, given the persistent character and the low level of interests engaged</i>	• Disinformation or messaging efforts aimed at another country's population • Non-Japanese ship or aircraft passage through Japan's exclusive economic zone • Fishing boat presence in the territorial waters of another nation

In various analyses on gray zone activities, we have used this three-category framework partly because we believe there to be a distinction between two categories of day-to-day gray zone competition: moderate and persistent. The distinction is that the United States must simply compete with persistent activities, which are generally legitimate, very gradual, and not especially provocative. On the other hand, the United States can attempt to dissuade many moderate gray zone activities over time, raising the cost of these more coercive and pointed actions and thus reducing their perceived value. For the purposes of this report, however, the critical distinction is a binary one between (1) moderate and persistent gray zone activities and (2) aggressive, high-end activities, which can be the target of actual deterrence strategies.

Various forms of cyber aggression, harassment, or espionage can be forms of gray zone competition. Depending on their severity, different types of cyberattack could be located in any of the three categories of the typology. A massive, society-crippling attack on governmental institutions and critical infrastructure would be a severe, high-end form of gray zone aggression which would—as all activities in that category do—

begin to shade into the category of traditional military action. As noted in Table 1.1, the significant but not disastrous Russian cyberattack on Latvia in 2007 counts as a moderate form of competition. Day-to-day harassment below the level of major attack represents a form of persistent competition.

The use of information channels to achieve competitive advantage, ranging from ongoing propaganda and messaging activities to large-scale disinformation campaigns designed to influence the outcomes of elections and other major activities, can also fit into various components of the framework. Russian attacks on the integrity of the U.S. electoral process, as in the 2016 presidential election, represent aggressive gray zone competition that the United States has now sought to deter and disrupt. Day-to-day messaging activities are a classic form of persistent gray zone competition. Other information-based tactics, such as more-pointed disinformation and attitude campaigns without a specific electoral goal but still designed to damage the targeted society, could fit into the moderate category.

The gray zone as an analytical concept can therefore refer to a wide range of activities, some of them relatively modest in their aggression and not posing a threat sufficient to warrant credible deterrent policies. For example, day-to-day disinformation campaigns designed to promote a specific narrative of events can be an integral aspect of a gray zone campaign, but they are not something the United States or its allies are likely to have great success in deterring; the effort to manipulate narratives is an assumed part of major power rivalries and seldom justifies credible threats of severe retaliation. When we examine the deterrence challenges of the gray zone, then, many aspects of those challenges will simply not be subject to deterrence—hence our focus on high-end gray zone activities. We conceive of these high-end activities as actions that retain the basic gray zone character of remaining below thresholds for major response and pursuing political gain gradually over time but that represent the most belligerent activities on the gray zone spectrum, involving the direct coercive use of military or nonmilitary capabilities and sometimes involving violence.

In this category, we have in mind such activities as the use of proxy or militia paramilitary units (or so-called civilian paramilitary maritime capabilities) to coerce, intimidate, or stake a claim to territory; hostile actions against the civilian or military assets of a country, such as ramming ships or engaging in dangerously provocative air operations; or destructive cyberattacks. These actions, which are usually attributable, fall just below the outright military aggression practiced by Russia in Crimea and eastern Ukraine in 2014, which we classify as interstate aggression that emerged out of a longer-term gray zone effort. Table 1.2 provides examples of possible future high-end gray zone activities that fit these criteria and that the United States might seek to deter.

In a hypothetical future case, a renewed Chinese effort to gain control of the contested Senkaku Islands using swarms of fishing boats, physical intimidation of Japanese ships, and even landings of civilian militias onto some of the islands would

Table 1.2
Potential Future High-End Gray Zone Actions

Gray Zone Aggressor	Actions
China	• Paramilitary swarming attacks in the Senkaku Islands • Additional forcible territorial encroachment in Scarborough Shoals or other Philippine territory • Announcement of a militarily-enforceable air defense identification zone covering the entire South China Sea
Russia	• Paramilitary incursions or proxy militia activities in the Baltic states • Significant and destructive clandestine activities designed to undermine the stability of local governments • Large-scale, socially destructive cyberattacks on European countries
North Korea	• Significant special operations infiltration of South Korea • Expanded, destructive cyberattacks on South Korea or the United States

count as high-end or aggressive gray zone activities. It is something that Japan and the United States seek to deter. Similarly, large-scale Russian cyberattacks combined with an infiltration of special forces into the Baltic states would constitute a form of high-end gray zone aggression that would invite deterrence policies.

One important aspect of the U.S. gray zone deterrence challenge emerges from a roster of such examples: In addition to representing a challenge below the threshold of major war, deterring aggressive gray zone activity is also—ironically, much like U.S. deterrence of interstate aggression—an issue of *extended* deterrence. The United States is trying to deter gray zone aggression against other countries, mostly far from home. Many gray zone tactics, even at the higher end, also involve the use of intermediary or proxy actors that cloak the responsibility of the actual gray zone aggressor. Deterrence thus becomes a complex and challenging multilayer phenomenon in which the United States is supporting the country being attacked without necessarily being attacked itself, and a gray zone aggressor is acting either directly but below the threshold of war or indirectly through a proxy.

The cases selected in this study represent a cross section of gray zone challenges across three contingency areas. We chose Russia's aggression against the Baltic states, China's aggression in the South China Sea, and North Korea (officially the Democratic People's Republic of Korea)'s aggression against South Korea (officially the Republic of Korea [ROK]). The level of intensity and other factors differ among the cases, but they each represent one leading potential case involving each of the possible gray zone aggressors. There are other potential cases, such as a South China Sea example, but the three examined in this report represent important examples of the phenomenon.

Criteria for Effective Deterrence

After the first phase of our analysis, a review of the literature outlined in an earlier report, we concluded that there are three broad categories of factors for effective deterrence of interstate aggression, as well as 12 variables across those categories that help explain the success or failure of deterrence.³ In the effort described in the present report, the core challenge is to determine whether these same variables apply to deterrence of high-end gray zone aggression and, if not, what parallel set of criteria might help explain success or failure.

Broadly speaking, the theory of effective deterrence that emerges from the literature is one that points to the relationship between perceived costs and benefits of aggression in the mind of a potential aggressor. A potential attack that appears to have very substantial benefits and very low costs and risks will be tempting. One with enormous likely costs and risks and marginal benefits will be less attractive. The challenge for effective deterrence often comes from the skewed perceptions that states bring to such calculations. Deterrence can fail, for example, when a potential aggressor convinces itself that costs will be low even though objective analysis would suggest otherwise. In general, however, deterrence policies have their effect by raising the costs and risks involved in aggression and reducing its perceived value.⁴

As contended in the earlier study, a defender can shape the perceived value of aggression both with reassurances and with threats. (This is one reason the study employed the term *dissuasion* to describe the basic approach to preventing aggression: Strategies of dissuasion can use deterrent threats, as well as confidence-building measures and reassurances.) Deterrence can fail—as with Japan in 1941 or the Soviet Union in Afghanistan in 1979—when an attacker believes that it is under such imminent threat and risk that it has no alternative but to act. A defender can forestall aggression by keeping such moments from arising, partly by offering timely assurances—through both verbal statements and policy positions—to reduce a potential aggressor’s fears.

³ Michael J. Mazarr, Arthur Chan, Alyssa Demus, Bryan Frederick, Alireza Nader, Stephanie Pezard, Julia A. Thompson, and Elina Treyger, *What Deters and Why: Exploring Requirements for Effective Deterrence of Interstate Aggression*, Santa Monica, Calif.: RAND Corporation, RR-2451-A, 2018.

⁴ As Thomas Schelling argued, there are dilemmas involved in trying to adjust all of these factors at the same time and still control risks for the defender. One effective way to convey high risk is to threaten immediate, devastating escalation (such as to nuclear use) in the event of an attack. Or a defender could make commitments that it cannot escape if war occurs, thus making those commitments more credible because an attacker will have less room to convince itself that the defender will not respond. Such steps increase the risks of possible aggression, but they also reduce a defender’s ability to control escalation once conflict is underway. See Thomas C. Schelling, *The Strategy of Conflict*, Cambridge, Mass.: Harvard University Press, 1980.

The three broad categories of factors that help determine whether deterrence is successful, as derived from the extensive literature review conducted for the earlier study, are as follows:

1. the *motivations* of the potential aggressor, including its perceived need to act, the degree of interests it has at stake, and its subjective perceptions of the risks, costs, and benefits of a potential attack
2. the deterring state's *clarity of message* about what it aims to deter and what it will do if that commitment is challenged
3. the aggressor's belief that the defender has both the capability and the will—thus, the *credibility of message*—to fulfill its threats and commitments.

These three categories reflect well-established criteria for the success of deterrent policies. If a deterring state is not clear about what it is defending, an aggressor can misperceive its willingness to respond—as occurred in Korea in 1950 and Kuwait in 1990. If an aggressor believes that the defender will not, or cannot, respond adequately to aggression, it will be tempted to attack—as in Adolf Hitler's view of the West in the late 1930s. But, in all cases, the central factor determining the outcome of a deterrence relationship is the aggressor's motivation. An aggressor can ignore even powerful risks and costs if it has come to believe that it has no real alternative to attacking, as happened in Japan in 1941.

Of the 12 specific variables suggested by our literature review, four fall into each of the three categories. Table 1.3 outlines the detailed framework that we developed to explain the success or failure of interstate aggression.

In the broad category of *motivation*, the specific variables tend to deal with the degree of interests the aggressor perceives and the degree to which it believes that it faces an imperative to act. In the category of *clarity of message*, the variables pertain to the specificity about what is being deterred, what the defending nation will do if that threat is challenged, and how those statements are communicated. In the category of *credibility of message*, the variables highlight the role of local military capacity and political will for fulfilling deterrent threats. The importance of any one of these factors varies by the specific case. In some cases, the success or failure of deterrence can hinge on a single variable or a small set of them. In other cases, many factors have to go wrong before deterrence can fail.

Taken together, the 12 variables in Table 1.3 point to a combination of deterrence-by-denial and deterrence-by-punishment criteria. As explained in the report on the first phase of this study, deterrence is about discouraging actions by affecting the cost-benefit calculations on the part of a potential aggressor.⁵ This can usually occur by

⁵ A summary of those themes can be found in Michael J. Mazarr, *Understanding Deterrence*, Santa Monica, Calif.: RAND Corporation, PE-295-RC, 2018. Classic works include Lawrence Freedman, *Deterrence*, London: Polity Press, 2004; Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and*

Table 1.3
Variables Governing Extended Deterrence of Territorial Aggression

Category	Variable
Motivation: How motivated is the potential aggressor?	1 General level of dissatisfaction with the status quo and determination to create a new strategic situation
	2 Degree of fear that the strategic situation is about to turn against the aggressor in decisive ways
	3 Level of national interest involved in the territory of concern
	4 Urgent sense of desperation and a need to act
Clarity of message: Is the defender clear and explicit regarding what it sought to prevent and what actions it would take in response?	1 Precision and consistency in the type of aggression the defender seeks to prevent
	2 Clarity and consistency in the actions that will be taken in the event of aggression
	3 Forceful communication of these messages to outside audiences, especially potential aggressors
	4 Timely response to warning with clarification of interests and threats
Credibility of message: Did the aggressor view the defender's threats as credible and intimidating?	1 Actual and perceived strength of the local military capability to deny the presumed objectives of the aggression
	2 Degree of automaticity of the defender's response, including escalation to larger conflict
	3 Degree of actual and perceived credibility of the political commitment to fulfill deterrent threats
	4 Degree of national interest engaged in the state to be protected

SOURCE: Based on Mazarr et al., 2018, p. 54.

either reducing the feasibility of a potential action (*deterrence by denial*) or threatening significant consequences for it (*deterrence by punishment*).

The goal of this analysis—as with the previous study—is therefore not to prove that potential attackers have been or will be deterred by specific policies. This analysis reflects instead a two-part approach: (1) identifying principles of effective deterrence from the literature on interstate conflict (which was accomplished in the earlier study) and (2) testing specific cases of aggression against those principles to assess the status of deterrence. In this report, we unpack the particular problem of gray zone aggression, which offers special challenges and will affect our judgments about whether the criteria for effective deterrence are met.

Practice, New York: Columbia University Press, 1974; Paul K. Huth, *Extended Deterrence and the Prevention of War*, New Haven, Conn.: Yale University Press, 1988; Robert Jervis, “Deterrence and Perception,” *International Security*, Vol. 7, No. 3, Winter 1983; Patrick M. Morgan, *Deterrence: A Conceptual Analysis*, 2nd ed., Beverly Hills, Calif.: Sage Publications, 1983; and Bruce M. Russett, “The Calculus of Deterrence,” *Journal of Conflict Resolution*, Vol. 7, No. 2, June 1963.

Thus, in this study, we apply an analytical framework to gain additional insight on the status of deterrence. This work does not represent a causal analysis designed to demonstrate that a given action will necessarily or probably lead to a given outcome. The specific case analyses offer an analytical basis to identify steps that might bolster deterrence; they do not constitute predictions of whether deterrence will fail.

This study, as noted earlier, specifically focuses on principles of effective deterrence of *high-end* gray zone aggression. The gray zone is an expansive concept that encompasses activities of vastly divergent intensity. Only some of those tactics will be subject to deterrence. In the cases presented in this report, we are applying the criteria for effective deterrence to judge the current status of deterring potential high-end activities, such as those outlined in Table 1.2. The results therefore do not provide a judgment about the status of deterrence or competition for other gray zone activities.

As we will show, the characteristics of gray zone campaigns make some of these variables less relevant than they are for interstate aggression. For gray zone campaigns, the traditional requirements for effective deterrence are joined by other requirements that must address the difficult challenges posed by gradual, ambiguous, and often nonattributable acts of aggression.

Eight Characteristics of Gray Zone Aggression

This section outlines eight core characteristics of gray zone campaigns and discusses the difficulties they pose for effective deterrence. Those difficulties are magnified by the fact that the campaigns are also, at least in part, challenges of extended deterrence. Moreover, the United States is trying to deter gray zone aggression not only against itself but also against friends or allies. The characteristics of gray zone aggression outlined here are designed to complicate responses by the country directly in the crosshairs of the campaign, and these characteristics pose even greater challenges for a distant country trying to enunciate and enforce credible, extended, and sometimes indirect deterrent threats.

The characteristics of gray zone aggression also correspond primarily to deterrence by punishment, further complicating the task of issuing credible threats that can be fulfilled when an aggressor takes action. And the characteristics can obstruct deterrence by denial by making it more difficult for defenders to identify the likely routes of aggression or to deploy the capabilities to deny success. As we argue later, gray zone activities magnify the distinction between types of deterrence, and we recommend a steadfast focus on deterrence by denial as the foundation for an effective strategy.

Not every gray zone action—especially the acts of high-end aggression—will reflect all of these characteristics. Some actions will be relatively unambiguous and attributable. Some will employ larger portions of military than nonmilitary capa-

bilities. Some will threaten more-significant interests in the targeted nation. Broadly speaking, though, some combination of the following eight factors will explain why gray zone aggression is more difficult to deter than interstate aggression is.

Falls Below the Threshold for Military Response

The most fundamental characteristic of gray zone aggression and the factor that distinguishes gray zone activities from classic military aggression is that the gray zone aggressor tries to scale the actions to fall just short—or, in some cases, well short—of established thresholds for a response by the targeted country or its partners. The goal is to avoid major clashes, violations of international law or norms, or outright conflict. This characteristic can be built into specific actions—such as nonattributable cyber harassment or a *de facto* presence in a maritime area—but it can also govern the long-term shape of a gray zone campaign. Often, an aggressor will follow a series of more-aggressive actions with a period of calm, designed to allay regional concerns about the activities. Both in their specific actions and in their overall structure, therefore, gray zone campaigns are designed to deny a defender precisely the sort of clarity in the violation of rules that is typically important in effectuating a deterrent threat.

Unfolds Gradually

The second-most-defining characteristic of gray zone activities is that they unfold gradually over time. Such “salami tactics” provide less basis for decisive responses—and thus less ability to make unambiguous deterrent threats in advance. The tactics represent persistent campaigns to change the status quo through the gradual accumulation of actions rather than single bold moves.

Is Not Attributable

Most gray zone campaigns involve actions in which the aggressor aims to hide its role. Whether through cyberattacks, disinformation campaigns, or proxy forces, these actions allow a gray zone aggressor to deflect responses—and obstruct the potential for successful deterrence—by simply denying that it is responsible.

Uses Legal and Political Justifications

For actions that are open and attributable, gray zone aggressors typically offer extensive legal and political justifications, often grounded in historical claims supported with documentation. The aggressors deploy teams of lawyers to justify their actions under international law. In some cases, as with a handful of specific Chinese legal claims in the South China Sea, the aggressors recruit other countries to their point of view. These tactics complicate the tasks of generating a local response and enforcing punishments.

Threatens Only Secondary National Interests

Gray zone campaigns typically steer clear of the defender's vital or existential interests. This tactic is another way of avoiding decisive responses and undermining the potential for effective deterrence. It is one way of achieving the first characteristic described—staying under military thresholds for response—but it deserves special emphasis in its own right. It is the lack of vital interests on the part of the defender—especially a defender practicing extended deterrence, as in the case of the United States today—that so greatly complicates the challenge of effective deterrence. Any one small gray zone step will not threaten enough of the target's interests to make deterrent threats credible.

Has State Sponsorship

An important characteristic of gray zone aggression is that, even as it seeks to remain below key thresholds for a military response, it also takes place with the full national power—including military power—of the gray zone aggressor looming in the background. This provides a sort of escalation leverage and complicates deterrent threats: Local countries know that if they use too much power to respond to a fairly modest gray zone move, the aggressor can then employ more-significant capabilities, including military force. China plays this game especially well, conducting maritime gray zone operations with its People's Liberation Army (PLA) Navy assets positioned just beyond the targeted area. Such intimidation tactics are central to effective gray zone strategies.⁶

Uses Mostly Nonmilitary Tools

For obvious reasons related to remaining below the threshold for a military response, gray zone campaigns are typically built around nonmilitary tools. The campaigns employ diplomatic, informational, cyber, and quasi-military forces, militias, and other tools and techniques to avoid the impression of outright military aggression. This tactic challenges defenders to have similarly well-developed nonmilitary tools of statecraft available to threaten or carry out deterrent actions. Escalating to military responses will seldom be viewed as credible or desirable, especially given the characteristic of state support and intimidation embodied by the aggressor's military capabilities in the background.

Exploits Weaknesses and Vulnerabilities in Targeted Countries and Societies

The final characteristic of gray zone campaigns is that they are designed, in part, to attack particular vulnerabilities in the targeted countries. The vulnerabilities can include social cleavages, such as ethnic populations sympathetic to the gray zone aggres-

⁶ Lyle J. Morris, Michael J. Mazarr, Jeffrey W. Hornung, Stephanie Pezard, Anika Binnendijk, and Marta Kepe, *Gaining Competitive Advantage in the Gray Zone: Response Options for Coercive Aggression Below the Threshold of Major War*, Santa Monica, Calif.: RAND Corporation, RR-2942-OSD, 2019.

sor; political polarization; economic stagnation and its resulting needs and grievances; and lack of military or paramilitary capabilities. Gray zone aggressors also typically aim to put the defenders in situations in which strong responses appear to be ruled out or counterproductive. The aggressors can do this, for example, by establishing economic dependencies that create implicit leverage or by threatening escalation.

The sum of these characteristics greatly complicates the task of deterrence. In Table 1.4, we outline specific ways in which gray zone aggression makes it difficult to meet the three general criteria for effective deterrence.

Gray zone aggression makes it difficult to meet the general criteria for effective deterrence in three ways. First, it changes the calculus for aggressor motivations. States considering large-scale interstate aggression are dealing with the potential of profound risks and costs, and deterrence policies can influence the perceived cost-benefit calculus in very objective ways. When contemplating gray zone campaigns, on the other

Table 1.4
The Gray Zone Challenge to Effective Deterrence

Factor Determining Deterrence Success	Challenges of Gray Zone Aggression
Motivation: The defender’s ability to affect the motivations of the potential aggressor, including its perceived need for aggression and its belief in the potential for and value of aggression	• Motives are more persistent and less focused on specific momentary choices—and are thus less able to be influenced. • Aggressors need far less motivation to engage in gray zone campaigns, for which the perceived costs and risks are much lower than they are for major armed conflict; thus, it is more difficult to create a deterrent effect against gray zone campaigns. • Some gray zone actions are undertaken by proxy or quasi-governmental forces sponsored by, but not necessarily under the control of, the aggressor, which clouds the motivations at issue.
Clarity of message: The deterring state’s clarity about what it aims to deter and what it will do if that commitment is challenged	• Clever gray zone aggressors will not threaten interests to the point that the targeted country or its partners can justifiably provide a clear response. The aggressors will use gradualism and under-threshold aggression to make such clarity difficult. • Clarity in threats always presents trade-offs with other goals, such as preserving room for cooperation with an aggressor. Gray zone interests will not be sufficient to justify costly threats. • Challenges without attribution make clarity more difficult. The United States cannot issue unambiguous threats to respond to given actions without being certain of who is conducting those actions.
Credibility of message: The aggressor’s belief that the defender has both the capability and the will to fulfill its threats and commitments	• The ambiguity of the gray zone environment makes it more difficult to deploy capabilities that send clear signals about the defender’s ability to respond. • Lesser interests involved can lead aggressors to underestimate a defender’s willingness to respond. • State sponsorship and the potential for escalation can undermine a defender’s willingness to respond; an aggressor might perceive that it can deter the defender’s deterrent responses. • Lack of response to lower-significance gray zone activities could undermine the credibility of the claim that the defender has the will to respond at higher thresholds.

hand, aggressor motivations can be much more clouded and ambiguous, making them more challenging to identify and influence.

Second, gray zone campaigns are tailor-made to thwart the required clarity in deterrence policies. By targeting secondary interests, operating gradually, and operating often without clear attribution, gray zone campaigns can make it essentially impossible for defenders to articulate clear statements of what precisely they will react to and what they will do in such cases.

Third, gray zone tactics make it much more difficult to demonstrate a capability and a will to respond. Because the timing and tools they employ are so flexible, gray zone actions make it difficult for a defender to anticipate what sort of capabilities will be required to respond to specific incidents. Gray zone aggressors can usually pick some approach that takes advantage of vulnerabilities on the other side; in the South China Sea, for example, China benefits from the lack of a prominent U.S. or allied maritime militia or even a strong coast guard presence to counteract Chinese pressure. Again, the essential goal of gray zone campaigns is to undertake actions that test the will of the defender not through all-out attacks but by taking steps so small that risking escalation with a decisive response seems unwarranted.

These characteristics of gray zone campaigns confound both deterrence by denial and deterrence by punishment. The characteristics are especially problematic, however, for a strategy of deterrence by punishment because they undermine the necessary preconditions for such an approach. If a defender cannot identify the source of an attack, if it has only weak interests at risk in a specific event, or if a series of steps unfolds over such a long period of time that no one step provides a rallying point for punishment, a defender will never be able to muster the domestic and international support necessary for serious punishments.

Some of these factors also impair the ability of a defender to conduct deterrence by denial. An aggressor's use of a complex mix of gray zone tactics, for example, can deprive a defender of the ability to determine the nature of the next attack. On the whole, however, deterrence by denial appears to retain much of its feasibility, even under the constraints imposed by the characteristics of gray zone campaigns. If a defender can anticipate a move and develop capabilities to keep a gray zone tactic from working—whether through adequate cyber defenses, control of the domestic information ecosystem, or effective local responses to proxy forces—the defender can negate much of the intended effect. The result might not be deterrence (because the aggressor might continue to use the techniques) as much as successful competition in the gray zone. The nature of gray zone aggression, then, points to a necessary starting point for deterrence: a broad-based effort to make defending states more resilient against such tactics—politically, informationally, and otherwise—and thus more capable of denying the gray zone aggressors any intended gains.

Eight Criteria for Deterring High-End Gray Zone Aggression

Based on earlier work on general criteria for effective deterrence, as well as our analysis of the character of gray zone aggression, we derived eight criteria for effective deterrence of high-end gray zone aggression. Again, we limit ourselves to these more-aggressive gray zone activities because they pose the greatest risks to U.S. interests and international norms—and because lower-level gray zone activities will seldom be subject to effective deterrence under any circumstances. Activities at the higher end, such as using paramilitary groups to seize territory, are more attributable, sudden, and significant, thus losing some of the benefits of lower-level, more-gradual gray zone activities.

This set of criteria for effective deterrence represents a framework for assessing the overall health of a deterrence relationship. No one factor is necessarily more important than the others across different cases. The criteria represent a collective set of factors that can be assessed together.

In developing these criteria, we attempted to identify avenues to overcome the limitations on deterrence imposed by gray zone techniques. Several major themes emerged, leading us to the eight criteria:

1. As with general deterrence, the motivation of the aggressor in gray zone activities is a critical determinant of deterrence success. For deterrence to succeed, *the aggressor must not be so desperate or belligerent as to be willing to run very high risks and must see an alternative to the high-end gray zone aggression that sustains its long-term strategy.*
2. To deter geopolitical actions, *the identity of the actor must be known* to a high degree of fidelity, and perhaps even with certainty. Otherwise, the defender will not be able to issue—or, more significantly, fulfill—effective threats of retaliation.
3. The prospect of the high-end gray zone threat must be *significant, identifiable, and aggressive enough to justify deterrent threats* in advance, as well as their enforcement once an event occurs. The aggressive action must be significant enough to generate both domestic and international support for the deterrent threats and their enforcement.
4. The specific actions must be addressed by *existing U.S., partner, or ally policy statements*. The actions must be specific enough to have been identified as a threat, the United States and its partners must be clear and unambiguous about their intent to respond, and they must reinforce these messages with their posture and behavior.
5. The response must build on a *unity of public posture among the United States and its local partners*. A gray zone aggressor must not be able to capitalize on differ-

ences in commitment, policy, or political will between the United States and a partner state.

6. The United States or its partners must have *specific capabilities available to deny gains and, if deterrence fails, retaliate in ways proportional to the gray zone actions*. The aggressor must have little opportunity to exploit weaknesses, such as a defender's lack of presence in key areas or lack of paramilitary response options. The defender also needs capabilities that are flexible enough that the aggressor cannot perceive a gap in which it can take the initiative, leaving the defender with only highly escalatory options.
7. The United States or its partners must be able to garner *regional and global support for the deterrent responses*. This support will depend on whether the aggressor can make a persuasive political or legal claim to justify aggression, the degree to which the aggressor can control the narrative, and the views of regional and global players about the events and their larger context.
8. Especially in the gray zone, deterrence is based on cumulative signals. Success is more likely if *the history of interactions over the issue—including statements and behaviors of the local partner or the United States—fosters an expectation of immediate and significant responses* to high-end gray zone initiatives. If the aggressor has succeeded in similar gray zone initiatives in the past, it will be less likely to be deterred, even by new threats.

If these eight conditions are met, then deterrence of high-end gray zone aggression is likely to be more effective. Table 1.5 outlines these criteria and examples of each.

After developing these criteria for deterring high-end gray zone aggression, we extended the analysis to consider specific deterrence requirements that might apply to each of the three countries of focus for this analysis: China, Russia, and North Korea. We presume that the *general* principles of deterrence outlined earlier (see Table 1.3) are likely to remain relevant for each of the three countries. But, given those countries' differing goals, regional roles, leadership and governmental structures, and capabilities, we assume that the principles of *gray zone* deterrence could differ across the three potential aggressors. Therefore, in the chapters that follow, we suggest criteria for deterring gray zone aggression that are specific to each actor and then test these judgments in the case study analyses.

Table 1.5
Eight Criteria for Deterring High-End Gray Zone Aggression

Criterion	Examples
1 Intensity of the aggressor's motivations: Are the aggressor's motivations so extreme as to make its actions nearly impossible to deter?	• Aggressor interests in the specific area or issue of dispute • Political situation in the aggressor nation, which affects the degree to which there is strong pressure to act • Sense of urgency or desperation on the part of the aggressor
2 Attribution of the aggressor's role: Can the aggressor's role be clearly identified and proved in a specific event or action?	• Degree to which the aggressor has demonstrated ambitions for regional hegemony • Degree to which the aggressor has acquired a reputation for bending international legal norms and waging hostile gray zone aggression • Degree of aggressor control over activities • Involvement of proxy or independent forces that blur responsibility
3 Level of aggression: How aggressive is the specific event or action?	• Degree to which the action represents a physical change in the status quo • Degree to which the action directly encroaches on the territorial integrity of the defender
4 U.S. and partner alignment on unacceptable outcomes: Do the United States and its local partners have specific and agreed-upon outcomes that they will not accept? Do they agree on what they are trying to deter?	• Existence of clear policy statements on thresholds for response • Clarity and consistency of signaling about which actions will generate deterrent responses • Degree to which accumulating U.S. and partner actions reinforce this message
5 U.S. and partner alignment on deterrent responses: Are the United States and its local partners fully aligned on the need to respond to specific high-end gray zone provocations and the means of doing so?	• Degree to which the public positions of the United States and its local partner are aligned • Existence of formal coordinating mechanisms, planning groups, rules of engagement, or other processes that signal alignment • Conduct of exercises and joint operations to indicate alignment • History of combined responses to provocations
6 U.S. and partner proportionate response capabilities: Do the United States and its local partners have proportionate means of rapidly responding?	• Degree to which scalable and flexible response options are available • Speed with which the defender(s) can respond
7 Regional and global support for deterrence: Can the United States and its local partners generate significant regional and global support for response options?	• Whether the aggressor can generate a legal or political basis for its actions • Degree to which the aggressor controls the narrative • Regional states' and major global powers' perceptions of the event and larger context
8 Aggressor's expectation of meaningful responses: Has the history of interaction fostered an expectation of meaningful responses to high-end gray zone acts?	• Experiences of the aggressor, targeted nation, and United States on the issue • Degree to which the aggressor perceives that history indicates a likelihood of facing decisive responses

Deterring China's Gray Zone Aggression Against the Senkaku Islands

The Japanese archipelago is vast, with numerous land features separated by wide swaths of water.¹ Specifically, Japan comprises 6,852 islands within a 4,470,000-km² exclusive economic zone. Thus, Japan's Self-Defense Forces (SDF) and the Japan Coast Guard (JCG) are responsible for defending thousands of potential invasion points, a large airspace, and millions of square kilometers of waters.² The archipelago's southwestern area is particularly spread out. Spanning 1,100 km from the southern point of Kyushu to the westernmost inhabited island of Yonaguni, the southwest island chain known as the Nansei Shotō (also known as the Ryukyu Islands) comprises 55 islands and islets.³ Nearby, and uninhabited, is a set of five islands and three islets known collectively as the Pinnacle Islands, though better known by its Japanese name, the Senkaku Shotō. These islands are administered by Japan but claimed by China as the Diaoyu Dao.

Since about 2005, there has been an increase in Chinese fishing vessels and aircraft around the Senkaku Islands.⁴ Although the issue has been contentious since 1971, relations took a nosedive in 2010 when a Chinese fishing trawler rammed two JCG vessels. After Japan arrested the captain, China retaliated economically and diplomatically.⁵

¹ The research and writing for this report were completed in mid-2019. Events and developments since that time are not captured in this narrative. However, although some facts may have changed or new circumstances developed, we believe that the general interpretations, findings, and recommendations remain valid.

² Japan Institute of Country-ology and Engineering, "Tō Zai Nan Boku ni Nagai Yuminari no Kokudo [National Territory That Stretches Far East-West-South-North]," *Kokudo wo Shiru/Igai to Shiranai Nihon no Kokudo* [Understand Our National Territory/Unexpectedly Unknown Things of Japan Territory], undated-a; and Japan Institute of Country-ology and Engineering, "Umi ni Kakomareteiru Kuni [A Country Surrounded by Water]," *Kokudo wo Shiru/Igai to Shiranai Nihon no Kokudo* [Understand Our National Territory/Unexpectedly Unknown Things of Japanese Territory], undated-b.

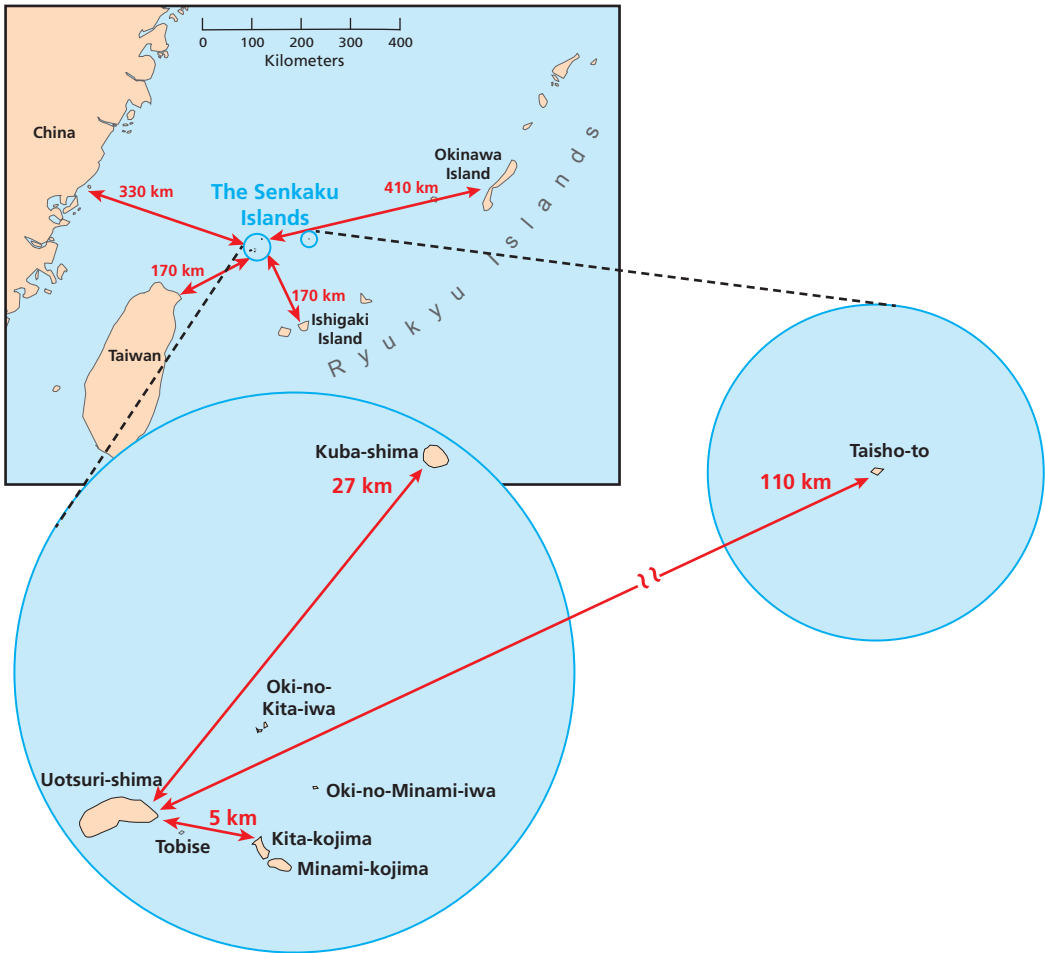
³ "Ryukyu Islands," *Encyclopaedia Britannica*, undated.

⁴ For a broader analysis of the strategic competition between Japan and China, see Jeffrey Reeves, Jeffrey Hornung, and Kerry Lynn Nankivell, eds., *Chinese-Japanese Competition and the East Asian Security Complex: Vying for Influence*, London: Routledge, 2017.

⁵ Michael Green, Kathleen Hicks, Zack Cooper, John Shaus, and Jake Douglas, *Countering Coercion in Maritime Asia: The Theory and Practice of Gray Zone Deterrence*, Washington, D.C.: Center for Strategic and International Studies, May 2017, pp. 66–94.

More alarming, Chinese state-owned ships made multiple intrusions into the contiguous zone around the islands over subsequent months.⁶ In September 2012, relations further deteriorated after Tokyo bought three of the islands from their private Japanese owner. (The purchase included Uotsuri-shima, Kita-kojima, and Minami-kojima, shown in Figure 2.1. The United States still leases the other two islands: Kuba-shima and Taisho-to. The three remaining islets remain in the ownership of Japan’s central government.) The action triggered a surge of Chinese activity around the islands. Ever since, China Coast Guard ships have become a regular presence in the islands’ contiguous zone and territorial waters.

Figure 2.1
Senkaku Islands



⁶ Japan Ministry of Foreign Affairs, “Trends in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands, and Japan’s Response,” webpage, October 4, 2019.

Japan believes that Chinese activities in the area are part of a whole-of-government approach using military, paramilitary, diplomatic, and political operations to erode Japan's administrative control without provoking war. Japan defines this behavior as gray zone activity, or "situations that are neither pure peacetime nor contingencies" that could further develop into dangerous situations.⁷ Tokyo views these as deliberate challenges to the status quo, much to the detriment of Japanese sovereignty and security.⁸ Over the past decade, the Japanese government has worked (1) to deter China from pursuing these gray zone activities and, (2) should deterrence fail, to be ready to defend or reclaim the islands by force. In this chapter, we explore the strength of this deterrent effort.

Applying the Framework to China's Gray Zone Aggression

1. Are China's Motivations So Extreme as to Make Its Actions Nearly Impossible to Deter?

Deterrence can work only if there is an expectation that the potential aggressor might change its intended course of action upon receiving the deterrent message. However, if the aggressor's motivations are so extreme that no argument or threat can make it change its mind, deterrence is bound to fail, and the defender should prepare for the upcoming confrontation rather than engage in time- and resource-consuming deterrence. Three variables can indicate the degree to which an aggressor might be induced to change course: (1) Does the aggressor have high national interests in the area or issue of dispute? (2) Is the aggressor facing strong domestic pressure to act aggressively? and (3) Does the aggressor feel a sense of urgency or desperation to act?

The Chinese government has strong interests that are nonnegotiable. A Chinese government-sponsored website on the islands states, "Diaoyu Dao and its affiliated Islands . . . are an inseparable part of the Chinese territory. Diaoyu Dao is China's inherent territory in all historical and legal terms, and China enjoys indisputable sovereignty over it."⁹ China claims that the islands have been part of its maritime territory since the Ming Dynasty (1368–1644).¹⁰ Beijing sees the islands as an inherent part of China that was stripped away by Japan during its Century of Humiliation. This belief of victimhood and grievance against Japan, combined with a national rejuvenation drive by Chinese President Xi Jinping, instills a high level of interest in reclaiming the

⁷ Japan Ministry of Foreign Affairs, *National Security Strategy*, Tokyo, December 17, 2013, p. 11.

⁸ Japan Ministry of Foreign Affairs, 2013, pp. 12–13.

⁹ Diaoyu Dao: The Inherent Territory of China, website, undated.

¹⁰ State Council of the People's Republic of China, *Diaoyu Dao, an Inherent Territory of China*, Beijing, white paper, September 2012; and People's Republic of China Ministry of Foreign Affairs, "Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on September 5, 2012," September 6, 2012a.

islands. As Chinese Ambassador to the United Nations Li Baodong asserted in 2016, Japan's action

will never change the fact that the Diaoyu Dao is part of China's territory, nor will it ever shake China's resolve to safeguard its territorial sovereignty over the Diaoyu Dao and its affiliated islands. The Chinese government and people will never waver in their will and determination to uphold China's territorial sovereignty.¹¹

Given these assertions, there is pressure for China to demonstrate its will to defend the islands. Under Xi, China might be "less able or willing to compromise in public, especially on territorial issues or other matters that are rooted in national sentiment, for fear that it would harm his political position."¹² Xi has said, "No foreign country should expect us to make a deal on our core interests and hope we will swallow the bitter pill that will damage our sovereignty, security and development interests."¹³ Even more forcefully, Xi has said, "We absolutely will not permit any person, any organization, any political party—at any time, in any form—to separate any piece of Chinese territory from China."¹⁴ Other officials have followed his lead. Premier Wen Jiabao stated, "the Chinese government and its people will absolutely make no concession on issues concerning its sovereignty and territorial integrity."¹⁵ Similarly, Chinese Foreign Minister Hong Lei warned that if Japan took any action to escalate tensions, Japan would "face the full consequences."¹⁶

Likewise, Vice Foreign Minister Zhang Zhijun declared,

The Chinese government has unshakable resolve and will to uphold China's territorial sovereignty. We have the confidence and the ability to uphold the country's sovereignty and territorial integrity. No amount of foreign threats or pressure will shake, in the slightest, the resolve of the Chinese government and people.¹⁷

¹¹ Li Baodong, "Remarks of Rebuke Against Japan's Statement on Diaoyu Dao by Ambassador Li Baodong During the General Debate of the 67th Session of the UN General Assembly," Permanent Mission of the People's Republic of China to the UN, October 16, 2012.

¹² Robert D. Blackwell and Kurt M. Campbell, *Xi Jinping on the Global Stage: Chinese Foreign Policy Under a Powerful but Exposed Leader*, New York: Council of Foreign Relations, Special Report No. 74, February 2016, p. 4.

¹³ "China Will Never Compromise on Security, Says Xi Jinping," *The Telegraph*, January 29, 2013.

¹⁴ "Xi Takes Hard Line on Sovereignty, Says China Will Never Permit Loss of 'Any Piece' of Its Land," *Japan Times*, August 1, 2017.

¹⁵ "‘Absolutely No Concession’ on Diaoyu Islands, Says Chinese Premier," *People's Daily Online*, September 11, 2012.

¹⁶ "China Warns Japan Against Provocations on Diaoyu Islands," *People's Daily Online*, January 13, 2016.

¹⁷ People's Republic of China Ministry of Foreign Affairs, "Vice Foreign Minister Zhang Zhijun Gave Briefing to Chinese and Foreign Journalists on the Diaoyu Dao Issue (Transcript)," October 27, 2012c.

The government website explaining Beijing's position says, "China will firmly defend its national sovereignty and territorial integrity. China's resolve . . . will not be shaken by any force."¹⁸ Similar language is used by China's defense establishment. In December 2012, Defense Ministry spokesperson Yang Yujun stated that the PLA "will decisively fulfill [its] tasks and missions . . . so as to safeguard China's maritime law enforcement activities and protect the country's territorial integrity and maritime rights."¹⁹ Following Tokyo's 2012 purchase of three islands, Chinese Defense Ministry spokesman Geng Yansheng said, "The determination and the will of the Chinese government and military to safeguard their territorial integrity are firm. We . . . reserve the right to take necessary measures."²⁰

However, despite this nonnegotiable stance, China has displayed no sense of urgency to act. Beijing tends to emphasize its historical right, reinforcing the notion that time is on its side. Its white paper on the Senkaku Islands, in which it details measures to safeguard its sovereignty, does not read like China is scrambling under a dwindling timeline. On the contrary, China's behavior sounds like methodological bureaucratic processes playing out: "issuing diplomatic statements, making serious representations with Japan and submitting notes of protest to the United Nations"; enacting "domestic laws, which clearly provide that Diaoyu Dao belongs to China"; and maintaining a "routine presence and exercis[ing] jurisdiction in the waters of Diaoyu Dao."²¹ The common refrain from Chinese officials is that the islands have been an inherent part of China for centuries and that this unquestionable truth will one day be righted:

The Diaoyu Island and its affiliated islands have been China's sacred territory since ancient times. This is supported by historical facts and jurisprudential evidence. The Diaoyu Islands were first discovered, named and exploited by the Chinese people. Chinese fishermen had long been engaged in production activities on these islands and in their adjacent waters. The Diaoyu Islands have been put under the jurisdiction of China's naval defense as affiliated islands of Taiwan, China since the Ming Dynasty. The Diaoyu Islands have never been "terra nullius." China is the indisputable owner of the Diaoyu Islands. . . . According to international law, the Diaoyu Island and its affiliated islands have already been returned to China. Facts are facts, and history is not to be reversed.²²

¹⁸ Diaoyu Dao: The Inherent Territory of China, undated.

¹⁹ "China on Guard Against Japanese Jets Near Diaoyu," *China Daily*, December 27, 2012.

²⁰ "China Warns of Consequences as Japan Announces Purchase of Disputed Islands," *The Guardian*, September 11, 2012.

²¹ State Council of the People's Republic of China, 2012.

²² People's Republic of China Ministry of Foreign Affairs, "Statement of the Ministry of Foreign Affairs of the People's Republic of China," Beijing, September 10, 2012b.

2. Can China's Role Be Clearly Identified and Proved in a Specific Event or Action?

Deterrence by punishment requires knowledge of the identity of the potential aggressor. Without this critical piece of information, the defender would not know whom to warn against attacking or whom to punish for an attack. Determining the aggressor's identity is generally obvious in the case of territorial aggression, but this question becomes more problematic for gray zone actions, which cannot always be attributed to a specific source.²³ In a context in which finding a smoking gun can be difficult, evidence of intent or capability might be the closest available indication of an aggressor's identity. The indicators might include

- the degree to which an aggressor has demonstrated ambitions for regional hegemony
- the degree to which an aggressor has acquired a reputation for bending international legal norms and hostile gray zone aggression
- the degree of aggressor control over activities
- the involvement of proxy or independent forces that blur responsibility.

China has dramatically reshaped international relations in the Indo-Pacific region. With a rapidly growing economy, Chinese power has increased, fueled by an expanding and modernizing PLA. Amid this growth, China has embarked on behaviors outlined elsewhere in this chapter, raising alarm across the region. Some scholars argue that China has clear ambitions for regional hegemony and hopes to displace the United States.²⁴ Under Xi, China departed from the long-held injunction of former leader Deng Xiaoping for China to keep a low profile, moving toward a philosophy of striving for achievement.²⁵ And Beijing harbors frustration, even opposition, to the U.S. alliance system in the region.²⁶ Most scholars interpret Xi's foreign policy as assertive, with China moving to (re)claim islands, create international institutions, pressure its neighbors, and deploy military assets to disputed regions in China's periphery.²⁷ It is uncertain whether Xi's ultimate goal is regional hegemony, but his foreign policy differs from that of his predecessors in that he is willing to use every instrument of statecraft to pursue Chinese interests, including military assets, geo-economic intimi-

²³ On the issue of attributability of cyberattacks, for instance, see Thomas Rid and Ben Buchanan, "Attributing Cyber Attacks," *Journal of Strategic Studies*, Vol. 38, No. 1–2, 2015.

²⁴ Patrick Cronin, "Chinese Regional Hegemony in Slow Motion," *War on the Rocks*, May 18, 2015; Timothy Heath, "Diplomacy Work Forum: Xi Steps Up Efforts to Shape a China-Centered Regional Order," *China Brief*, Vol. 13, No. 22, November 7, 2013; and Jennifer Lind, "Life in China's Asia: What Regional Hegemony Would Look Like," *Foreign Affairs*, March/April 2018.

²⁵ Yan Xuetong, "From Keeping a Low Profile to Striving for Achievement," *Chinese Journal of International Politics*, Vol. 7, No. 2, 2014.

²⁶ Adam Liff, "China and the U.S. Alliance System," *China Quarterly*, Vol. 233, March 2018.

²⁷ Blackwell and Campbell, 2016.

dation, and explicit economic rewards.²⁸ He has also centralized power in a way not seen in China since Mao Zedong, making Xi a powerful leader with all levers of the Chinese state at his disposal.

In his pursuit of national interests, Xi has made China very active in the region. Many see China's "rhetoric and policies towards its neighbors, including several U.S. allies, as increasingly provocative and newly assertive, even aggressive."²⁹ Such activities have built a reputation for China as a state willing to undertake provocative actions that bend international legal norms. Although China has claimed the Senkaku Islands since 1971, it is only since 2008 that Chinese maritime law enforcement vessels have been actively intruding into Japanese territorial waters around the islands. Since the Chinese fishing trawler rammed the two JCG vessels in 2010, China has increasingly undertaken aggressive gray zone activities against Japan. And following Tokyo's September 2012 purchase of three of the islands, intrusions of Chinese maritime enforcement vessels have become routine. Ever since, these government ships have become a regular presence in Japan's contiguous zone and territorial waters (as indicated in Figure 2.2). Initially, this presence conformed to a 3-3-2 pattern: Three times per month, three ships enter territorial waters for roughly two hours.³⁰ Since August 2016, China has increased the number of ships from three to four, resulting in a 3-4-2 pattern.

This behavior by Chinese law enforcement ships is matched by PLA provocations. The PLA Navy has a sustained presence in the East China Sea, and its regular area of activities has expanded toward the Nansei Shotō, including now-constant operations near the Senkakus.³¹ This presence includes surface combatants entering the Senkaku Islands' contiguous zone for the first time in June 2016 and a submerged submarine doing so in January 2018. Despite the legality of such actions under international law, Japan believes that the activity "unilaterally raises tensions and represents a serious concern for Japan."³² Likewise, Japan views PLA Navy fleet activities in the Pacific Ocean, while again legal, as provocative, given the increased frequency of PLA Navy ships transiting through international straits between Japanese territories. For instance, China's sole operational carrier group (*Liaoning*) sailed between Okinawa

²⁸ Blackwell and Campbell, 2016, p. 16.

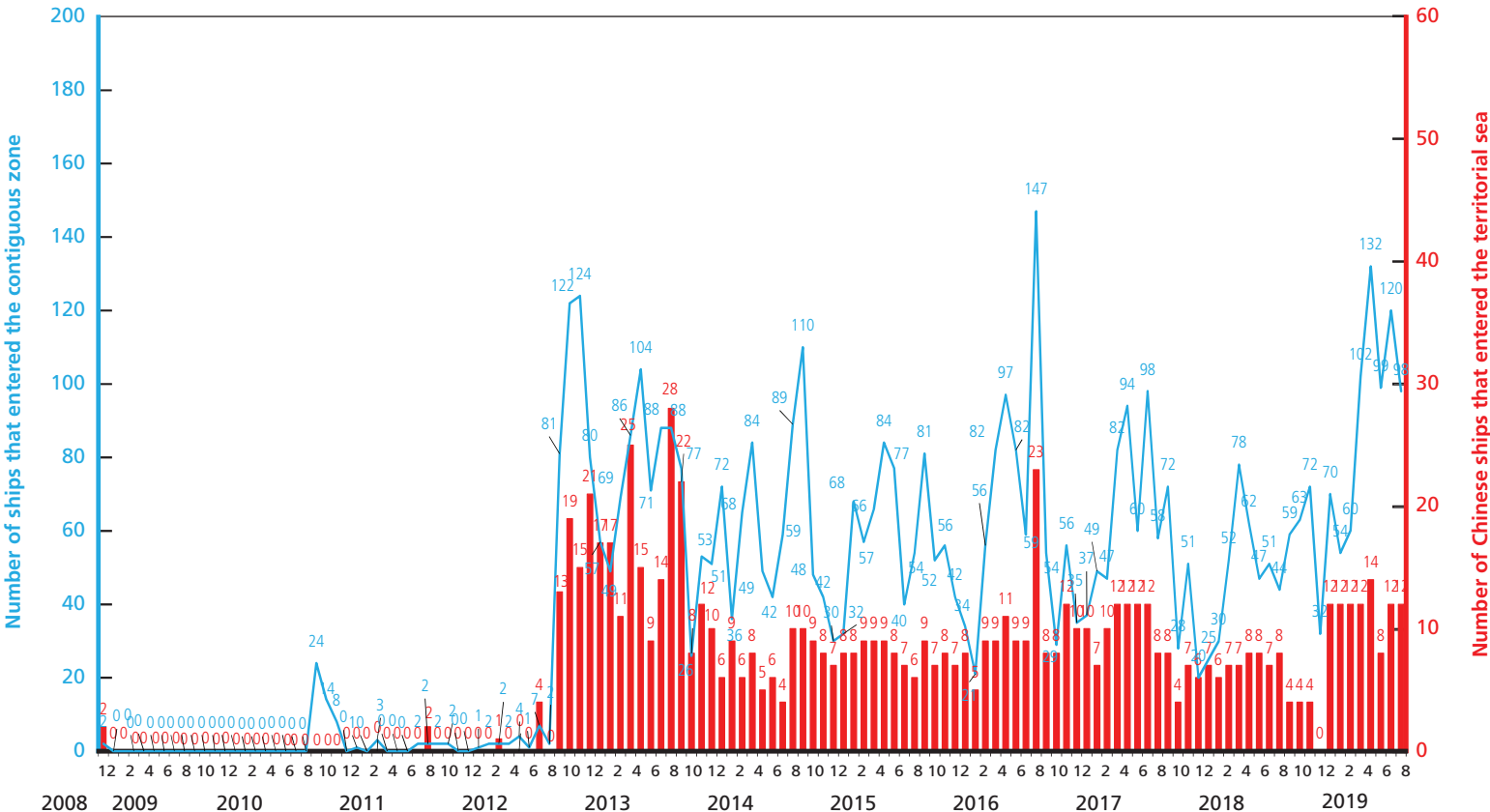
²⁹ Liff, 2018, p. 138.

³⁰ Tetsuo Kotani, "Bolstering the U.S. Commitment to the Senkaku Islands, *The Diplomat*, May 25, 2017.

³¹ Edmund J. Burke, Timothy R. Heath, Jeffrey W. Hornung, Logan Ma, Lyle J. Morris, and Michael S. Chase, *China's Military Activities in the East China Sea: Implications for Japan's Air Self-Defense Force*, Santa Monica, Calif.: RAND Corporation, RR-2574-AF, 2018.

³² "Press Conference by the Chief Cabinet Secretary (Excerpt)," Prime Minister of Japan and His Cabinet, Public Relations Office, January 11, 2018.

Figure 2.2
Chinese Government Vessels Near the Senkaku Islands



SOURCE: JCG, "The Numbers of Chinese Government and Other Vessels That Entered Japan's Contiguous Zone or Intruded into Territorial Sea Surrounding the Senkaku Islands," chart, June 30, 2019.

and Miyako for its first voyage into the Pacific Ocean in December 2016,³³ and PLA Navy vessels occasionally sailed through the Tsugaru and Soya Straits in the northern part of Japan. Japan views these activities as provocative because these ships occasionally transit uncontested territorial waters far from the Senkaku Islands. For example, a Chinese ship entered the territorial waters around Kuchinoerabu and Yaku Islands off Kyushu in June 2016, and another ship did the same around Kojima Island near Hokkaido in July 2017.³⁴

In addition to this maritime activity, Chinese air activities have increased, including those closer to the Nansei Shotō and Senkaku Islands. Maritime law enforcement aircraft have even violated the Senkakus' territorial airspace. The first violation occurred in December 2012 by a fixed-wing Y-12 surveillance aircraft from the State Oceanic Administration. In May 2017, a drone-like object was launched from a China Coast Guard vessel and subsequently flew into the Senkakus' territorial airspace.³⁵ Like the increased frequency of PLA Navy ships transiting through straits, there has been an increase in PLA Air Force activity further away from the Senkaku Islands, even into the Sea of Japan. PLA Air Force aircraft have crossed over the Tsushima Strait (adjacent to the Korea Strait), as well as over straits closer to the Nansei Shotō en route to and from the Pacific Ocean. There has been a particular increase in activity over the Miyako Strait (between Okinawa and Miyako).³⁶ On March 23, 2018, alone, the PLA Air Force flew over the strait with four H-6 bombers, one Y-8 electronic countermeasures aircraft, one Tu-154 surveillance plane, and two Sukhoi Su-35 fighters.³⁷

China has been even more aggressive in the South China Sea. Although it has unilaterally declared a Nine-Dash Line that encompasses the majority of the sea, China has never clarified what rights it believes are derived from that assertion. Despite having no basis in international law, China has taken steps to bolster its claims. In addition to an increased presence of China Coast Guard vessels in the South China Sea, China has increased its PLA presence, such as PLA Air Force patrols. The most provocative steps have been land reclamation projects to create artificial islands from small geological features in both the Spratly and Paracel Islands. China has pursued

³³ Joint Staff Office, "Chūgoku Kaigun Kantei Tō no Dōkō ni Tsuite [Regarding China's Naval Fleet and Other Movements]," press release, Japan Ministry of Defense, December 25, 2016.

³⁴ Ayako Mie, "Chinese Spy Ship Enters Japan's Territorial Waters for Second Time Since End of WWII," *Japan Times*, June 15, 2016; and "Chinese Naval Surveillance Ship Enters Japanese Waters Near Hokkaido," *Japan Times*, July 3, 2017.

³⁵ "Drone Joins Four Chinese Ships in Latest Senkaku Intrusion," *Japan Times*, May 18, 2017.

³⁶ Franz-Stefan Gady, "Japan Scrambles Fighter Jets in Response to Chinese Spy Plane over Miyako Strait," *The Diplomat*, June 17, 2019.

³⁷ Joint Staff Office, "Chūgoku ki no Higashi Shinakai oyobi Taiheiyō ni Okeru Hikō ni Tsuite [Regarding the Flight of Chinese Planes in the East China Sea and Pacific Ocean]," press release, Japan Ministry of Defense, March 23, 2018a.

infrastructure projects on these islands, including runways; hangars; radars; and, in some instances, missile batteries. In the Spratly Islands, China has militarized three artificial islands: Fiery Cross Reef, Subi Reef, and Mischief Reef. Among the Paracel Islands, Woody Island has had its runway extended and seen the deployment of fighters and anti-ship cruise missiles. Although building islands is not illegal, acting as if they generate rights challenges maritime law. And equipping them with facilities to support missile batteries and forward-deployed platforms—such as fighters, bombers, and unmanned aerial vehicles—militarizes them. These steps are viewed as provocative because they improve China’s air power–projection capability over the South China Sea, its anti-access/area-denial capabilities, and its ability to impose an air defense identification zone. Table 2.1 lists just some of China’s aggressive, and sometimes unlawful, provocations against South China Sea claimants and the United States.

In addition to these clearly attributable actions, China employs irregular forces that blur attribution of the activities. Ships appearing to be crewed by civilians are believed to be forces managed by local PLA military commands and funded by provincial governments. This maritime militia is useful because China can deny involvement

Table 2.1
Chinese Provocations in the South China Sea

Date	Provocation
March 2009	U.S. naval ship Impeccable incident
May 2011	Vietnamese oil exploration cables incident (<i>Binh Minh 02</i>)
June 2011	Vietnamese oil exploration cables incident (<i>Viking II</i>)
April 2012	Scarborough Shoal standoff
March 2013	James Shoal incident
May 2013	BRP Sierra Madre incident (1 of 2)
December 2013	USS Cowpens incident
March 2014	BRP Sierra Madre incident (2 of 2)
May 2014	HYSY-981 (China National Offshore Oil Corporation rig) incident
March 2016	China-Indonesia confrontation near the Natuna Islands
May 2016	Chinese jets intercept U.S. EP-3 aircraft near Hainan Island
December 2016	Chinese submarine seizes U.S. undersea drone glider
July 2017	Chinese fighter jets intercept U.S. P-3 patrol aircraft
September 2018	A Chinese <i>Luyang II</i> destroyer makes unsafe close passage to a U.S. destroyer near Spratly Island formations

SOURCE: Maritime Awareness Project, “Incident Timeline: South and East China Seas,” National Bureau of Asian Research and Sasakawa Peace Foundation USA, undated.

in maritime encounters with other states.³⁸ At the same time, Beijing can order these units to conduct specific operations and closely coordinate their activities with the PLA Navy and the China Coast Guard. In effect, the maritime militia is a state-organized, state-developed, and state-controlled force operating under the direct military chain of command to conduct state-sponsored activities.³⁹ It is believed that, in the South China Sea, the maritime militia participated in China's seizure of Scarborough Shoal from the Philippines in 2012 and helped China repel Vietnamese ships from an oil rig that China stationed near the Paracel Islands in 2014.⁴⁰ In addition, it is believed that, in the East China Sea, more than 100 maritime militia vessels were part of a fishing fleet that penetrated the contiguous zone of the Senkaku Islands in August 2016.⁴¹

3. How Aggressive Is the Specific Event or Action?

The more aggressive the gray zone provocations are, the more possible it is to deter them, because they can be identified, attributed, and shown to threaten national interests severely enough to make deterrent messages credible in advance. Broadly speaking, it is more difficult to threaten to respond to an action of minimal importance than it is to threaten to respond to one of significant importance. Two indicators in particular can help gauge the level of aggression: (1) the degree to which an action represents a territorial change in the status quo and (2) the degree to which an action directly encroaches on the territorial integrity of a defender.

China's actions in the Senkaku Islands do not represent a territorial change in the status quo, but they directly encroach on Japan's territorial integrity. The Japanese government views the Senkaku Islands as "an inherent part of the territory of Japan, in light of historical facts and based upon international law. Indeed, the Senkaku Islands are under the valid control of Japan. There exists no issue of territorial sovereignty to be resolved concerning the Senkaku Islands."⁴² This view is strongly supported by Japanese Prime Minister Shinzō Abe, who views the islands as "an integral part of Japanese

³⁸ Andrew Erickson and Conor Kennedy have done extensive research on the topic. See Andrew S. Erickson and Conor M. Kennedy, "Meet the Chinese Maritime Militia Waging a 'People's War at Sea,'" *Wall Street Journal*, March 31, 2015a; Andrew S. Erickson and Conor M. Kennedy, "Directing China's 'Little Blue Men': Uncovering the Maritime Militia Command Structure," *Asia Maritime Transparency Institute*, September 11, 2015b; and 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*, November 2, 2015c.

³⁹ Conor M. Kennedy and Andrew S. Erickson, *China's Third Sea Force, the People's Armed Forces Maritime Militia: Tethered to the PLA*, Newport, R.I.: China Maritime Studies Institute, China Maritime Report No. 1, March 2017.

⁴⁰ Andrew S. Erickson and Conor M. Kennedy, "China's Maritime Militia: What It Is and How to Deal with It," *Foreign Affairs*, June 23, 2016.

⁴¹ Lyle Morris, "The New 'Normal' in the East China Sea," *The Diplomat*, February 24, 2017.

⁴² Japan Ministry of Foreign Affairs, "About the Senkaku Islands," webpage, April 13, 2016b.

territory based on international law as well as in the context of our history.”⁴³ Although China has not attempted to seize the islands by force and largely refrains from the type of behavior that it pursues in the South China Sea, its actions represent a salami-slicing strategy meant to call into question Japan’s control. China is attempting to establish a new status quo that enables China to argue that Japan does not have uncontested control of the islands. Japan views this as a threat to its territorial integrity. In his first press conference as prime minister in 2012, Abe called this activity “a crisis that exists right there and now.”⁴⁴

Beyond its activity in the water and in the air, China seeks to undermine Japanese administrative control of the Senkakus by controlling the narrative. It does this on two fronts. The first is by bolstering its claims through unilateral legal proclamations meant to have international legal import. For example, on February 25, 1992, the Standing Committee of the National People’s Congress adopted the Law of the People’s Republic of China on the Territorial Sea and the Contiguous Zone.⁴⁵ The law is meant to be the legal basis by which Beijing can exercise sovereignty over its territorial sea and control over its contiguous zone. The law refers to “Taiwan and all islands appertaining thereto including the Diaoyu Islands (Article 2)” as belonging to China. The law extends sovereignty “to the air space over the territorial sea as well as to the bed and subsoil of the territorial sea (Article 5).” Importantly, the law outlines responsibilities for other states that, if abided by, reinforce China’s control of the islands. These responsibilities include

- innocent passage for nonmilitary foreign ships through territorial seas (Article 6)
- the need for foreign ships to obtain the approval from Beijing for passing through territorial seas (Article 6)
- the need for foreign submarines to surface and show their flag when passing through territorial seas (Article 7)
- the prohibition of aircraft of a foreign state to enter the airspace over the territorial sea unless they have made a prior agreement (Article 12).

To enforce these responsibilities, the law gives China the right to

- take “all necessary measures to prevent and stop non-innocent passage through its territorial sea” (Article 8)

⁴³ Lally Weymouth, “An Interview with Japanese Prime Minister Shinzo Abe,” *Washington Post*, November 7, 2014.

⁴⁴ “Press Conference by Prime Minister Shinzo Abe,” Prime Minister of Japan and His Cabinet, Public Relations Office, December 26, 2012.

⁴⁵ Government of the People’s Republic of China, Law of the People’s Republic of China on the Territorial Sea and the Contiguous Zone, Beijing, February 25, 1992.

- “exercise control in the contiguous zone to prevent and impose penalties for activities infringing the laws or regulations concerning security, the customs, finance, sanitation or entry and exit control within its land territory, internal waters or territorial sea” (Article 13).⁴⁶

More recently, China has taken similar actions to support its narrative that the islands are not controlled by Japan. In 2009, Beijing passed the Law of the People's Republic of China on the Protection of Offshore Islands to protect, develop, and manage the nation's offshore islands and to prescribe the determination and announcement of their names.⁴⁷ In March 2012, Beijing announced their standard names. In September 2012, Beijing announced the baseline boundaries of the territorial sea of Diaoyu and its affiliated islands, and it submitted the coordinates table and baseline chart to the United Nations. In November 2013, Beijing declared an air defense identification zone in the East China Sea.⁴⁸ The zone covered Diaoyu Dao and included rules for foreign aircraft, including a vague threat that “China's armed forces will adopt defensive emergency measures to respond to aircraft that do not cooperate in the identification or refuse to follow the instructions.”⁴⁹

The second means by which China attempts to control the narrative is to publicly discredit Japan. In addition to framing Japanese actions as illegal, China links Japan's claims with actions taken by Imperial Japan in the early 20th century. The criticisms are often subtle but enough to paint democratic Japan as a continuation of Imperial Japan. For example, in a speech at the United Nations, Ambassador Li Baodong argued,

At the end of the 19th century, Japan stole from China large chunks of territory, including the Diaoyu Dao, through colonial war of aggression. Now we are in the 21st century. Japan still adopts the obsolete colonial mentality and attempts to exercise long-term occupation of the Diaoyu Dao that it stole from China.⁵⁰

Other times, Chinese criticisms question Japan's role in the world. Following Tokyo's 2012 purchase of three islands in the Senkakus, China's Foreign Ministry released a

⁴⁶ Government of the People's Republic of China, 1992.

⁴⁷ Government of the People's Republic of China, Law of the People's Republic of China on the Protection of Offshore Islands, Beijing, December 26, 2009.

⁴⁸ People's Republic of China Ministry of National Defense, “Statement by the Government of the People's Republic of China on Establishing the East China Sea Air Defense Identification Zone,” *China Daily*, November 23, 2013b.

⁴⁹ People's Republic of China Ministry of National Defense, “Announcement of the Aircraft Identification Rules for the East China Sea Air Defense Identification Zone of the People's Republic of China,” *China Daily*, November 23, 2013a.

⁵⁰ Li, 2012.

statement saying, “The political tendency these actions point to may well put people on the alert. We cannot but ask: where is Japan heading to? Can anyone rest assured of Japan’s future course of development?”⁵¹ The statement goes on to explicitly warn that Japan’s actions threaten the international order that was established after Imperial Japan’s defeat, arguing that “Japan’s position on the issue of the Diaoyu Island is an outright denial of the outcomes of the victory of the World Anti-Fascist War and constitutes a grave challenge to the post-war international order.”⁵²

This sentiment was echoed by Ambassador Li, who said, “The Japanese act is a resistance to the international endeavors against colonialism, an outright denial of the outcomes of victory of the world anti-fascist war, and a grave challenge to the post-war international order and the international law.”⁵³ More explicitly, a Chinese-government white paper on the islands states that “Japan’s attempted occupation of Diaoyu Dao . . . constitutes a challenge to the post-war international order established by such legal documents as the Cairo Declaration and the Potsdam Proclamation and seriously violates the obligations Japan should undertake according to international law.”⁵⁴

4. Do the United States and Japan Have Specific and Agreed-Upon Outcomes That They Will Not Accept? Do They Agree on What They Are Trying to Deter?

Deterrence requires the defender to establish a threshold beyond which the aggressor will face retaliation. Without this information, the aggressor does not know what will constitute a redline for the defender and therefore cannot adjust its behavior accordingly. A common understanding between the United States and its local partners of where this threshold lies helps them to send a clear signal to the potential aggressor. Furthermore, any disagreement on that front might be perceived by the potential aggressor as showing dissension—and therefore weakness. Three indicators of such shared understanding are the existence of clear policy statements on thresholds for response, the clarity and consistency of signaling about which actions will generate deterrent responses, and the degree to which U.S. and partner actions reinforce this message.

In the case of Chinese aggression against the Senkaku Islands, the Japanese government has consistently provided clear statements on its commitment to protect the islands. After assuming the premiership, Abe made explicit his “stance of resolutely defending [Japan’s] sea and territory” and that “there is no room for negotiations on this issue.”⁵⁵ Tokyo has consistently said that it will respond to provocative behavior, but it has not always been clear about its thresholds for response. Many of the Abe adminis-

⁵¹ People’s Republic of China Ministry of Foreign Affairs, 2012b.

⁵² People’s Republic of China Ministry of Foreign Affairs, 2012b.

⁵³ Li, 2012.

⁵⁴ State Council of the People’s Republic of China, 2012.

⁵⁵ “Press Conference by Prime Minister Shinzo Abe,” Prime Minister of Japan and His Cabinet, Public Relations Office, January 11, 2013.

tration's security-related documents detail the broad contours of how Japan will act in the event of Chinese actions that cross over from gray zone into clear aggression. For example, Japan's 2013 National Security Strategy lays out a broad strategy. In addition to encouraging China to play a responsible and constructive role, to adhere to international norms of behavior, and to improve transparency in its military modernization efforts, Tokyo "will urge China to exercise self-restraint and will continue to respond firmly but in a calm manner without escalating the situation."⁵⁶ The December 2013 National Defense Program Guidelines provide further details, stating that Japan will "swiftly and seamlessly respond to situations including gray zone situations."⁵⁷ The document goes on to explain which responses China can expect should it go beyond gray zone activities and attack the remote islands:

Japan will immediately take appropriate measures to deal with any incursions into its territorial airspace. Japan will respond effectively and promptly to gray-zone situations or any other acts that may violate its sovereignty. Furthermore, should the acts in question become protracted or escalate, Japan will respond seamlessly as the situation evolves, taking all possible measures for the defense and security of the sea and airspace surrounding Japan.

. . . Japan will intercept and defeat any invasion, by securing maritime supremacy and air superiority, with the necessary SDF units swiftly deployed to interdict, in addition to the units deployed in advance in accordance with the security environment. Moreover, should any remote islands be invaded, Japan will recapture them. In doing so, any ballistic missile or cruise missile attacks will be dealt with appropriately.⁵⁸

Statements by Japanese officials tend to echo these documents in their firm opposition to China's gray zone activities. For example, following the flights of PLA Air Force assets over the Miyako Strait and close to Japan's territorial airspace, Chief Cabinet Secretary Yoshihide Suga noted that not only will Japan "continue to watch the Chinese military's activity," but the government is "determined to defend our land, territorial waters and the skies."⁵⁹ In response to a worsening situation around the islands in August 2016, Japan's Foreign Minister Fumio Kishida summoned Cheng Yonghua, China's ambassador to Japan, and warned against a "rapidly deteriorating" situation

⁵⁶ Japan Ministry of Foreign Affairs, 2013, p. 25.

⁵⁷ Japan Ministry of Defense (JMOD), *National Defense Program Guidelines for FY2014 and Beyond*, Tokyo, provisional translation, December 17, 2013b, p. 13.

⁵⁸ JMOD, 2013b, p. 14.

⁵⁹ Feliz Solomon, "Japan Warns China After Warplanes Were Spotted Flying Close to Disputed Islands," *Time*, September 26, 2016.

brought on by China's actions.⁶⁰ Kishida issued a protest that included a demand for China "to remove its vessels without delay and improve the situation on the ground in a clear and tangible manner."⁶¹

On rare occasions, Japanese officials signal which actions will generate a deterrent response. In 2013, Japanese media reported plans by the JMOD for the SDF to shoot down foreign drones that intrude into Japan's airspace if warnings to leave are ignored.⁶² Similarly, Chief Cabinet Secretary Suga said, "one option" of the government's plan to do everything to protect Japanese territory, water, and airspace included permanently stationing public officials on the islands.⁶³ And in November 2015, the Japanese government informed China of its decision to use the Japan Maritime Self-Defense Force (JMSDF) to tell any foreign naval vessel that enters Japanese waters for reasons other than "innocent passage" to leave.⁶⁴

Suga announced this decision publicly at a press conference in January 2016: "If a foreign naval vessel transiting Japanese waters does not fall under innocent passage," he said, Japan will "order a Maritime Security Order [*kaijō keibi kōdō*] and dispatch the Maritime Self-Defense Force to demand withdrawal."⁶⁵ The most explicit signaling was given by Prime Minister Abe himself, who, in parliamentary discussions, said that it is natural for Japan to use "forceful expulsion" (*kyōsei haijō*) for any Chinese landing on the Senkaku Islands.⁶⁶

In addition to these explicit deterrent statements, Japan has been sending clear signals—through action—on its ability to back up its warnings. Since 2010, beyond

⁶⁰ Kiyoshi Takenaka, "Japan Warns China of 'Deteriorating' Ties over East China Sea Dispute," *The Independent*, August 9, 2016; and "Japan Warns China of Deteriorating Relations over Senkaku Islands," *The Guardian*, August 9, 2016.

⁶¹ Japan Ministry of Foreign Affairs, "Protest by Foreign Minister Kishida to Mr. Cheng Yonghua, Ambassador of the People's Republic of China to Japan, Concerning the Situation Around the Senkaku Islands," press release, August 9, 2016c.

⁶² Ryōkū Shinnyū no Mujinki Gekitsui, Seifu ga Kentō Taisho Hōshin Sakutei ni Chakushu" [Shoot Down Unmanned Aircraft in Territorial Airspace, Government Is Examining, Beginning to Formulate a Plan to Address It], *Sankei Shimbun*, September 18, 2013.

⁶³ "Senkaku Yuzurenu 1-Nen [One Year of Not Conceding the Senkakus]," *Asahi Shimbun*, September 11, 2013, p. 2; and "Senkaku Kokuyūka 1-Nen Kinchō Nao, Seifu, Bōei Taisei Kyōka Isogu, Chūgoku to no Kyōgi Teitai [One Year Since Senkaku Nationalization and Still Tensions, Government Hurries Strengthening Defense Readiness, Discussion with China at Standstill]," *Nihon Keizai Shimbun*, September 11, 2013, p. 4.

⁶⁴ Kaori Kaneko, Linda Sieg, and Ben Blanchard, "Japan Sends China Warning over Incursions Near Disputed Isles," Reuters, January 11, 2016.

⁶⁵ "Senkaku Ryōkai ni Chūgoku-kan Shinnyū Ji 'Jieitai ga Taiō' Nakatani Bōeisō [When Chinese Ships Intrude into Senkaku Territorial Waters, 'Respond with the SDF,' Defense Minister Nakatani]," *Asahi Shimbun*, January 13, 2016, p. 4; and "Kaijō Keibi Kōdō: Senkaku ni Kaiji Haken mo Chūgoku ni Dentatsu [Maritime Security Order: Communicate to China MSDF Will Also Dispatch to the Senkakus]," *Mainichi Shimbun*, January 13, 2016, p. 2.

⁶⁶ Shinzō Abe, Upper House Budget Committee discussions, Diet Records Search System (Japanese only), April 23, 2013.

passing legislation that narrowly expands what the SDF can do, Tokyo has added capabilities devoted particularly to the defense of the Nansei Shotō.⁶⁷ The aim has been to strengthen Japan's ability to deter or defeat the various forms of Chinese aggression, thereby also strengthening its ability to deliver a deterrent response should Chinese actions cross the threshold beyond the gray zone. In the National Defense Program Guidelines, for instance, the government outlined the actions it planned on taking to respond to the increasing frequency and duration of gray zone situations. Tokyo's responses include

- conducting persistent intelligence, surveillance, and reconnaissance (ISR) activities
- achieving maritime supremacy and air superiority
- developing defense capabilities, adequate both in quantity and quality, that underpin activities to realize a more robust defense force
- building a response posture that includes advance deployment of units in response to the security environment and rapid deployment of adequate units.⁶⁸

As a result, there has been a concerted effort to strengthen SDF capabilities in key areas. For maintaining air superiority and maritime dominance, the JMSDF maintains 17 submarines and 46 destroyers, four of which are equipped with the Aegis Combat System.⁶⁹ The JMSDF plans on increasing the submarine fleet to 22 and the destroyer fleet to 54 (with eight that are Aegis-equipped). Japan's Medium Term Defense Program for fiscal years (FYs) 2014 to 2018 stipulated five new destroyers,⁷⁰ but only three had been built as of 2018. To make up for the shortage, the JMSDF is planning to introduce two new compact destroyers, which "will be designed to weigh and cost less than the fleet's current destroyers while retaining basic equipment such as anti-air missiles, radar and torpedoes."⁷¹ They will also be equipped with amphibious drones that could help them search for and destroy mines. To counter the threat from mines, the JMSDF possesses a fleet of 25 minesweepers.⁷²

⁶⁷ For changes in Japan's security laws, see Jeffrey W. Hornung, "Japan's 2015 Security Legislation: Change Rooted Firmly in Continuity," in Mary M. McCarthy, ed., *Routledge Handbook of Japanese Foreign Policy*, London: Routledge, 2018.

⁶⁸ JMOD, 2013b, pp. 7–8.

⁶⁹ JMOD, "Reference 10," *Nihon no Bōei Heisei 29 Nenban [Defense of Japan 2017]*, white paper, Tokyo, 2017b, p. 480.

⁷⁰ JMOD, *Medium Term Defense Program (FY2014–FY2018)*, Tokyo, provisional translation, December 17, 2013a.

⁷¹ "Japan Eyes Smaller, Cheaper Warships," *Nikkei Asian Review*, June 6, 2017. The new ships will weigh approximately 3,900 tons (compared with around 5,000 tons for standard destroyers), and the required crew will be 130 (compared with 200).

⁷² JMOD, 2017b, p. 480.

In recent years, the JMSDF has been acquiring a new class of ocean minesweeper equipped with higher capabilities and a fiber-reinforced polymer hull rather than the conventional wooden hull. Already, the force has acquired two of these 690-ton *Awaji*-class ships, which have entered service.⁷³ In addition to building a third ship, the JMOD is intent on building a new class of submarine with higher detection capabilities to conduct intelligence-gathering and surveillance activities.

Similarly, the Japan Air Self-Defense Force (JASDF) maintains an arsenal of 201 F-15J/DJs, 52 F-4EJs, and 92 F-2A/Bs.⁷⁴ Importantly, the JASDF received its first delivery of four F-35As in 2017, with six more requested in FY2018 as part of its plan to acquire a fleet of 42 such aircraft over the next few years to replace the fleet of F-4EJs. Significant resources have also been devoted to upgrading the existing air fleet to adapt to the modernization of the PLA Air Force's aerial combat capabilities. This upgrade includes continuous improvements to the air-to-air combat capabilities of the F-2 fleet and equipping the F-2s with the SDF Digital Communication System (Fighter), also known as JDCS (F). There are even rumors of arming the F-35 fleet with long-range standoff missiles and guided bombs, including the long-range, precision-guided Joint Strike Missile, the Joint Air to Surface Standoff Missile, and the GBU-31JDAM air-to-ground guided bomb.⁷⁵

Two additional domains of focus have been ISR aircraft and ships for anti-submarine warfare (ASW). The JASDF maintains 13 E-2C early-warning aircraft and four E-767 early-warning and control aircraft.⁷⁶ The JMSDF maintains 11 P-1s, 62 P-3Cs, 35 SH-60Js, and 52 SH-60Ks,⁷⁷ all of which are supported by the JMSDF's surface fleet, which is capable of both ISR and ASW operations. That fleet is adding to its current number of 33 destroyers, which can all carry at least one helicopter, while the two *Atago*-class and two *Hatakaze*-class guided-missile destroyers are equipped to transport a helicopter.⁷⁸ Over the past decade, the JMSDF has also introduced larger helicopter-equipped destroyers, including two *Hyūga*-class destroyers (13,950 tons) that

⁷³ Gabriel Dominguez, "JMSDF Commissions First Awaji-Class Minesweeper," *Jane's Defence Weekly*, March 22, 2017a.

⁷⁴ JMOD, "Reference 9," *Nihon no Bōei Heisei 29 Nenban [Defense of Japan 2017]*, white paper, 2017a, p. 480.

⁷⁵ Franz-Stefan Gady, "Deterring North Korea: Will Japan Buy More F-35 Fighter Jets?" *The Diplomat*, September 6, 2017.

⁷⁶ JMOD, 2017a, p. 480.

⁷⁷ JMOD, 2017a, p. 480.

⁷⁸ Only the *Akizuki*-class destroyer can carry two helicopters. The four *Kongō*-class guided-missile destroyers have only a helicopter platform, not a helicopter hangar; therefore, they are not considered capable of carrying their own helicopter. Data on each ship were found in IHS Markit, *Jane's Fighting Ships*, 2017; specifically, the dates for published data on each class are as follows: *Akizuki* class, June 13, 2017; *Hatsuyuki* class, February 9, 2017; *Asagiri* class, February 9, 2017; *Murasame* class, February 9, 2017; *Takanami* class, January 19, 2017; *Hatakaze* class, January 19, 2017; and *Atago* class, July 20, 2017.

can carry up to 11 SH-60K helicopters⁷⁹ and two *Izumo*-class destroyers (19,550 tons) that can carry nine helicopters, including seven ASW helicopters and two search and rescue helicopters.⁸⁰ Between 14 and 17 more helicopters can be stored in the hangar deck.⁸¹ Finally, the JMSDF maintains two 2,850-ton *Hibiki*-class ocean surveillance ships with advanced capabilities to gather acoustical intelligence on the open seas. Critically, the JMOD continues to improve Japan's radar capabilities in the Senkaku Islands. In the FY2017 defense budget, the JMOD sought to strengthen these ISR and ASW capabilities in the following ways:

- Install fixed warning and control radar (FPS-7) at some existing radar sites in the region.
- Convert computing devices and install or upgrade electronic warfare support measures in an E-767 as part of the effort to improve the fleet's warning and surveillance capabilities.
- Acquire two E-2D Advanced Hawkeye airborne early-warning and surveillance aircraft.
- Upgrade existing radar in the P-3Cs as part of ongoing efforts to improve the fleet's detection and discernment capabilities.
- Build a third *Hibiki*-class ship.⁸²

To improve logistical support capabilities, the JMOD has requested a new KC-46A aerial refueling and transport aircraft (one of three planned) and will add aerial refueling functions to one C-130H cargo plane.⁸³ Similarly, because of the separation between islands, the SDF are improving their airlift capabilities. The JASDF is creating a fleet of ten indigenously produced C-2 transport planes, which will add lift capabilities to the JASDF's existing fleet of 17 C-1s and 14 C-130Hs. And although no resources are being used to develop a new class of tank landing ship for Japan's Amphibious Rapid Deployment Brigade, the Japan Ground Self-Defense Force (JGSDF) is also building up its lift capabilities. Currently, the JGSDF has a fleet of 57 CH-47JA helicopters that enable quick and large-scale transport and deployment to outlying islands.⁸⁴ Complementing these helicopters in the coming years will be a fleet

⁷⁹ "JMSDF Hyuga Class Destroyer, Japan," *Naval Technology*, undated.

⁸⁰ "Bōei-shō kara Heisei 22-nendo Keikaku Herikoputā Tōsai Goeikan wo Juchū: Kokunai Saidai no Goeikan, [From the MOD, Receiving Orders for a Destroyer Equipped with a Helicopter in FY2010 Plan: The Country's Largest Destroyer]," *IHI*, April 13, 2011.

⁸¹ J. R. Potts and Dan Alex, "JS *Izumo* (DDH-183): Conventionally-Powered Helicopter Carrier/Destroyer," *Military Factory*, September 14, 2016.

⁸² JMOD, *Waga Kuni no Bōei to Yosan: Heisei 30 Nendo Gaisan Yōkyū no Gaiyō* [Defense Programs and Budget of Japan: Summary of FY2018 Request Estimates], Tokyo, 2017c, p. 4.

⁸³ JMOD, 2017c, p. 7.

⁸⁴ JMOD, 2017a, p. 479.

of 17 V-22 tilt-rotor aircraft, capable of flying farther and faster than the CH-47JAs. Five of these were expected to be delivered in 2019, with an additional four in 2020, another four in 2021, and a final four in 2022.

The clearest signals about which actions will generate deterrent responses have come from the JASDF and the JCG. Within the JCG, there is a strong belief that it must not only maintain a persistent presence near the Senkakus but also respond to *every* territorial violation by Chinese vessels “as evidence that Japan protests Chinese activities.”⁸⁵ Since the 2012 purchase of the three islands, this commitment has been tested. From 68 Chinese government vessels intruding into Japanese territorial waters and 407 into Japan’s contiguous zone in 2012, the numbers grew to 121 and 752 vessels, respectively, in 2017.⁸⁶ There is a fear that if the JCG is absent, China might become more aggressive.⁸⁷ Therefore, whenever Chinese vessels approach, “the JCG dispatches patrol vessels/craft and aircraft to those waters to take any and all necessary measures, such as giving warnings, demanding departure, and exercising other forms of control.”⁸⁸

The same belief is widespread in Japan’s defense establishment, where people believe that if the SDF do nothing, China will continue to extend its sphere of activities without limit. Worse, Japan’s administrative control will be called into question.⁸⁹ JMOD and SDF officials believe that a persistent presence and a consistent response will force China to consider Japan’s willingness to protect its territory.⁹⁰ Likewise, the JASDF is tasked with actively responding to every possible airspace violation.⁹¹ These scrambles are conducted by what is today the JASDF’s Southwestern Air Defense Force (previously called the Southwestern Composite Air Division). In FY2013, JASDF units assigned to this area scrambled 402 times, primarily against Chinese planes. This number rose in subsequent years to 468 (FY2014), 531 (FY2015), and 803 (FY2016).⁹² For a reason that Japanese analysts are still debating, the number of PLA Air Force intrusions dropped dramatically in FY2017, necessitating only 477 scrambles.

⁸⁵ Japanese scholar, interview with authors, January 16, 2018.

⁸⁶ JCG, “Chūgoku Kōsen ni Yoru Setsuzoku Suiiki Nyūiki, Ryōkai Shinnyū [Chinese Official Vessels Enter into Japan’s Contiguous Zone and Intrude into Territorial Waters],” in *Kaijō Hoan Repōto 2017-nen ban* [*Japan Coast Guard Annual Report 2017*], Tokyo, 2017a.

⁸⁷ Anonymous #1, interview with the authors, January 15, 2018; and anonymous #9, interview with the authors, January 18, 2018.

⁸⁸ JCG, “Guarding Territorial Waters and the EEZ,” March 2018, p. 9.

⁸⁹ Anonymous #8, interview with the authors, January 18, 2018.

⁹⁰ Anonymous #9, interview with the authors, January 18, 2018.

⁹¹ Retired JASDF officer, interview with the authors, January 15, 2018.

⁹² Joint Staff Office, “Heisei 29-Nendo no Kinkyū Hasshin Jisshi Jōkyō ni Tsuite [Regarding the Status of Implementing Emergency Scrambles in Fiscal Year Heisei 29],” press release, Japan Ministry of Defense, April 13, 2018b.

5. Are the United States and Japan Fully Aligned on the Need to Respond to Specific High-End Gray Zone Provocations and the Means of Doing So?

In addition to agreeing on a threshold that the potential aggressor should not cross, the United States and its partners need to share an understanding of the likely response that needs to be communicated as part of a deterrent message. Several indicators can provide a sense of whether such an agreement on responses exists:

- the degree to which the public positions of the United States and its local partners are aligned
- the existence of formal coordinating mechanisms, planning groups, rules of engagement, or other processes that signal alignment
- the conduct of exercises and joint operations to indicate alignment
- a history of combined responses to provocations.

In this case, Washington and Tokyo are aligned in their opposition to Chinese behavior. Tokyo has been explicit on the type of behavior that it views as a threat to its territorial integrity. Japan's National Security Strategy identifies Chinese military activities that it feels it "needs to pay careful attention to."⁹³ These include activities in the seas and airspace around Japan; intrusion into Japan's territorial waters and airspace around the Senkaku Islands; and actions that infringe on the freedom of overflight above the high seas, such as the establishment of the air defense identification zone. Japan's National Defense Program Guidelines voice a similar concern, arguing that China

has intruded into Japanese territorial waters frequently and violated Japan's airspace, and has engaged in dangerous activities that could cause unexpected situations, such as its announcement of establishing an "Air Defense Identification Zone" based on its own assertion thereby infringing the freedom of overflight above the high seas.⁹⁴

Tokyo views such behavior as dangerous because it indicates that China is using force or coercion to change the status quo of the Senkakus. Tokyo objects to "any unilateral action that seeks to undermine Japan's administration" of the islands.⁹⁵ In a 2013 *Washington Post* interview, Abe reiterated this position repeatedly, saying that the Chinese need to

realize that they would not be able to change the rules or take away somebody's territorial water or territory by coercion or intimidation. . . . It is important for

⁹³ Japan Ministry of Foreign Affairs, 2013, p. 12.

⁹⁴ JMOD, 2013b, p. 3.

⁹⁵ Japan Ministry of Foreign Affairs, "Visit by Prime Minister Abe to Hawaii," December 28, 2016d.

us to have them recognize that it is impossible to try to get their way by coercion or intimidation. . . . Regarding the Senkaku Islands, . . . we need to make them recognize that that current status of Japan's valid control cannot be changed by coercion or intimidation.⁹⁶

Public positions of the United States closely align with those of Japan, although Washington differs from Tokyo in that it does not recognize Japanese sovereignty over the islands. Instead, Washington recognizes Japan's administrative control. But even this distinction is recent. For many years, Tokyo assumed Washington's support for Japan's position, based on Washington's involvement in administering the islands after World War II. Although the 1951 San Francisco Peace Treaty did not mention the Senkakus by name, it did refer to other locations that reverted to Chinese control or that China claimed, such as Taiwan. Article 3 gave the United States administrative powers of the "Nansei Shoto south of 29 north latitude (including the Ryukyu and the Daito Islands)."⁹⁷ In 1953, the U.S. Civil Administration of the Ryukyu Islands issued Proclamation 27, and officials at the U.S. Department of State indicated that the proclamation defined the boundaries of the "Nansei Shoto south of 29 degrees north latitude" to include the Senkaku Islands.⁹⁸ When the 1971 Okinawa Reversion Treaty was signed, it explicitly returned to Japan "all and any powers of administration, legislation and jurisdiction" over the Ryukyu and Daito Islands, which the United States had held under the Japan Peace Treaty.⁹⁹ The Senkaku Islands thus became covered by the 1953 security treaty, despite the fact that Washington had not explicitly said as much.

In 2004, U.S. Deputy Secretary of State Richard Armitage made what is considered the first implicit reference connecting the Senkaku Islands to the security treaty, stating that the security treaty "would require any attack on Japan, or the administrative territories under Japanese control, to be seen as an attack on the United States."¹⁰⁰ This connection was not made again until 2010, when U.S. Secretary of State Hillary Clinton *explicitly* tied the Senkaku Islands to the treaty, stating that "we have made it very clear that the islands are part of our mutual treaty obligations, and the obligation

⁹⁶ "Transcript of Interview with Japanese Prime Minister Shinzo Abe," *Washington Post*, February 20, 2013.

⁹⁷ Argentina, Australia, Belgium, Bolivia, Brazil, et al., Treaty of Peace with Japan, San Francisco, Calif., September 8, 1951.

⁹⁸ Tseng Hui-Yi, *Revolution, State Succession, International Treaties and the Diaoyu/Diaoyutai Islands*, Cambridge, United Kingdom: Cambridge Scholars Publishing, 2017, p. 216.

⁹⁹ United States of America and Japan, Agreement Between the United States of America and Japan Concerning the Ryukyu Islands and the Daito Islands, Washington, D.C., and Tokyo, June 17, 1971. Article I defines "the Ryukyu Islands and the Daito Islands" as "all territories with their territorial waters with respect to which the right to exercise all and any powers of administration, legislation and jurisdiction was accorded to the United States of America under Article 3 of the Treaty of Peace with Japan."

¹⁰⁰ Richard Armitage, "Remarks and Q&A at the Japan National Press Club," Tokyo, U.S. Department of State Archive, February 2, 2004.

to defend Japan.”¹⁰¹ In the years since, explicit references have become commonplace, supporting the argument that the United States and Japan are aligned on this issue. For example,

- On January 18, 2013, Secretary of State Clinton said, “Although the United States does not take a position on the ultimate sovereignty of the islands, we acknowledge they are under the administration of Japan.” She said that Washington opposed “any unilateral actions that would seek to undermine Japanese administration” of the Senkaku Islands.¹⁰²
- In October 2013, during a press briefing in Tokyo, U.S. Secretary of State John Kerry said that the “U.S. has been saying all along that the Senkaku Islands [have] been under the Japan’s administration and is opposed to any unilateral action that would violate the Japanese administration in the Senkaku region.”¹⁰³
- In November 2013, in response to China’s establishment of an air defense identification zone, U.S. Secretary of Defense Chuck Hagel said, “The United States reaffirms its longstanding policy that Article V of the U.S.-Japan Mutual Defense Treaty applies to the Senkaku Islands.”¹⁰⁴
- In April 2014, during a joint press conference with Prime Minister Abe, President Barack Obama—in the first public statement by a sitting U.S. President on the issue—said, “our treaty commitment to Japan’s security is absolute, and Article 5 covers all territories under Japan’s administration, including the Senkaku Islands.”¹⁰⁵
- In July 2014, during a press conference with his Japanese counterpart, Defense Secretary Hagel restated “America’s longstanding position on the Senkaku Islands, which are under Japan’s administrative control and, therefore, fall under our mutual security treaty.”¹⁰⁶
- An April 2015 U.S.-Japan joint statement underscored that U.S. commitments “extend to all the territories under the administration of Japan, including the Sen-

¹⁰¹ Hillary Rodham Clinton, “Remarks with Vietnamese Foreign Minister Pham Gia Khiem,” Hanoi, U.S. Department of State Archives, October 30, 2010.

¹⁰² Hillary Rodham Clinton, “Remarks with Japanese Foreign Minister Fumio Kishida After Their Meeting,” Washington, D.C., U.S. Department of State Archives, January 18, 2013.

¹⁰³ John Kerry, “Remarks with Secretary of Defense Chuck Hagel, Japanese Foreign Minister Fumio Kishida and Japanese Defense Minister Itsunori Onodera,” Tokyo, U.S. Department of State Archives, October 3, 2013.

¹⁰⁴ Chuck Hagel, “Statement by Secretary of Defense Chuck Hagel on the East China Sea Air Defense Identification Zone,” U.S. Department of Defense Archives, Release No. NR-036-13, November 23, 2013.

¹⁰⁵ White House, “Joint Press Conference with President Obama and Prime Minister Abe of Japan,” Tokyo, April 24, 2014a; and White House, “U.S.-Japan Joint Statement—The United States and Japan: Shaping the Future of the Asia-Pacific and Beyond,” April 25, 2014b.

¹⁰⁶ Chuck Hagel and Itsunori Onodera, “Joint Press Briefing by Secretary Hagel and Japanese Minister of Defense Itsunori Onodera in the Pentagon Briefing Room,” U.S. Department of Defense, July 11, 2014.

kaku Islands. In that context, the United States opposes any unilateral action that seeks to undermine Japan's administration of the Senkaku Islands."¹⁰⁷

- In February 2017, U.S. Secretary of Defense James Mattis spoke at a press conference in Tokyo, saying that America's "longstanding policy on the Senkaku Islands stands. The United States will continue to recognize Japanese administration of the islands, and as such article five of the U.S.-Japan Security Treaty applies."¹⁰⁸
- In a February 2017 joint statement between President Donald Trump and President Abe, the two leaders "affirmed that Article V of the U.S.-Japan Treaty of Mutual Cooperation and Security covers the Senkaku Islands. They oppose any unilateral action that seeks to undermine Japan's administration of these islands."¹⁰⁹

With alignment, though, came a mutual recognition that the alliance was not postured to defend against Chinese aggression short of high-end military conflict. Therefore, in 2015, the allies established the Alliance Coordination Mechanism "to conduct close, consultative dialogue and sound policy and operational coordination from peacetime to contingencies."¹¹⁰ The objective is "to address seamlessly and effectively any situation that affects Japan's peace and security or any other situation that may require an Alliance response."¹¹¹ The mechanism has been routinely used to coordinate government responses to natural disasters and even North Korea's nuclear test in 2016, and it was used to coordinate a response to the "swarming" of Chinese vessels around the Senkakus in August 2016.¹¹²

Despite a seven-decades-long relationship between their armed forces, however, the United States and Japan have no history of combined responses to provocations anywhere in the world. Even though the SDF have deployed to conflicts abroad in which U.S. troops have led combat operations, these forces have never engaged in any combat missions. Instead, the SDF have prioritized noncombat missions, such as reconstruction operations or humanitarian assistance and disaster relief operations. That said, since the end of the Cold War, the services in both countries have trained together in a variety of exercises aimed at high-end contingencies. Of these exercises,

¹⁰⁷ Barack Obama and Shinzō Abe, "Remarks by President Obama and Prime Minister Abe of Japan in Joint Press Conference," Washington, D.C., White House, April 28, 2015.

¹⁰⁸ James Mattis and Tomomi Inada, "Joint Press Briefing by Secretary Mattis and Minister Inada in Tokyo, Japan," U.S. Department of Defense, February 4, 2017.

¹⁰⁹ Donald J. Trump and Shinzō Abe, "Joint Statement from President Donald J. Trump and Prime Minister Shinzo Abe," White House, February 10, 2017.

¹¹⁰ JMOD, "The Guidelines for Japan-U.S. Defense Cooperation," Tokyo, April 27, 2015b.

¹¹¹ JMOD, 2015b.

¹¹² Jeffrey W. Hornung, *Managing the U.S.-Japan Alliance: An Examination of Structural Linkages in the Security Relationship*, Washington, D.C.: Sasakawa Peace Foundation USA, 2017, p. 50.

those most relevant to deterring Chinese provocations are *Iron Fist*, an amphibious-focused exercise between Japan's JGSDF and the U.S. Marine Corps, and *Dawn Blitz*, a U.S. Navy and Marine Corps joint amphibious exercise in which the JGSDF participates. Recently, several other exercises have begun to incorporate an amphibious element, such as *Keen Sword* and *Keen Edge*. Collectively, these exercises strengthen the allies' interoperability in conducting amphibious operations, should they be needed.

6. Do the United States and Japan Have Proportionate Means of Rapidly Responding?

The ability of the United States and its local partners to use proportionate means of rapidly responding is an important condition for a deterrent message to be effective. Being perceived as overreacting—for instance, responding militarily to a minor, but still high-end, gray zone attack—might backfire against the defender and inspire sympathy for the aggressor. In this perspective, issuing a credible threat to the offending state requires knowing (1) the degree to which scalable and flexible response options are available and (2) the speed with which the defenders can respond.

Japan is postured for rapid response to Chinese gray zone activity around the Senkaku Islands. The JCG's 11th Regional Coast Guard Headquarters leads this response,¹¹³ for which the Abe administration has devoted an increasing amount of resources. Despite the JCG currently having 375 patrol ships, only 137 of them are larger patrol vessels (*junshisen*), compared with 238 smaller patrol craft (*junshitei*).¹¹⁴ By 2021, the JCG plans to increase the number of larger patrol vessels to 144.¹¹⁵ Of these 144, only 62 will be large enough to conduct long-term operations at great distances from shore, such as around the Senkaku Islands. These capabilities are currently sufficient for the JCG to maintain a 24-hour presence around the Senkaku Islands to automatically respond to any intrusions.

To match this surface presence, the JCG is also bulking up its aerial capabilities. The JCG is developing a system whereby it would have 24-hour surveillance in the air.¹¹⁶ In addition to a fleet of 32 fixed-wing aircraft, the JCG operates 49 helicopters.¹¹⁷ Of these, five are Super Puma 225 helicopters. In March 2016, the JCG ordered a sixth one, plus three more in June 2017, bringing to nine the number of 225s expected to be

¹¹³ Article 25 of the Japan Coast Guard Law says that the JCG and its personnel are prohibited from being "trained or organized as a military or to operate military functions." See Kaijō Hoan Chō Hō [Japan Coast Guard Law], E-Gov, undated.

¹¹⁴ JCG, *Heisei 30 Nendo Kaijō Hoan Chō Kankei Yosan Kettei Gaiyō* [Summary of the FY2018 Budget Decision Regarding the Japan Coast Guard], December 2017b, p. 20. Although both types of patrol ships are tasked with maintaining ocean security, only the larger patrol vessels can operate in the open ocean.

¹¹⁵ JCG, 2017b, p. 12.

¹¹⁶ JCG, 2017b, p. 12.

¹¹⁷ JCG, 2017b, p. 20.

in service by February 2020.¹¹⁸ The JCG also operates three Super Puma 332s. This fleet of helicopters, operable from JCG patrol vessels, is supported by a maritime surveillance system involving satellites. The system, operational since February 2018, has private satellite operators taking photos of activity in a 2.2-million-km² area at least twice a day.¹¹⁹ The images are transmitted to JCG regional headquarters. This system enables the JCG to quickly collect information and rapidly respond to changing situations. This is a big improvement over the former system of obtaining images from the Cabinet Secretariat's Satellite Intelligence Center, filling out requests, and relying on other agencies for updates. Establishing its own system helps the JCG quickly collect information and rapidly respond to changing situations.

The JCG has undergone significant posture changes to improve its ability to rapidly respond. The number of personnel assigned to the 11th Regional Coast Guard Headquarters has increased rapidly, from 1,243 people in 2015 to approximately 1,800 as of late 2017.¹²⁰ This increase in personnel was necessary to man the increased capabilities devoted to the unit. As described in a 2019 RAND report,

In March 2016, the JCG stood up a 12-vessel Senkaku Territorial Waters Guard Unit based on Ishigaki Island. The unit is tasked exclusively with patrolling the waters surrounding the Senkaku Islands. To perform this mission, it is equipped with high-performance patrol ships that include ten newly built 1,500-ton patrol ships based on Ishigaki and two 3,100-ton patrol vessels based in Okinawa. Although all the ships can operate helicopters from their decks, only the two on Okinawa have hangars. For six of the ships at Ishigaki, JCG introduced a multiple crew system in 2016 to raise the utilization rate of three ships to the equivalent of four ships. This is done by taking the crew members needed to operate four ships and assigning them to three ships. Video transmission devices were also installed on all 12 ships to allow them to send instantaneous videos to JCG headquarters and the Prime Minister's Office via satellite circuit. These capabilities were completed in March 2018. The objective was to enable the government to make rapid decisions during any situation.

In October 2016, JCG also upgraded the status of its Miyako Coast Guard Station to the Miyako Coast Guard Office, doubled its patrol staff, and allocated it new patrol vessels—all to further enhance the security around the islands. The new office collaborates with the Senkaku Territorial Waters Guard Unit in sit-

¹¹⁸ Gabriel Dominguez, "Japan Coast Guard Orders Three Additional H225 Helicopters," *Jane's Defence Weekly*, June 21, 2017b.

¹¹⁹ "JCG to Introduce Maritime Surveillance System Using Satellites," *Yomiuri Shimbun*, via Open Source Enterprise, September 8, 2017.

¹²⁰ "(Reisei, Kizen to Taiō) Senkaku Keibi de Hasegawa Honbuchō Dai-11 Kanku Kaiho ['Calm and Resolute Response,' 11th Regional Coast Guard Headquarters Commander Hasegawa About Senkaku Security]," *Yaeyama Nippō*, August 4, 2015.

uations around the Senkaku Islands, if needed. Otherwise, the Miyako Coast Guard Office is responsible for everything else in the area's waters. Along with the upgraded status came additional resources. Before the station was upgraded, it had only three patrol vessels. Since the upgrade, it was allocated three new enhanced patrol vessels based at Nagayama Port on Irabu Island, which is connected via bridge to Miyako Island. Another three ships were added at the end of fiscal year 2017, and three more will be added by the end of fiscal year 2018, bringing the number of patrol boats at Miyako to 12 by March 2019.¹²¹

Should the China Coast Guard push beyond the gray zone and into higher-end activities, Japan is making posture changes in the SDF to give those forces more scalable and flexible response options. To fill a perceived force vacuum in the Nansei Shotō, a primary initiative has been to reposition the JGSDF in a manner more conducive to deterring Chinese aggression. As reported in earlier RAND research,

In March 2016, the [JGSDF] began operations of a coastal observation unit and logistics facility on Yonaguni, the westernmost inhabited island in the Japanese archipelago. Manned with about 160 personnel, the observation unit is a permanent intelligence-gathering facility that provides constant monitoring of the [East China Sea]. The JGSDF plans to open similar facilities on neighboring islands in the coming years. On Amami Ōshima, it will station about 550 infantry personnel by March 2019 to man a logistics facility, a mobile warning and control radar system, and surface-to-air missile and surface-to-ship batteries. On Miyako, 700 and 800 JGSDF personnel will man similar facilities by the same date. By 2021, another coastal observation unit will be completed on Ishigaki, with a plan to station 500–600 JGSDF personnel there.¹²²

These SDF equipment and personnel will be accompanied by increased missile batteries, thereby positioning the SDF to control escalation in high-intensity dominance situations. The JGSDF has a large inventory of truck-mounted anti-ship missile systems, including the 180-km range Type-88 SSM and the 200-km range Type-12

¹²¹ Morris et al., 2019, pp. 98–100. The Territorial Waters Guard Unit included 606 personnel as of 2016, and that is the only public figure available; we do not know whether the number has grown since then. The 12 patrol boats at Miyako include ten small patrol vessels, one medium patrol vessel, and one patrol craft (JCG official, email correspondence with the authors, April 10, 2018). See also the sources cited in the earlier RAND report: Kei Ishinabe, "Article Urges Reinforcing Coast Guard to Counter China over Disputed Senkaku Islands," *Sankei Web-S*, via Open Source Enterprise, February 24, 2017; JCG, *Annual Report 2016*, Tokyo: Ministry of Land, Infrastructure, Transport and Tourism, 2016, p. 9; "JCG to Expand Video Transmission on Senkaku Patrols—Graphic," *Yomiuri Shimbun*, via Open Source Enterprise, March 2, 2017; "JCG Deepens Surveillance Capabilities on Miyakojima," *Yomiuri Shimbun*, via Open Source Enterprise, September 17, 2017.

¹²² Morris et al., 2019, pp. 105–106.

SSM batteries.¹²³ Although these are fielded elsewhere in Japan, they have not been readily deployed in the Nansei Shotō. Thus, the JMOD decided to field these on Miyako and Amami Ōshima, providing the JGSDF with an ability to fire on enemy ships approaching Japanese territory farther out from shore. In addition to procuring more Type-11 short-range surface-to-air missiles, the JGSDF is procuring an upgraded Type-03 mid-range surface-to-air missile to deploy on the outposts planned for Ishigaki, Amami Ōshima, and Miyako by 2021.¹²⁴ The JMOD is also developing a new missile with a maximum range of 300 km to be deployed on Miyako and other major islands in the southwestern corridor.¹²⁵ Combined, these efforts use Japan's archipelago to strategic advantage for creating Japan's own version of anti-access/area-denial to prevent Chinese advancement eastward.¹²⁶

These JGSDF efforts are reinforced by force posture changes in the JASDF. Until 2016, the JASDF divided Japan's air defense into regional air defense forces protecting three air defense areas: Northern, Central, and Western. (The JASDF maintains two air wings in each regional air force.¹²⁷ Each wing, in turn, is made up of two squadrons.) Additionally, a Southwestern Composite Air Division was maintained with its 204th fighter squadron, which was solely responsible for scrambling against Chinese incursions in the Nansei Shotō. Because of the growing intensity of the Chinese presence,

in 2015, the JASDF established the 9th Air Wing in Naha by supplementing the 204th fighter squadron with the 304th squadron of F-15s from the 8th Air Wing at Tsuiki Air Base. This was the first new air wing since the 8th Air Wing was established in 1964, and the enhancement effectively doubled the number of fighters dedicated to responding to Chinese incursions. Then, in 2016, the Southwestern Composite Air Division was elevated to become the [Southwestern Air Defense Force], composed of the 9th Air Wing. The JASDF also established a new airborne early warning and control squadron in Naha in April 2014, composed of four of the [SDF's] 13 E-2C Hawkeye aircraft [with a mission to patrol the southwestern island theater].¹²⁸

¹²³ These figures are open-source ranges. See "Type 88 (SSM-1); Type 12; Type 90 (SSM-1B); SSM-2," *Jane's Weapons: Naval*, September 6, 2017.

¹²⁴ "Japan Deploying Type-3 Missile System in Okinawa Prefecture," *Defense Blog*, August 24, 2016.

¹²⁵ "Japan-Army," *Jane's World Armies*, January 24, 2017.

¹²⁶ Anonymous #6, interview with the authors, January 18, 2018.

¹²⁷ In the Northern area are the 2nd Air Wing at Chitose and the 3rd Air Wing at Misawa. In the Central area are the 6th Air Wing at Komatsu and the 7th Air Wing at Hyakuri. And in the Western area are the 5th Air Wing at Nyutabaru and the 8th Air Wing at Tsuiki.

¹²⁸ Morris et al., 2019, p. 106. See also the sources cited in that report: JMOD, *Defense of Japan 2015*, white paper, Tokyo, 2015, p. 228; and Kosuke Takahashi, "JASDF Forms New AEW Squadron in Okinawa," *Jane's Defence Weekly*, April 14, 2014.

Because the E-767s and other E-2Cs operate out of the main Japanese island of Honshu, establishing the new squadron reduced the burden on pilots having to make repeated long-distance flights to patrol the southwestern islands.

Finally, to bolster Japan's amphibious defense operations, the JGSDF stood up a new 2,100-member Amphibious Rapid Deployment Brigade at the end of March 2018.¹²⁹ Once fully established, the brigade will expand to approximately 3,400 personnel.¹³⁰ Headquartered at Ainoura, which is near Sasebo in Nagasaki prefecture, the new brigade is the first of three that are planned for the Western Army.¹³¹ The brigade's main purpose is to provide the SDF with the capabilities "to land, recapture and secure without delay any remote islands that might be invaded."¹³²

7. Can the United States and Japan Generate Significant Regional and Global Support for Response Options?

A deterrent message can be credible to a potential aggressor only if there is an expectation that the defenders will respond as threatened. Such expectation depends on various factors, including the aggressor's previous interactions with the defenders; the reputation of the leadership of the defenders for acting on their words; and, importantly, the ability of the defenders to generate significant regional and global support. In the absence of such support, the defenders will be politically isolated; their response to aggression might backfire; and, anticipating such an outcome, they might hesitate to carry out a response in the first place. Three indicators can help determine whether support for response options might be forthcoming: whether the aggressor can generate a legal or political basis for action, the degree to which the aggressor controls the narrative, and the perceptions of regional states and major global powers.

China is not well positioned to control the narrative on this matter. Clearly dissatisfied with the status quo, China is determined to change the strategic situation in its favor. But, short of conflict, Beijing has few levers to generate a basis for action. Instead, it tends to make demands upon Tokyo or attempt to discredit it, as discussed earlier. However, because China's actions elsewhere in Asia are viewed skeptically by states that see its South China Sea claims as erroneous and its behavior as illegal and bullying, China has very little control over the narrative vis-à-vis Japan. This makes it difficult for China to generate any legal or political basis for action that could strengthen its case against Japan. On the contrary, Japan appears to have control of the narrative,

¹²⁹ JMOD, "Bōuei Daijin Rinji Kisha Kaiken Gaiyō [Summary of the Minister of Defense's Special Press Conference]," September 7, 2016.

¹³⁰ Koichi Isobe, "The Amphibious Operations Brigade: The Establishment of the JGSDF Brigade and Its Challenges," *Marine Corps Gazette*, Vol. 101, No. 2, February 2017; and retired JGSDF officer, correspondence with the authors, September 27, 2017.

¹³¹ Isobe, 2017; and JGSDF officer, correspondence with the authors, March 18, 2018.

¹³² JMOD, 2013a, p. 5.

which consists of discrediting China by linking its activities in the East and South China Seas to a larger pattern of disruptive behavior and violations of international norms and laws.

Tokyo argues that China is not just attacking Japanese sovereignty but is “attempt[ing] to alter the present status in the East China Sea and the South China Sea.”¹³³ In Japan’s National Security Strategy, China is described as having “taken actions that can be regarded as attempts to change the status quo by coercion based on their own assertions, which are incompatible with the existing order of international law, in the maritime and aerial domains, including the East China Sea and the South China Sea.”¹³⁴ Similarly, in the National Defense Program Guidelines, the JMOD connects Chinese activities in the maritime and aerial domains to concerns “over regional and global security.”¹³⁵

In public forums, Japanese officials link Chinese behavior to causes for regional concern. For example, at a speech at the 2014 World Economic Forum, Prime Minister Abe implicitly referred to the dangers of Chinese behavior: “If peace and stability were shaken in Asia, the knock-on effect for the entire world would be enormous.”¹³⁶ In an interview with the *Wall Street Journal*, Abe’s warning was much more explicit: “There are concerns that China is attempting to change the status quo by force, rather than by rule of law. But if China opts to take that path, then it won’t be able to emerge peacefully. . . . So it shouldn’t take that path.”¹³⁷

Japanese officials also link their security concerns with those of other states threatened by China. In speaking about Chinese government vessels violating Japan’s territorial waters, Abe said, “China has been acting the same [way] also in the South China Sea, and many [Association of Southeast Asian Nations countries] have strong concerns about [these maritime disputes].”¹³⁸ In a 2015 *Washington Post* interview, Abe described China’s maritime behavior as

not happening only around Senkaku Islands, or East China Sea, it is also causing concern [in] countries like Vietnam, the Philippines and other countries regarding their behavior in the South China Sea, as well. So together with the United States and [Association of Southeast Asian Nations] countries, we would like to urge

¹³³ “Shinzo Abe Interview Transcript,” *Australian Financial Review*, January 19, 2018.

¹³⁴ Japan Ministry of Foreign Affairs, 2013, p. 12.

¹³⁵ JMOD, 2013b, p. 4.

¹³⁶ Shinzō Abe, “A New Vision from a New Japan,” speech at the World Economic Forum 2014 Annual Meeting, January 22, 2014.

¹³⁷ Gerard Baker and George Nishiyama, “Abe Says Japan Ready to Counter China’s Power,” *Wall Street Journal*, October 26, 2013.

¹³⁸ Nancy Gibbs and Hannah Beech, “The Patriot: Shinzo Abe Speaks to TIME,” *Time*, April 17, 2014.

China to become a country that will be responsible in regional issues, as well as a country that will be involved in constructive cooperation.¹³⁹

Foreign Minister Kishida has expressed the same concern with countries outside of the region. In an interview with Italian media, he raised alarm about Chinese intrusions and unilateral oil and gas development activities in the East China Sea and artificial island-building in the South China Sea. He said these “escalatory attempts at unilateral change in the status quo provoke serious concern for international society, including Japan. These are not just problems for the Asia-Pacific region, they are problems for the entire world, including Europe, in maintaining the international order based on the rule of law.”¹⁴⁰ Tokyo thus attempts to frame China's behavior as a problem not simply for Japan but for the world.

There is evidence that this approach is working. States that face a similar challenge from China in the South China Sea echo many of Japan's statements. Until the election of Rodrigo Duterte, the Philippines was the most ardent critic of China, even taking it to the Permanent Court of Arbitration over its activities in the South China Sea. But with Duterte's softening toward China, Vietnam has emerged as the region's leading critic, opposing China's activities on and near the Paracel Islands as violating international law.¹⁴¹ Outside of the South China Sea region, U.S. allies echo the criticism. Canada, Australia, France, and the United Kingdom have increasingly called out China's activities and warned Beijing to follow the rule of law.¹⁴² Together, this suggests that regional states and major global powers share Japan's view of China. Many of these same countries have strengthened their security ties with Japan since China began its provocations.

8. Has the History of Interaction Fostered an Expectation of Meaningful Responses to High-End Gray Zone Acts?

When nations have a long history with each other, a potential aggressor can have certain expectations of how the defender(s) might react to various activity. Prior responses signal the potential degree of partners' decisiveness or divisions. Two indicators in

¹³⁹ David Ignatius and Post Opinions Staff, “David Ignatius's Full Interview with Japanese Prime Minister Shinzo Abe,” *Washington Post*, March 26, 2015.

¹⁴⁰ Japan Ministry of Foreign Affairs, “Koriëre Derra Sëra-shi (Itaria) ni Yoru Kishida Gaimu Daijin Intabyū, 2016-nen, 3-gatsu 19-nichi zuke [Interview of Foreign Minister Kishida by Corriere della Sera (Italy), March 19, 2016 Edition],” March 25, 2016a.

¹⁴¹ My Pham, “Vietnam Criticizes China's Cinema on Disputed South China Sea Island,” Reuters, August 1, 2017.

¹⁴² Rosie Perper, “The Leaders of France and Australia Just Took Aim at China with Pointed Comments About Following the Rule of Law,” *Business Insider*, May 2, 2018; Vu Minh, “Canada Criticizes China for ‘Hostile Behavior’ in Troubled Waters: Report,” *VN Express*, April 25, 2018; and “Britain to Sail Warship Through Disputed South China Sea,” *The Guardian*, February 12, 2018.

particular are useful in this regard: (1) the experience of the aggressor, local targeted nations, and the United States on these issues and (2) the degree to which the history suggests to the aggressor a likelihood of facing decisive responses.

The history of interaction between China and the U.S.-Japanese alliance on these issues has been a source of frustration for China. Although it is unclear whether this interaction has created an expectation of meaningful responses to high-end gray zone acts, it has served to force Chinese planners to consider possible U.S. involvement. This fact disturbs Beijing, as demonstrated by public statements. Already dissatisfied with the United States for “arbitrarily expand[ing] the scope of trusteeship to include Diaoyu Dao” and having later “returned” the “power of administration” over Diaoyu Dao to Japan, Beijing has become more frustrated since Washington began explicitly supporting Japan’s position.¹⁴³ In 2013, Foreign Ministry spokesman Hong Lei called Secretary of State Clinton’s support of Japan’s administrative control “ignorant of facts and indiscriminate of rights and wrongs.”¹⁴⁴ When Defense Secretary Hagel reminded China that the Senkaku Islands fall under alliance obligations, China’s Foreign Ministry complained about his “irresponsible remarks” and asked the United States, through Ambassador Gary Locke, “to correct its mistakes and stop making irresponsible remarks on China.”¹⁴⁵ In 2014, in response to President Obama’s statement that the security treaty covers the islands, Foreign Ministry Spokesperson Qin Gang said, “The US should respect facts, take a responsible attitude, remain committed to not taking sides on territory and sovereignty issues, speak and act cautiously and earnestly play a constructive role in regional peace and stability.”¹⁴⁶

Chinese dissatisfaction continues under the Trump administration. In response to Defense Secretary Mattis’s remark in 2017 that U.S. treaty obligations extend to the islands, chief spokesman for China’s Foreign Ministry, Lu Kang, urged the United States to “take a responsible attitude, stop making wrong remarks on the issue involving the Diaoyu islands’ sovereignty, and avoid making the issue more complicated and bringing instability to the regional situation.”¹⁴⁷ And in response to a joint statement between Prime Minister Abe and President Trump that affirmed that the security treaty covered the Senkaku Islands, Chinese Foreign Ministry Spokesperson Geng Shuang said, “No matter what anyone says or does, it cannot change the fact that the

¹⁴³ State Council of the People’s Republic of China, 2012.

¹⁴⁴ Tania Branigan and Justin McCurry, “China Rebukes US over ‘Ignorant’ Comments on Island Dispute with Japan,” *The Guardian*, January 21, 2013.

¹⁴⁵ Simon Tisdall, “China Escalates Islands Dispute with Japan,” *The Guardian*, November 24, 2013.

¹⁴⁶ Justin McCurry and Tania Branigan, “Obama Says US Will Defend Japan in Island Dispute with China,” *The Guardian*, April 24, 2014.

¹⁴⁷ Zhang Jianfeng, ed., “China Urges U.S. to Stop Making Wrong Remarks on Diaoyu Islands,” *CCTV*, February 4, 2017.

Diaoyu Islands belong to China, and cannot shake China's resolve and determination to protect national sovereignty and territory."¹⁴⁸

There is little evidence that the history of interaction has fostered an expectation in Beijing of meaningful, decisive responses. On the contrary, Chinese statements tend to suggest that the historical wrong will eventually be righted. Per a State Council white paper, "No matter what unilateral step Japan takes over Diaoyu Dao, it will not change the fact that Diaoyu Dao belongs to China."¹⁴⁹

Assessment

Applying the framework developed in Chapter One to the case of Chinese gray zone aggression in the Senkaku Islands highlights some strengths and weaknesses of the deterrence message and posture for the area. Table 2.2 summarizes the assessment for each category of criteria. The color-coding in the table and in similar tables in this report represents our judgments based on the evidence gathered in the research. Green represents strong deterrence—clear evidence that the specific criterion is being met. Gray represents mixed deterrence—some evidence that there may be holes or challenges in how well the criterion is met. And red represents weak deterrence—clear evidence that the criterion is not being met in important ways.

China's national interest in the Senkaku Islands is extremely high and non-negotiable. Despite China viewing the islands as an integral part of Chinese territory and demonstrating its will to defend them, its motivation to use force to take these islands appears to be very low, suggesting that Japan's current deterrence posture might be sufficient to prevent a Chinese attack. China is dissatisfied with the status quo and the strategic environment, but there is no indication that it feels any sense of urgency or desperation to act to change that situation.

China's role can be clearly identified and proved in most activity around the islands. Although China, especially under Xi Jinping, has acquired a reputation for bending international legal norms and conducting hostile gray zone aggression in both the East and South China Seas, it is unclear whether this is part of broader ambitions for regional hegemony. Nevertheless, Chinese foreign policy regarding the Senkaku Islands has become assertive. Although China tends to rely on state-owned assets to harass Japan, it occasionally employs irregular forces that blur attribution.

The actions China has taken against Japan do not necessarily represent a territorial change in the status quo, but its actions do directly encroach on Japan's territorial integrity. China's salami-slicing actions that are meant to call into question Japan's administrative control of the islands are detrimental to Japan's security.

¹⁴⁸ Curt Mills, "China Warns Trump on East China Sea," *U.S. News and World Report*, February 13, 2017.

¹⁴⁹ State Council of the People's Republic of China, 2012.

Table 2.2**Assessment of High-End Gray Zone Deterrence: Chinese Aggression Against the Senkaku Islands**

Criterion		Level of Deterrence	Details
1	Intensity of the aggressor's motivations	Mixed	China has strong, nonnegotiable interests in the islands but exhibits no sense of urgency to act.
2	Attribution of the aggressor's role	Mixed	China openly claims the islands and has a regular presence of coast guard ships operating near the islands. There is increasing PLA activity, including that of irregular forces, in the waters and air around the islands and in other places around Japan.
3	Level of aggression	Mixed	China's actions do not attempt a physical change in territory, but they directly encroach on Japan's territorial integrity. China's actions are meant to undermine Japanese administrative control.
4	U.S. and partner alignment on unacceptable outcomes	Strong	Tokyo provides clear statements on its commitment to the islands. There is clear U.S. messaging on its commitment to the U.S.-Japanese alliance and on the fact that the nations' security treaty applies to the islands.
5	U.S. and partner alignment on deterrent responses	Mixed	The United States and Japan are strongly aligned in their opposition to Chinese behavior. Despite the creation of an institutional mechanism to deal with Chinese aggression—including gray zone activities—the allies have no history of combined responses to provocations anywhere in the world. Japan is bolstering its defenses, but the SDF have never engaged in any combat.
6	U.S. and partner proportionate response capabilities	Strong	U.S. forces are forward-based in Japan. The United States and Japan have an extensive suite of capabilities in all domains. Japan's systems across all domains are well developed and postured for rapid responses to Chinese gray zone activity around the islands. There are no clearly identified gaps that would tempt gray zone aggression.
7	Regional and global support for deterrence	Strong	The United States and Japan are able to leverage regional dissatisfaction with China's actions elsewhere in Asia, particularly among South China Sea littoral states that also view Chinese behavior as illegal and bullying.
8	Aggressor's expectation of meaningful responses	Strong	It is unclear whether the U.S.-Japanese interaction has created an expectation of responses in China, but the interaction has served to force Chinese planners to consider possible U.S. involvement.

It is unclear whether the United States and Japan have specific and agreed-upon outcomes that they will not accept, but there are clear outcomes that Japan will not accept. Although Tokyo has issued clear and consistent statements signaling its firm defense of its territory, it has only occasionally issued clear statements about which actions will generate specific deterrent responses. Regardless, Tokyo has sent clear signals about its ability to back up its interests through a considerable build-up of defense assets to defend the Nansei Shotō, and it has instituted a policy of using SDF and JCG assets to respond to 100 percent of the Chinese activity around the islands.

Based on public positions, the United States and Japan are fully aligned on the need to respond to Chinese high-end gray zone provocations. In addition to speaking the same language on the security treaty covering the islands, the allies share coordinating mechanisms specifically designed to respond to gray zone activities and conduct several exercises geared toward improving their ability to conduct a joint amphibious operation. Despite this, it is not clear whether the allies are fully aligned on the means of responding to Chinese provocations, particularly because they lack any history of combined responses to provocations.

With U.S. forces forward-deployed in Japan and Japan bolstering its SDF force posture and capabilities to respond to China's gray zone activities, the allies have proportionate means of rapidly responding. Because China's activity takes place below a threshold of force, however, responses to Chinese actions have been taken by Japan alone. And within Japan, the JCG leads the effort. As a law enforcement organization, the JCG is hesitant to include the United States, making it unclear how scalable and flexible the U.S. response options can be for activity short of major conflict. Should the actions escalate to such conflict, Japan has scalable and flexible response options available and can quickly respond. With U.S. forces stationed in Japan, it is assumed that the United States can do the same, but there is nothing explicitly demonstrating this capability.

One of the greatest strengths for the United States and Japan is their ability to generate significant regional and global support for their response options in this situation. Because China's actions elsewhere in Asia are viewed skeptically by states that see its behavior as illegal and bullying, China faces difficulty in trying to generate any legal or political basis for action that could strengthen its case against Japan. It also means that China does not control the narrative. On the contrary, regional and global states echo the narrative promoted by both Japan and the United States, which is that China's activities in the East China Sea are part of a larger pattern of disruptive behavior and violations of international norms and laws.

It is unclear whether the history of interaction between Japan and the United States has created an expectation of responses to high-end gray zone acts. But, given the history of the allies becoming more aligned in their opposition to Chinese activities and the history of efforts to bolster the alliance, China has been forced to consider possible U.S. involvement against any possible high-end gray zone act. This fact disturbs Beijing, as demonstrated by its public statements. Yet there is little evidence that the interaction has fostered an expectation in Beijing of meaningful, decisive responses. On the contrary, Chinese statements tend to suggest a long view that historical wrongs will be righted.

Deterring Russia's Gray Zone Aggression Against the Baltic States

The Baltic states are highly vulnerable to Russian gray zone attacks.¹ Estonia, Latvia, and Lithuania are nested between Russia and its Kaliningrad enclave, facilitating the infiltration of operatives, potential acts of sabotage, and opportunities for cross-border incidents. Estonia and Latvia have sizable Russian minorities who are often described as potential conduits for Russian propaganda.² Despite efforts to diversify their energy providers,³ all three Baltic states remain dependent on gas and oil from Moscow, and they share their electrical grid with Russia and Belarus.⁴

Russia has exploited these vulnerabilities in the past. Since the collapse of the Soviet Union, as Agnia Grigas notes, “all three Baltic states have been consistently targeted by Moscow’s soft power, humanitarian and compatriot policies, information warfare, and, to some degree, its passportization efforts.”⁵ As early as 1993, Russia suspended its supply of natural gas to Estonia to protest a new Estonian law related to its Russian minority.⁶ In 2007, Russia allegedly supported a wave of cyberattacks and street protests against the Estonian government.⁷ In 2014, Estonia accused Russia of abducting one of its intelligence officers, whom Russia claims had been spying on its

¹ See F. Stephen Larrabee, Stephanie Pezard, Andrew Radin, Nathan Chandler, Keith Crane, and Thomas S. Szayna, *Russia and the West After the Ukrainian Crisis: European Vulnerabilities to Russian Pressures*, Santa Monica, Calif.: RAND Corporation, RR-1305-A, 2017.

² Andrew Radin, *Hybrid Warfare in the Baltics: Threats and Potential Responses*, Santa Monica, Calif.: RAND Corporation, RR-1577-AF, 2017, p. 14.

³ North Atlantic Treaty Organization (NATO), *Countering Russia's Hybrid Threats: An Update*, Brussels: NATO Parliamentary Assembly, Committee on the Civil Dimension of Security, March 27, 2018c, p. 8.

⁴ Andrius Sytas, “Baltic States to Link Power Grid to EU as Early as 2020, Says Lithuania,” Reuters, December 7, 2017.

⁵ Agnia Grigas, *Beyond Crimea: The New Russian Empire*, New Haven, Conn.: Yale University Press, 2016, p. 136. *Passportization* refers to the Russian policy of granting passports to ethnic Russians living in the post-Soviet space.

⁶ Celestine Bohlen, “Russia Cuts Gas Supply to Estonia in Protest,” *New York Times*, June 26, 1993.

⁷ Robinson et al., 2018, pp. 89–96.

territory.⁸ Russia also engages in “steady-state” gray zone actions—such as supporting pro-Russian organizations and media—to maintain some degree of continuous influence on the Baltic states.

Russia’s gray zone actions in the Baltic states generally fall into three categories. First, the actions might represent an initial step toward interstate aggression, as in Ukraine—although in the Baltic states, a hybrid preamble to a conventional fight might facilitate, rather than hinder, a NATO response.⁹ Second, Russia might use such actions to destabilize and weaken the Baltic governments, as in supporting internal separatist groups.¹⁰ Third, the actions could be designed to influence NATO and European Union (EU) decisions in a Trojan Horse scenario.¹¹ The fact that the Baltic states are NATO members makes them, paradoxically, more likely to be targeted by actions below the threshold of war, because actions above that threshold would risk bringing Russia into war with NATO.¹²

This chapter applies the gray zone deterrence framework outlined in Chapter One to the case of Russian gray zone aggression against the Baltic states as of 2018 and provides an assessment of the strength of the deterrence posture, based on the eight categories of indicators identified in the framework. Following the model of an earlier RAND report on deterring interstate aggression,¹³ these indicators of gray zone deterrence do not imply a formal model but are meant instead to give a sense of the evidence that is available from the sources we used to make informed judgments.

The gray zone actions examined in this chapter are of only the high-end type, including shows of force, uses of paramilitary or proxy groups, assassinations and sabotages, severe cyberattacks, disruptions of energy supplies or other strategic resources, attacks against critical infrastructure, and serious political destabilizations (e.g., riots,

⁸ David M. Herszenhorn, “Russia and Estonia Differ over Detention,” *New York Times*, September 5, 2014.

⁹ Samuel Charap notes,

For the Russian military, the most significant threat in the Baltic region, particularly because of the strategically vulnerable Kaliningrad enclave, where the Russian-Baltic Fleet is based, is the potential deployment of US forces and high-end capabilities. A Russian hybrid operation would give ample time for the US to do just that. (Samuel Charap, “The Ghost of Hybrid Warfare,” *Survival*, Vol. 57, No. 6, 2015, pp. 55–56)

¹⁰ Radin, 2017, p. 1.

¹¹ Radin, 2017, p. 1.

¹² Yet Radin, 2017, p. 1, notes that the Baltic states are more concerned with a conventional attack on the part of Moscow than gray zone action, and all three have accordingly rallied the support of their NATO allies since 2014 to deter Russia from engaging in such a course of action. On the risk of a conventional attack on the Baltic states, see, for instance, Ted Galen Carpenter, “Are the Baltic States Next?” *National Interest*, March 24, 2014; and David A. Shlapak and Michael Johnson, *Reinforcing Deterrence on NATO’s Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016, p. 3. For a dissenting view that the Baltic states are at heightened risk of Russian aggression, see Robert Person, “6 Reasons Not to Worry About Russia Invading the Baltics,” *Washington Post*, November 12, 2015.

¹³ Mazarr et al., 2018.

attempted coups, election manipulation). Sources examined for this chapter include English-language primary and secondary sources.

The chapter concludes with an assessment of the U.S., NATO, and Baltic states' deterrent posture toward Russian high-end gray zone actions. Overall, we find that this posture is of mixed effectiveness, at best. While Russia's motivation to employ high-end gray zone methods against the Baltic states appears low (category 1), the ability to attribute attacks is highly dependent on their type, allowing Russia to escape blame more often than not (category 2). And not all high-end gray zone attacks might appear as such, making their deterrence more challenging (category 3). Additionally, there has been no clear messaging on the part of the United States or NATO regarding the types of gray zone attacks that would be considered unacceptable (category 4), and there does not appear to be a clear, common understanding among the allies of what might constitute appropriate responses to such attacks (category 5). Although the Baltic states and their allies have proportionate means of response at their disposal (category 6), the ability of the Baltic states and the United States to garner regional or international support for a response will likely be determined on a case-by-case basis (category 7). Finally, the current track record of responses to Russian high-end gray zone attacks appears inconsistent and will likely not deter Russia from employing these methods again in the future (category 8).

Two principles should inform the deterrent posture for gray zone actions. First, states should be their own first lines of defense, with allies providing limited (and not always visible) support upon request. Second, responses should focus on increasing the frontline states' resilience to potential gray zone attacks (to discourage Russia from attacking) rather than threatening Russia with reprisals if it does attack. Adding deterrence by denial to deterrence by punishment addresses many of the challenges posed by gray zone attacks—such as the difficulty of attribution, the wide variety of attacks to be deterred, and the vague definition of meaningful thresholds—and should be further embraced by the Baltic states and their Euro-Atlantic allies.

Applying the Framework to Russia's Gray Zone Aggression

1. Are Russia's Motivations So Extreme as to Make Its Actions Nearly Impossible to Deter?

Russia's interest in the Baltic states stems from several factors: their shared history as part of the Soviet Union; the presence of Russians among the populations of two Baltic states; the Baltic states' proximity to Russia, including the Kaliningrad enclave; and the Baltic states' strategic position on the Baltic Sea. Russia and the Baltic states have had difficult relations since the collapse of the Soviet Union, with disagreements centering on the treatment of Russian minorities in Estonia and Latvia—which Russia

deems unsatisfactory¹⁴—and conflicting views of history, specifically on the role that the Soviet Union played in the Baltic states during World War II and their experiences as Soviet republics.¹⁵ Russia disapproved of their joining NATO in 2004 but could hardly prevent this from happening.¹⁶ After a short period of increased dialogue,¹⁷ tensions mounted again in 2014 amid concerns on the part of the Baltic states that they might be next on Russia's expansionist agenda, following parts of Ukraine.¹⁸ In March 2015, Russia focused a strategic snap exercise on a contingency in the Baltic and Barents Sea regions.¹⁹ Since then, Russia has been conducting numerous unauthorized overflights of the Baltic state airspace.²⁰ The Baltic states have reinforced their territorial defense forces²¹ and now host three rotational battalion-sized battlegroups as part of NATO's Enhanced Forward Presence.

Yet Russia's interest in the Baltic states is also markedly lower than in a number of other former Soviet Republics, such as Ukraine, Georgia, and Belarus.²² Unlike these three countries, the Baltic states do not represent a potential buffer zone between Russia and NATO, being NATO members themselves.²³ There is no indication that the Baltic states, which have been firmly anchored to the West since 2004, could be forced to reverse course. Consequently, there is little to suggest that Russia might be willing to use the same playbook in the Baltic states as it did in Ukraine and employ gray zone methods as a first step to an invasion. The risk of a Russian conventional attack against the Baltic states is of critical importance for NATO military planning, but because of the political and logistical challenges that an allied response would

¹⁴ See, for instance, Steve Pifer, "Watch Out for Little Green Men," *Spiegel Online*, July 7, 2014.

¹⁵ Dmitri Trenin, "Russian Policies Toward the Nordic-Baltic Region," in Robert Nurick and Magnus Nordenman, eds., *Nordic-Baltic Security in the 21st Century: The Regional Agenda and Global Role*, Washington D.C.: Atlantic Council, September 2011, p. 47.

¹⁶ Angela Stent, *The Limits of Partnership: U.S.-Russian Relations in the Twenty-First Century*, Princeton, N.J.: Princeton University Press, 2014, pp. 77–78.

¹⁷ See, for instance, Trenin, 2011, p. 48.

¹⁸ Andrew Osborn, "Putin a Threat to Baltic States, Western Officials Say," Reuters, February 19, 2015.

¹⁹ Dave Johnson, "ZAPAD 2017 and Euro-Atlantic Security," *NATO Review*, December 14, 2017.

²⁰ "Russia Accused of Estonia Airspace Violations as Finland Signs Defense Pact with US," *Deutsche Welle*, October 8, 2016.

²¹ Piotr Szymański, "The Baltic States' Territorial Defense Forces in the Face of Hybrid Threats," Centre for Eastern Studies, March 20, 2015.

²² Bryan Frederick, Matthew Povlock, Stephen Watts, Miranda Priebe, and Edward Geist, *Assessing Russian Reactions to U.S. and NATO Posture Enhancements*, Santa Monica, Calif.: RAND Corporation, RR-1879-AF, 2017, pp. 29–30; and Andrew Radin and Clint Reach, *Russian Views of the International Order*, Santa Monica, Calif.: RAND Corporation, RR-1826-OSD, 2017, p. 11.

²³ Dmitry Adamsky, "Cross-Domain Coercion: The Current Russian Art of Strategy," Proliferation Paper 54, Institut Français de Relations Internationales, November 2015, p. 19.

present,²⁴ the likelihood of Russian President Vladimir Putin deliberately choosing such a confrontation appears, overall, low.²⁵

Russia's apparent lack of interest in invading the Baltic states, however, does not mean that gray zone tactics cannot be used as ends in themselves rather than as pre-ludes to conventional war. Russia's past involvement in such actions—from its role in protests against the removal of a monument honoring the Soviet army in Tallinn in 2007 to its occasional disruption of energy supplies—has routinely been used to punish behavior deemed hostile to Russia. However, although Russia might feel compelled to signal to the Baltic states its disapproval of various policies, such signals need not be interpreted as *high-end* gray zone actions. Russia could just as well choose to undertake diplomatic action; apply sanctions; or sever various political, economic, and cultural ties with the offending state. In this sense, there is no indication that Russia is compelled to use high-end gray zone tactics in the Baltic states, although it might still choose to do so.

There is little evidence that the Russian leadership is experiencing a sense of desperation that would compel it to choose high-level gray zone action. On March 19, 2018, Putin was elected by a large margin—more than 76 percent of the vote—to a fourth presidential term.²⁶ Although remaining constrained by structural weaknesses and low investment, the Russian economy somewhat picked up in 2017 after almost null growth in 2016.²⁷ U.S. and EU sanctions remain in place, but the EU consensus on the issue has been eroding for several years, and the result of the 2018 elections in Italy, which put two parties opposed to the sanctions in charge of the country, portends more difficulties for the future.²⁸ Putin is not immune to contestation, and popular support fell after his controversial pensions reform: Only 39 percent of surveyed Russians listed Putin as the politician they trust most, down from 59 percent in November 2017.²⁹ Yet, even in the hypothetical situation that Putin somehow decided to conduct a diversionary war to attempt to maintain his power,³⁰ there is no indication that he would choose to target the Baltic states and take the chance of triggering an all-out NATO response that would likely further jeopardize his hold on power.

²⁴ Shlapak and Johnson, 2016.

²⁵ Frederick et al., 2017, p. 67.

²⁶ "Russia Election: Vladimir Putin Wins by Big Margin," BBC News, March 19, 2018.

²⁷ *The Economist* Intelligence Unit, "Country Report: Russia," May 2018, p. 8.

²⁸ Nicole Winfield, "On Migrants & Moscow, Italy's New Foreign Policy Makes Waves," *Washington Post*, June 4, 2018.

²⁹ Levada Center, "The Most Trusted Politicians," press release, October 22, 2018. Although the Levada Center gives September 2018 as the date of the poll, it notes that the survey took place between August 23–30, 2018. See also Polina Ivanova, "Despite Putin's Concessions, Russians Protest Pension Reform Law," Reuters, September 2, 2018.

³⁰ Frederick et al., 2017, pp. 67–69, examines such a scenario.

Putin might feel compelled to act if he felt that the Baltic states threatened Russia's most-pressing interests or endangered Russia's regime survival, access to basing and logistical facilities, military capability, or nuclear deterrent. One such scenario would be if the Baltic states agreed to host missile defense systems or weapon systems that Russia considers to be an existential threat, such as long-range precision weapons.³¹ Absent any such threat as perceived by Russia, there is no reason to believe that Russia would be compelled to use high-end gray zone methods.

2. Can Russia's Role Be Clearly Identified and Proved in a Specific Event or Action?

Although the Baltic states remain important to Russia because of their geographic proximity and their shared borders with Russia (with Kaliningrad in the case of Lithuania), Russia appears to have accepted that the Baltic countries are part of NATO and that this fact will not be overturned.³² Overall, the Baltic states represent a secondary strategic interest of Russia's, and although Moscow seeks to maintain some degree of influence over Baltic politics based on historical and economic ties, as well as the presence of Russians in Estonia and Latvia, this policy does not amount to a quest for regional hegemony. Russia, however, is generally seen as a prime suspect whenever suspicious gray zone activity occurs in the Baltic states, for several reasons: First, it has historically made gray zone actions a key part of its repertoire of political and military responses, and the combination of military and nonmilitary means to reach strategic objectives has occupied a central place in recent Russian doctrinal debates.³³ Second, Russia has been seen using gray zone methods with renewed intensity over the past decade, from the hacking of the Democratic National Committee in the United States in 2016 to the alleged participation in an attempted coup in Montenegro that same year.³⁴ Third, as the examples in the introduction to this chapter illustrate, Russia has used these methods in the Baltic states in the past.

Yet these methods point merely to Russia's potential motivation to conduct future gray zone activities. Whether its responsibility for such attacks will be unambiguous enough to warrant punishment, thus reinforcing deterrence, is a different matter. Gray zone attacks span a remarkable range of types, which can be more or less easy to trace back to the individual or country that initiated them. Some are overt; for instance, Russia conducting an exercise close to the borders of a Baltic state and undertaking overflights of a Baltic state's territory are shows of force designed to demonstrate Russia's military might. Attribution, in these cases, is precisely the purpose of the action

³¹ Frederick et al., 2017, p. 43.

³² Frederick et al., 2017, p. 49.

³³ See, for instance, Adamsky, 2015.

³⁴ Ellen Nakashima, "U.S. Investigators Have Identified Russian Government Hackers Who Breached the DNC," *Washington Post*, November 2, 2017b; and Valerie Hopkins, "Indictment Tells Murky Montenegrin Coup Tale," *Político*, May 23, 2017.

taken. Similarly, when Russia decides to turn off its energy supplies to a country, it does so to express publicly its disapproval of policies or actions taken by that country. Other gray zone actions are effective only if Russia's role remains invisible. Information campaigns, for instance, lose most of their impact if they are seen as piloted from Moscow rather than by local actors, and fabricated news stories become less convincing once they are shown to be fabrications.³⁵ Furthermore, attempts at political destabilization through protests, riots, and other street actions are more likely to gain public support if they are seen as grassroots, local initiatives rather than movements engineered by an outside power.

Between these two extremes, there are gray zone actions whose effectiveness is not influenced by the issue of attributability but for which Russia might be tempted to conceal its role to escape blame or punishment. These actions include the use of proxies or concealed paramilitaries ("little green men"), cyberattacks, assassinations, and sabotage. It is still unclear to this day, for instance, what role Russia played in the cyberattacks that targeted Estonia in April and May 2007. The attacks took place in successive waves, and although Russia probably did not initiate the attacks, it is likely to have directed the second wave, which differed qualitatively from the first one.³⁶

There is no assurance that the defenders against gray zone actions will be able to deliver on their deterrent message if attribution is unclear—or if Russia's responsibility is established with certainty after such a delay that the appropriate response time has elapsed. Ways to address this challenge include improving the means of detection and attribution—for instance, through increased intelligence-sharing with allies and partners—or switching to a deterrence-by-denial strategy that would make attacks impossible or ineffective rather than threatening punishment if they were to occur.

3. How Aggressive Is the Specific Event or Action?

The high-end gray zone activities outlined earlier in this chapter as possible forms of Russian aggression against the Baltic states are aggressive enough that they should be more, rather than less, deterrable. This is true partly because of their inherent nature, which involves threats to the territorial integrity or political stability of sovereign nations. It is also true because of the recent history of Russian regional aggression and the close attention being paid nowadays to potential Russian activities: Anything involving actual Russian personnel or large-scale informational activities will be considered a highly aggressive move. Almost by definition, then, the high-end gray zone activities that we are evaluating in this case meet this criterion for deterrence, although

³⁵ However, some studies show that the impact of fabricated news persists even after the information has been revealed to be fabricated. See, for instance, Martin Kragh and Sebastian Åsberg, "Russia's Strategy for Influence Through Public Diplomacy and Active Measures: The Swedish Case," *Journal of Strategic Studies*, Vol. 40, No. 6, 2017, p. 781.

³⁶ Robinson et al., 2018, pp. 91–95.

a small subset of the activities—cyberattacks, in particular—create neither a physical change in the status quo nor an encroachment on territorial integrity and, therefore, represent more of a challenge for deterrent policies.

4. Do the United States and Its NATO Allies Have Specific and Agreed-Upon Outcomes That They Will Not Accept? Do They Agree on What They Are Trying to Deter?

While the United States and its fellow NATO members, including the Baltic states, broadly agree that a conventional attack against Estonia, Latvia, or Lithuania would be unacceptable and would trigger NATO's Article 5 on collective defense, the types of gray zone attacks that might trigger a similar reaction—or *any* reaction—are less clear. High-level U.S. officials meeting with their Baltic counterparts tend to focus on conventional threats and the U.S. commitment to collective defense within NATO. Yet a few exceptions stand out. In September 2014, President Obama stated in Tallinn that, "Even as we meet conventional threats, we need to face other challenges. And that includes propaganda campaigns that try to whip up fears and divide people from one another."³⁷ Similarly, in his July 2017 speech in Tallinn, Vice President Mike Pence stated,

Be assured: The United States rejects any attempt to use force, threats, intimidation, or malign influence in the Baltic states or against any of our treaty allies—and under President Donald Trump, the United States of America will stand firmly behind our Article 5 pledge of mutual defense—and the presence of the U.S. Armed Forces here today proves it.³⁸

Yet neither speech suggested a specific outcome that would be considered unacceptable and might trigger a response. One reason might be that, once a threshold is made public, the United States and its allies would need to act on their promises when that threshold is crossed, or their entire deterrent posture might be perceived by their adversary as a bluff. This creates an incentive to keep the number of redlines relatively low and to limit them to instances in which alternative options—such as diplomacy or sanctions—are not expected to be effective.

Although the United States has publicly condemned some specific gray zone acts, such as the repeated overflights by Russian military aircraft in the Baltic states' airspace, there has been no clear articulation of limits that could be signaled to Russia. U.S. Deputy Defense Secretary Robert Work called these overflights "unsatisfactory," "unsafe," and "unprofessional,"³⁹ but these statements do not convey a

³⁷ Barack Obama, "Remarks by President Obama to the People of Estonia," Tallinn, Estonia, White House, September 3, 2014.

³⁸ Mike Pence, "Remarks by the Vice President to Enhanced Forward Presence and Estonian Troops," Tallinn, Estonia, White House, July 31, 2017.

³⁹ Lisa Ferdinando, "Russian Airspace Violations in Nordic-Baltic Regions Dangerous, Work Says," U.S. Department of Defense, October 6, 2016.

strong message of protest and did not threaten specific forms of retaliation if Russia pursued these actions. This might be because these incidents are generally considered to be Russian provocations rather than threats—unless one accounts for the risk of accidental escalation. Using these incidents to convey a deterrent message might elevate them and represent an escalation in itself, which the United States has been keen to avoid so far.

Another recurring activity in or near the Baltic states has been Russian military exercises, which have been used at times—such as in Georgia in 2008 and in Crimea in 2014—as a cover for prepositioning personnel and equipment in anticipation of an offensive move. Accordingly, these exercises are closely watched by the United States and its allies. A key concern about the much anticipated Zapad 17 exercise was that Russia might be tempted to leave capabilities in Belarus, potentially to prepare for an offensive farther West.⁴⁰ However, even though this concern was expressed publicly,⁴¹ it was not defined by the U.S. administration as a “threshold,” possibly in an attempt to retain some margin of maneuver to define a response based on the specifics of the threat, such as the number and types of assets mobilized by Russia for the exercise.

The ability to jointly define unacceptable outcomes is further hampered by the differences in threat assessment that might exist among the allies. Gray zone attacks often target issues that are perceived as sensitive and for which the Baltic states themselves might resent interference, even when coming from allies. Baltic state leaders might argue, for instance, that their efforts at integrating the nations’ minorities protect them from Russian influence, whether this optimism is justified or not.⁴²

The Baltic states, meanwhile, have made clear that they will respond to Russian covert action and infiltration. Estonian Chief of Defence Riho Terras stated in 2015 that Estonians would “shoot” any “little green men” found on the national territory.⁴³ All three states have also built up their internal defense capabilities since 2014 to signal to Russia that, whether or not they have the capacity to hold back a conventional attack, they at least have the ability to make an invader’s life—whether regular or proxy forces—more difficult.⁴⁴ Meanwhile, their NATO allies, including the United States, have been clear that there would be a response to a conventional attack of the Baltic states but have not communicated a similar message for gray zone attacks.

⁴⁰ On prospective analyses of the Zapad 17 exercise, see, for instance, Dmitry Gorenburg, “Everything You Need to Know: Russia’s Massive Zapad Military Exercise,” *National Interest*, August 7, 2017; and Michael Kofman, “What to Expect When You’re Expecting Zapad 2017,” *War on the Rocks*, August 23, 2017.

⁴¹ Andrea Shalal, “U.S. General Says Allies Worry Russian War Game May Be ‘Trojan Horse,’” Reuters, July 20, 2017.

⁴² Radin, 2017, p. 13.

⁴³ Sam Jones, “Estonia Ready to Deal with Russia’s ‘Little Green Men,’” *Financial Times*, May 13, 2015.

⁴⁴ Szymański, 2015.

5. Are the United States and Its NATO Allies Fully Aligned on the Need to Respond to Specific High-End Gray Zone Provocations and the Means of Doing So?

Ever since Russia employed hybrid methods in Ukraine, with the infiltration of “little green men” in Crimea and support of proxy forces in the Donbass region, there have been speculations that it might try to undermine NATO by attempting an action just below the threshold of war, which would create dissensions among allies on whether, and how, to respond.⁴⁵ The worst-case scenario sees an implosion of the Alliance, unable to get a consensus behind its most central principle—collective defense. There is no evidence that Russia has any intention of taking such a gambit;⁴⁶ if it failed and all NATO members agreed on use of force as a response, Russia would find itself at war with an alliance that outmatches it in military capabilities.⁴⁷ Nonetheless, this concern has compelled NATO members to try to articulate better how they intend to handle gray zone actions as an alliance, answering Supreme Allied Commander Europe GEN Philip Breedlove’s call, after Russia’s invasion of Crimea, to “mature . . . the way we think about irregular warfare, so that we can define in NATO what takes it over that limit by which we now have to react.”⁴⁸

NATO’s response to this definitional challenge (which requires deciding what constitutes an *armed attack* and could thus trigger Article 5) has been to note that the Alliance might respond to hybrid attacks through collective defense but that this response would not be automatic. At the Brussels Summit in 2018, the Alliance reiterated its position that “the primary responsibility for responding to hybrid attacks rests with the targeted nation,” but NATO can provide assistance with this response; and, “in cases of hybrid warfare, the Council could decide to invoke Article 5 of the Washington Treaty, as in the case of an armed attack.”⁴⁹ NATO also announced the creation of counter-hybrid support teams, whose purpose is to “provide tailored, targeted assistance to Allies, upon their request, in preparing for and responding to hybrid activities.”⁵⁰ This suggests that NATO allies are encouraged to build their resilience and

⁴⁵ See, for instance, Pifer, 2014.

⁴⁶ Charap, 2015, pp. 55–56.

⁴⁷ This capability imbalance, however, is reversed when looking only at the Baltic Sea region. See Scott Boston, Michael Johnson, Nathan Beauchamp-Mustafaga, and Yvonne K. Crane, *Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority*, Santa Monica, Calif.: RAND Corporation, RR-2402, 2018; and Richard Sokolsky, *The New NATO-Russia Military Balance: Implications for European Security*, Washington, D.C.: Carnegie Endowment for International Peace, March 13, 2017.

⁴⁸ John Vandiver, “Breedlove: NATO Must Redefine Responses to Unconventional Threats,” *Stars and Stripes*, July 31, 2014.

⁴⁹ NATO, “Brussels Summit Declaration: Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Brussels 11–12 July 2018,” press release, July 11, 2018d. See also NATO, “Warsaw Summit Communiqué: Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Warsaw 8–9 July 2016,” press release, July 9, 2016b.

⁵⁰ NATO, 2018d.

find their own ways (possibly with assistance from NATO) of responding to attacks rather than to expect that such attacks will be met with a collective response.

The issue of cyberattacks has triggered a separate, albeit somewhat similar, discussion among NATO members. In a May 2018 speech, NATO Secretary General Jens Stoltenberg stated, "In 2014, NATO leaders agreed that a cyber-attack could trigger Article 5 of our founding treaty. Where an attack on one Ally is treated as an attack on all Allies."⁵¹ He reminded the audience that cyber has been one of NATO's domains (in addition to land, sea, and air) since 2016. However, earlier remarks by Stoltenberg suggest that only certain "serious cyber attacks" could trigger Article 5, making NATO's response to cyberattacks possible but not automatic.⁵² The repertoire of options in the case of a cyberattack—whether serious or not—remains unknown. In 2017, General Breedlove argued in favor of a NATO policy that would authorize the Alliance to respond with offensive cyberattacks.⁵³

NATO's response as an organization has been to develop new mechanisms, strategies, and institutions that focus specifically on hybrid attacks. For instance, NATO established a new Joint Intelligence and Security Division with a branch for hybrid analysis "with a mandate to analyse the full spectrum of hybrid actions by drawing from military and civilian, classified and open sources."⁵⁴ At its 2016 Warsaw Summit, the Alliance adopted a cyber defense pledge, under which the members committed to increasing the defense of their networks and infrastructure. A new Cyberspace Operations Centre is also planned to open.⁵⁵ Two NATO centers of excellence already focus on hybrid threats: the Strategic Communications Centre of Excellence in Riga—which became functional three months before Russia's invasion and annexation of Crimea⁵⁶—and the NATO Cooperative Cyber Defence Centre of Excellence in Tallinn. NATO also supports the Finland-based European Centre of Excellence for Countering Hybrid Threats, which aims to integrate NATO and EU responses and counts both organizations as members, in addition to 16 states.⁵⁷

⁵¹ Jens Stoltenberg, "Speech by NATO Secretary Jens Stoltenberg at the Cyber Defence Pledge Conference (Ecole Militaire, Paris)," North Atlantic Treaty Organization, May 15, 2018.

⁵² NATO, "Press Conference by NATO Secretary General Jens Stoltenberg Following the North Atlantic Council Meeting at the Level of NATO Defence Ministers," June 14, 2016a; and Jens Stoltenberg, "Remarks by NATO Secretary General Jens Stoltenberg at the Elliott School of International Affairs, George Washington University," North Atlantic Treaty Organization, April 13, 2017.

⁵³ Patrick Tucker, "Former NATO Commander: Alliance Needs to Take Cyber Fight to Russia's Door," *Defense One*, July 6, 2017.

⁵⁴ NATO, 2018c, p. 9, para. 44.

⁵⁵ NATO, "NATO Cyber Defence," factsheet, Brussels, February 2018a. The opening of the Cyberspace Operations Centre was again mentioned at the July 2018 Brussels Summit (NATO, 2018d).

⁵⁶ Strategic Communications Centre of Excellence, "About Us," webpage, North Atlantic Treaty Organization, undated.

⁵⁷ European Centre of Excellence for Countering Hybrid Threats, "What Is Hybrid CoE?" webpage, undated.

In high-level U.S. officials' successive visits to the Baltic states since 2014, the only responses to gray zone threats mentioned—at least publicly—focused on reducing the Baltic states' reliance on Russian energy. For instance, U.S. Vice President Joe Biden told the presidents of Latvia and Lithuania that the United States supported their efforts to diversify their sources of energy “so that no nation can use supplies of energy as a political weapon or a quasi-military weapon against you.”⁵⁸ The importance of energy security was also underlined by Estonian President Toomas Hendrik Ilves in his remarks with President Obama in September 2014,⁵⁹ and again by Vice President Biden in 2016, who suggested that U.S. natural gas could help the Baltic states be less dependent on Moscow.⁶⁰ Overall, the rare references to potential gray zone attacks by Russia on the Baltic states have been made in the context of a discussion on measures to improve resilience rather than planned responses in the event of an attack. The sole exception is the 2017 reference to Article 5 made by Vice President Pence, who followed his mention of “malign influence” with a commitment backed by the presence of U.S. forces.⁶¹

Because the targets of gray zone attacks are largely internal (e.g., elections, minorities, critical infrastructure, governmental websites), there is an expectation that the attacks will be dealt with first by the targeted state, which may then ask its allies for whatever support it deems useful. On the issue of Russian communities in Estonia and Latvia, Dmitri Trenin notes, “Clearly, this is an internal matter for Tallinn and Riga.”⁶² Any request for support is likely to be made on an ad hoc basis, making it difficult to communicate to a potential aggressor what a joint response might be in case of an attack. While the Baltic states have signaled that they will respond to infiltration with force and will mobilize their self-defense forces in the event of a perceived invasion, the support that the Baltic states' allies might provide in such contingencies is much less clear.

⁵⁸ Joe Biden, Dalia Grybauskaitė, and Andris Bērziņš, “Remarks to the Press by Vice President Joe Biden, President Dalia Grybauskaitė of Lithuania, and President Andris Bērziņš of Latvia,” Vilnius, Lithuania, White House, March 19, 2014.

⁵⁹ Barack Obama, Toomas Hendrik Ilves, Dalia Grybauskaitė, and Andris Bērziņš, “Remarks by President Obama and Leaders of Baltic states in Multilateral Meeting,” Tallinn, Estonia, White House, September 3, 2014.

⁶⁰ Joe Biden, “Remarks by Vice President Joe Biden at the National Library of Latvia,” Riga, Latvia, White House, August 24, 2016.

⁶¹ Pence, 2017.

⁶² Trenin, 2011, p. 50.

6. Do the United States and Its NATO Allies Have Proportionate Means of Rapidly Responding?

Overall, the United States and its NATO allies can resort to a wide range of nonmilitary response options, including additional sanctions against Russian individuals and economic entities, additional trade sanctions, expulsion of diplomats, and suspension of areas of cooperation with Russia that still exist. A case illustrating a proportionate and highly flexible allied response came in reaction to the poisoning of former Russian double agent Sergei Skripal and his daughter Yulia with a military-grade nerve agent in Salisbury, England, in March 2018. Following British Prime Minister Theresa May's assessment that Russia's involvement in the poisoning was "highly likely,"⁶³ the United States expelled 60 Russian diplomats and closed the Russian consulate in Seattle, while 22 other countries responded in a similar fashion, expelling a total of 56 Russian diplomats in other nations.⁶⁴ Such a response is easily scalable: It would take only a small change in the criteria to produce a longer or shorter list of expelled diplomats. Similarly, in the case of economic sanctions, more names of individuals and entities can be added or deleted, as in the various rounds of sanctions (three as of 2018) since 2014 in response to the Ukraine crisis. The United States and its allies in the region, therefore, have proportionate means of rapidly responding to Russian gray zone attacks, were they to choose to do so.

Military responses, too, present a vast repertoire of options. The successive adjustments and reinforcements of NATO's Enhanced Forward Presence and other types of military presence—such as the expected doubling of the number of U.S. Marines deployed to Norway and their moving closer to the Norway-Russia border⁶⁵—suggest that the prepositioning of troops and equipment can be fine-tuned to send tailored messages to Russia proportionate to its behavior. Similarly, the scale, scenarios, and simulated targets used in military exercises can be tailored to create a higher or lesser sense of alarm in Moscow. Overall, although the wide variety of gray zone threats is what makes them so difficult to preempt and deter, it also means that gray zone responses to gray zone threats permit a large range of options to choose from, allowing the responding state(s) to select the most appropriate and proportionate ones. Whether these responses will be effective in deterring future Russian gray zone attacks is a different question, however, and it should be noted that sanctions and expulsions of diplomats have not put an end to suspected Russian cyberattacks and efforts at disinformation.

⁶³ "Russian Spy: Highly Likely Moscow Behind Attacks, Says Theresa May," BBC News, March 13, 2018.

⁶⁴ "Spy Poisoning: Russian Diplomats Expelled Across US and Europe," BBC News, March 26, 2018.

⁶⁵ Gwladys Fouche, "Norway to Invite More U.S. Marines, for Longer and Closer to Russia," Reuters, June 12, 2018.

7. Can the United States and Its NATO Allies Generate Significant Regional and Global Support for Response Options?

In its recent instances of using force, Russia has shown that it tends to invoke legal justifications for its actions.⁶⁶ In the annexation of Crimea, Russia argued that it had to protect its Russian citizens in Ukraine.⁶⁷ For actions in Syria, Putin argued that Russia was protecting Syria's "state sovereignty, unity and territorial integrity."⁶⁸ A similar pattern would likely apply in the case of a gray zone attack in the Baltic states. Moscow could claim that it needs to protect ethnic Russians in those states from poor treatment or that areas populated mostly by Russians have a right to self-determination.⁶⁹ Russia's repeated messages labeling these countries as "Nazi" contributes to a perception among the public that a Russian intervention is not only legitimate but required. Another justification that Russia might invoke is the preemption of a NATO attack—for instance, against Kaliningrad. However, this would most likely prompt conventional, rather than hybrid, action on the part of Moscow, unless the hybrid activity was only the first step leading to conventional action. By using these various justifications, Russia attempts not only to legitimize its actions to its own population but also to divide the international community on whether its actions are legitimate or require forceful responses. Political leaders in Greece, Hungary, and Italy, among others, have already expressed doubts that the sanctions were a useful response to the Ukraine crisis or have plainly called for their termination.⁷⁰ Similarly, in the case of the Skripal double murder attempt, the European response was uneven, and ten EU members refrained from expelling any Russian diplomats.⁷¹

These different regional and international reactions to various responses and crises suggest that support will be provided on a case-by-case basis. This variability weakens the deterrent message. For example, Russia might take a chance at launching an attack against the Baltic states in the event that they find themselves isolated

⁶⁶ Samuel Charap, "Russia's Use of Military Force as a Foreign Policy Tool: Is There a Logic?" PONARS Eurasia, Policy Memo 443, October 2016, p. 4.

⁶⁷ See, for instance, Brian Resnick, "How the Russian Constitution Justifies War in Ukraine," *The Atlantic*, March 3, 2014; and "Ukraine Crisis: Does Russia Have a Case?" BBC News, March 5, 2014.

⁶⁸ Gabrielle Tétrault-Farber, "Putin Tells Assad Russia Will Help Defend Syrian Sovereignty: Kremlin," Reuters, December 30, 2017. See also Mary Dejevsky, "Putin's Rationale for Syria," *The World Today*, February and March 2018.

⁶⁹ The right to self-determination was invoked by Moscow in the Crimea case (see Charap, 2016, p. 4).

⁷⁰ Robin Emmott and Gabriela Baczynska, "Italy, Hungary Say No Automatic Renewal of Russia Sanctions," Reuters, March 14, 2016.

⁷¹ Bernd Riegert, "EU Majority Stands with United Kingdom in Its Fight with Russia," *Deutsche Welle*, March 27, 2018; and Leonid Bershidsky, "Europe's Anti-Kremlin Roll Call Was Weak," *Bloomberg*, March 27, 2018. Bershidsky notes, however, that some of these countries (e.g., Cyprus, Malta, and Luxembourg) had small Russian representations and could hardly expel one diplomat without losing most of this representation.

in their deterrent response or criticized for overreacting, which would further threaten solidarity within NATO.

8. Has the History of Interaction Fostered an Expectation of Meaningful Responses to High-End Gray Zone Acts?

Russia has a long history with the Baltic states and with NATO and, as a result, holds certain expectations of how they might react in certain circumstances. The track record of gray zone attacks against the Baltic states, as well as their responses—or lack thereof—provide Russia with some indication of whether further attacks might receive a meaningful response. Prior responses signal the potential degree of Baltic and NATO decisiveness or divisions.

Russia has a lengthy historical record of high-end gray zone actions against the Baltic states, including disruptions of energy supplies (Russia closed its pipeline providing crude oil to Lithuania in July 2006);⁷² violent incidents and cyberattacks against Estonia in 2007 in response to the Bronze Soldier relocation;⁷³ the kidnapping of an Estonian intelligence officer in 2014;⁷⁴ recurrent airspace violations; and aggressive moves toward the Baltic states in Russian military exercises, including in the Zapad exercise in September 2017.⁷⁵

In some cases, the targeted countries have responded with countermeasures of their own, but such responses have been limited. For instance, Estonia deported several Russian activists involved in protests after the Bronze Soldier crisis.⁷⁶ Meanwhile, responses from the broader international community have remained mainly at the diplomatic level, with statements of support for the targeted states or warnings toward Moscow. The EU, for instance, issued a protest against Russia for violent incidents targeting Estonian and Swedish diplomats in Moscow during the Bronze Soldier crisis.⁷⁷

Yet focusing on the paucity of immediate responses to individual Russian gray zone attacks would miss the far more consequential responses that have resulted from the cumulatively growing distrust inspired by Russia in the wake of these attacks. For instance, Estonia distanced itself from the Nord Stream gas pipeline project, championed by Russia, out of concern that it could lead to Russian Navy incursions in Esto-

⁷² Russia argued that the pipeline had a leak and needed repair. See Andrew E. Kramer, "Lithuanians Are Given a Taste of How Russia Plays the Oil Game," *New York Times*, October 28, 2006.

⁷³ Ian Traynor, "Russia Accused of Unleashing Cyberwar to Disable Estonia," *The Guardian*, May 16, 2007b.

⁷⁴ Herszenhorn, 2014. The crisis was resolved a year later with the exchange of the Estonian officer for a former Estonian official who was jailed in Estonia on charges of spying for Russia (Jason Bush and David Mardiste, "Russia and Estonia Swap Alleged Spies," Reuters, September 26, 2015).

⁷⁵ Michael Birnbaum and David Filipov, "Russia Held a Big Military Exercise This Week. Here's Why the U.S. Is Paying Attention," *Washington Post*, September 23, 2017.

⁷⁶ Laima Vaiga, "Nashi Activists Detained at Border," *Baltic Times*, January 9, 2008.

⁷⁷ Ian Traynor, "EU Protests over Russian Attacks on Ambassadors," *The Guardian*, May 2, 2007a.

nia's territorial waters.⁷⁸ Baltic states have worked to deepen their ties with the West and to limit or eliminate their energy dependence on Moscow—a move that effectively reduces Russian leverage on these countries, hurts Russia's economy, and shifts the long-term strategic alignment of these countries away from Russia. Similarly, Russia's military-type gray zone threats against the Baltic states—such as overflights of their airspaces and shows of force—have prompted the deployment of additional conventional capabilities on their territories, a response that is highly negative from Russia's viewpoint and might deter it from undertaking such activities in the future.

Overall, therefore, the track record of responses to individual gray zone attacks suggests that Russia might not perceive that the punishment for pursuing these types of actions will be too harsh. If anything, Russia would have likely switched to other methods by now if it had concluded that the cost to pay was too high. At the same time, the accumulation of these attacks has long-term effects that consist of clear shifts in the political, strategic, and economic orientations of the targeted countries, as well as shifts in the local balance of military forces, and all of these effects are detrimental to Russia.

Assessment

Applying the framework developed in Chapter One to the case of Russian aggression in the Baltic states highlights some strengths and weaknesses of the Baltic and NATO deterrence message. Table 3.1 summarizes the assessment.

The table shows a deterrent picture of mixed effectiveness, with only two indicators in green: (1) the absence of motivations so extreme, on the part of Russia, that it would feel compelled to use high-end gray zone attacks and (2) the availability of proportionate means of rapidly responding with military or nonmilitary means. Half of the eight indicators are gray, indicating mixed effectiveness: Attribution largely depends on the type of attack that is being carried out; some attacks might be more difficult to identify than others; regional and global support for responses to gray zone attacks will likely come on a case-by-case basis; and past responses to Russia's gray zone attacks will likely give it a sense of impunity, although the long-term effects overall will reduce Russia's leverage on the Baltic states and shift the European balance of power away from Russia.

Two indicators are in red, indicating a failure of deterrence. First, the United States and its NATO allies have not clearly communicated which outcomes (short of a violation of territorial integrity) they will not accept, making it unclear what it is they are trying to deter. In addition, there does not appear to be much coordination, or even a common understanding, of the type of actions that the allies will take in response to

⁷⁸ *The Economist* Intelligence Unit, "Estonia Rejects Russian Pipeline Survey," December 7, 2012.

Table 3.1

Assessment of High-End Gray Zone Deterrence: Russian Aggression Against the Baltic States

Criterion	Level of Deterrence	Details
1 Intensity of the aggressor's motivations	Strong	Russia appears unlikely to take risks to gain an advantage in countries that it does not consider to be an essential national interest, especially because it can resort to a whole range of lower-level gray zone measures instead.
2 Attribution of the aggressor's role	Mixed	Attributability depends to a great extent on the type of attack being carried out and the individual characteristics of the attack. Because Russia has both the means and the motives to carry out high-end gray zone attacks in the Baltic states, it is a prime suspect when such attacks happen. However, Russia simply having these capabilities and inclinations might not provide sufficient grounding to launch a meaningful response and to secure broader support for it.
3 Level of aggression	Mixed	Most of Russia's high-end gray zone activities examined here meet this criterion for deterrence, but a small subset of these activities—particularly cyberattacks—create neither a physical change in the status quo nor an encroachment on territorial integrity.
4 U.S. and partner alignment on unacceptable outcomes	Weak	The Baltic states and the United States have been communicating almost exclusively about conventional threats. With regard to high-end gray zone acts, there have been no clear and consistent statements about which outcomes would be considered unacceptable, and there is no evidence that the parties agree on what they are trying to deter.
5 U.S. and partner alignment on deterrent responses	Weak	The Baltic states and their NATO allies have not made clear how they would respond to high-end gray zone acts. Targeted states will be largely responsible for crafting a response and might ask for support from their allies on an ad hoc basis. This provides the targeted states with some degree of flexibility to provide the most appropriate response, but it muddles the deterrent message to Russia.
6 U.S. and partner proportionate response capabilities	Strong	The range of responses to gray zone attacks is about as wide as the range of gray zone attacks themselves.
7 Regional and global support for deterrence	Mixed	There is some evidence (e.g., the Skripal poisoning) that retaliation against Russia can garner significant regional and global support. Yet such support will likely be provided on a case-by-case basis. Any perception of the United States overreacting against Russia or overreaching in the internal affairs of an ally might backfire and potentially threaten ally solidarity.
8 Aggressor's expectation of meaningful responses	Mixed	Although responses to the gray zone attacks themselves have hardly been meaningful, they have prompted the development of additional capabilities and defense mechanisms, making future attacks more difficult. They have also created a sense of threat over the Baltic states that has led to further conventional reinforcements—a negative development from Moscow's viewpoint.

an attack. In terms of deterrence, the United States and its allies are, effectively, delivering a nonexistent threat: Russia is not being told what it cannot do or what the price will be for doing it.

Yet maintaining some degree of uncertainty with regard to thresholds and responses also has benefits. NATO mentioned that hybrid actions might trigger collective defense but did not communicate clear thresholds for such action, which keeps Moscow uncertain about how far it can safely go before triggering a forceful response on the part of the Alliance. It also prevents Moscow from trying to undermine NATO's unity with actions below the threshold, because there is no public commitment from NATO to respond collectively under such circumstances.

Overall, this assessment of mixed deterrence effectiveness reflects the general difficulty of deterring high-end gray zone attacks and is likely to apply to many cases aside from the Baltic region. Moreover, while it is easy for states or sets of allies to know what they are trying to prevent with interstate aggression, it is much more challenging to pinpoint exactly what needs to be prevented in the gray zone and to distinguish between what is worth deterring and what is not. If the deterrent message is too broad, it will not be effective because the United States or NATO cannot commit to stopping all gray zone threats, even high-end ones. If the message is too specific, Russia will easily circumvent it by employing different methods to achieve the same political or strategic objectives. This might explain NATO's decision to focus on deterrence by denial—which makes gray zone attacks less feasible and less attractive for Moscow—rather than deterrence by punishment. As a March 2018 NATO parliamentary report put it,

Russia's hybrid machine is innovative and difficult to predict. In most cases, the Kremlin exploits and aims to amplify cleavages that already exist in Western societies. Therefore, it is imperative to focus on building the overall resilience of a society and addressing domestic grievances, rather than on efforts to predict Russia's next move. . . . Hybrid defence efforts should primarily be oriented inwards rather than outwards against a specific country.⁷⁹

While deterrence by punishment will still be warranted in certain cases—for instance, to respond to cyberattacks or particularly egregious actions, such as murders or attempted murders—it should be complemented by the more long-term strategy of deterrence by denial.

The focus of the United States and NATO has been to help states help themselves—a choice that recognizes that gray zone attacks often touch on sensitive issues that targeted states might prefer to handle themselves anyway. Interference by the United States or NATO, furthermore, might backfire by creating internal discontent and calling into question the ability of national governments to handle their own

⁷⁹ NATO, 2018c, p. 12, para. 63.

issues, potentially triggering precisely the type of social or political destabilization that Russia hopes to achieve.

Making the Baltic states more resilient can be accomplished through several means. Improving the cyber resilience of computer systems and critical infrastructure can help protect against cyberattacks. The manipulation of Russian minorities by pro-Kremlin propaganda might be preempted through targeted communication campaigns or through the adoption of political, economic, or social measures that build the loyalties of these minorities to the central government.⁸⁰ If the Baltic states succeed in making themselves less attractive targets for high-end gray zone attacks, Russia might reconsider the benefit of using these methods altogether, for they have so far failed to translate into major political or strategic benefits for Moscow. Even in eastern Ukraine, employing these methods did not allow Russia to fulfill its objectives while remaining below the threshold of war.⁸¹

In the Baltic states, Russia's use of high-end gray zone attacks only helped convince NATO that serious reassurance measures were warranted and brought back to Europe some of the U.S. forces that had left in the decade following the end of the Cold War. Employing gray zone methods also led to increased military engagement on the part of various NATO members and an overall increase in NATO members' defense expenditures by almost 5 percent between 2016 and 2017.⁸² If high-end gray zone attacks, from Moscow's viewpoint, are not particularly effective, risk backfiring, and are made harder by more-resilient societies, then there will be little incentive for Russia to continue resorting to these tactics to pursue its strategic goals.

⁸⁰ See, for instance, "Estonia Gets Creative About Integrating Local Russian-Speakers," *The Economist*, May 10, 2018.

⁸¹ Charap, 2015, pp. 54–55; and Michael Kofman, Katya Migacheva, Brian Nichiporuk, Andrew Radin, Olesya Tkacheva, Jenny Oberholtzer, *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, Santa Monica, Calif.: RAND Corporation, RR-1498-A, 2017, p. 76.

⁸² NATO, *The Secretary General's Annual Report 2017*, Brussels, March 15, 2018b, p. 32.

Deterring North Korea's Gray Zone Aggression Against South Korea

This chapter applies the framework of criteria governing the success of gray zone deterrence measures to possible North Korean provocations against South Korea. We first define the sort of gray zone challenges that are the subject of the deterrence analysis. As in the other cases, this analysis focuses on high-end gray zone aggression—that is, actions toward the upper end, in terms of bellicosity, violence, and kinetic effects, of this admittedly abstract category. Specifically, we evaluate the deterrence of North Korean military provocations below the threshold of major conflict, including naval aggression, limited kinetic operations on land, and large-scale cyberattacks. We evaluate both South Korean and U.S. involvement in the deterrence task, including South Korea's policy of disproportionate retaliation.¹ The question is whether U.S. and South Korean deterrence of such activities is strong or weak today.

The analysis in this chapter draws heavily on the research presented in the companion report on deterring North Korean conventional aggression.² In many cases, the essential policies and capabilities that govern deterrence—such as overall U.S. statements of commitment to South Korea (which often mention gray zone-style contingencies), the perceived health of the alliance, and the broad suite of capabilities possessed by both South Korean and U.S. forces—are applicable to the deterrence of both interstate and gray zone aggression. We apply some of those variables to the assessment of high-end gray zone deterrence. We conclude the chapter by making recommendations about possible avenues to strengthen that deterrence, given the sources of deterrent strength described in the assessment framework.

¹ On the context for this change, see Michael McDevitt, "Deterring North Korean Provocations," Brookings Institution, February 7, 2011; Lee Tae-hoon, "Defense Chief Tells Troops to Act First, Report Later," *Korea Times*, March 1, 2011; "Respond Swiftly and Strongly to N. Korean Attacks, Soldiers Told," *Chosun Ilbo*, March 2, 2011; "S. Korea Responds to N. Korea's Artillery with New Engagement Rules," Yonhap, April 1, 2014; and David E. Sanger and Thom Shanker, "U.S. Designs a Korea Response Proportional to the Provocation," *New York Times*, April 7, 2013.

² Michael J. Mazarr, Nathan Beauchamp-Mustafaga, Timothy R. Heath, and Derek Eaton, *What Deters and Why: The State of Deterrence in Korea and the Taiwan Strait*, Santa Monica, Calif.: RAND Corporation, RR-3144-A, 2020.

First, however, it is necessary to account for the peculiar unpredictability of North Korea on the world stage. Given the difficulty of predicting North Korea's aggressive actions, the remainder of this introduction will briefly discuss the country's recent history of gray zone aggression toward its southern neighbor and then propose a set of hypothetical future high-end gray zone actions that might emanate from North Korea's sometimes murky recent history.

Traditionally, North Korea has viewed limited provocations as a useful tool for promoting its interests, both domestic and international.³ Its risk tolerance is somewhat limited, though, and it has generally sought to pursue operations that are

carefully calibrated and initiated at a time and place of its choosing, to accomplish the regime's political objectives without setting off a broader conflict. However, if such conflagrations threaten to slip the control of central decisionmakers, North Korea has tended to quickly shut them down, even when doing so appears at odds with the North's penchant for fiery rhetoric and its finely cultivated image of risk acceptance and escalation dominance. North Korea has very little appetite for a fight that would go beyond the level of an individual tactical engagement.⁴

As a result, there is a gulf between the public impressions that North Korea cultivates and its actual behavior. Pyongyang appears anxious to portray itself as a fearsome risk-taker whose behavior is unpredictable and who is ready for escalation in any crisis. However, its behavior suggests a commitment—in the face of U.S. and South Korean military superiority—to keep strict control of the escalatory dynamics of any crisis and to preserve clear off-ramps to de-escalate when events seem to be running out of control. This tendency does not mean that the North will always back down in the face of escalatory threats; such an assumption could prove dangerous if North Korean political imperatives dictated standing firm. But North Korea is a generally risk-avoidant strategic actor.

Like the gray zone acts of the other states examined in this report, North Korea's actions do not conform to any rigid spectrum of gray zone tactics. North Korean provocations, such as the 2010 attacks on South Korean naval vessels and island bases, stretch the upper end of even high-end gray zone activities. North Korea appears to be waging less of a consistent, gradual campaign, as in the cases of China and Russia; instead, it uses specific provocations for strategic effect. Nonetheless, North Korea does employ multiple tools below the level of outright armed conflict to achieve its

³ Narushige Michishita, *North Korea's Military-Diplomatic Campaigns, 1966–2008*, New York: Routledge, 2010.

⁴ Michael J. Mazarr, Timothy R. Heath, Scott W. Harold, Bryan Frederick, William R. Thompson, Anya Loukianova Fink, Nathan Beauchamp-Mustafaga, and Julia A. Thompson, *Managing the Challenge of Limited Conflict: Promoting U.S. and Allied Interests Under the Shadow of Escalatory Risk*, Santa Monica, Calif.: RAND Corporation, RR-2540-A, forthcoming, p. 110.

goals, and, in this sense, its tactics represent a form of what has been called gray zone aggression.

Rather than being designed as tools to gain territory, North Korea's tactics are more likely designed to be tools to wage psychological warfare against the United States and South Korea and to serve the domestic political needs of North Korean leaders.⁵ The gray zone strategies are therefore primarily political-informational in nature: Pyongyang is trying to shape the surrounding geopolitical environment, South Korean political dynamics, and internal regime politics more so than laying the groundwork for acquiring territory.⁶

It also does not appear that North Korea has a specific strategy or doctrine that governs its use of gray zone actions.⁷ Although its activities appear to be centrally directed (apart from cases where local activities accidentally get out of hand), the activities are products of leadership objectives at a given moment rather than of enduring doctrinal considerations. This ad hoc nature of the gray zone activities makes them relatively unpredictable.

The scale and scope of North Korean provocations have declined in recent decades compared with their heyday in the 1970s and 1980s, when North Korea had its troops assault U.S. forces at the demilitarized zone (DMZ), attempted to assassinate South Korean leaders, and staged terrorist attacks against South Korean aircraft.⁸ Then, in 1996, a North Korean mini-submarine ran aground in South Korea; the escaping North Korean special forces troops killed several South Korean soldiers and civilians, and some evaded capture for seven weeks.⁹

Compared with these high-water marks of provocations, recent years have been relatively quiet, notwithstanding North Korea's landmark 2010 sinking of South Korea's *Cheonan* warship, which killed 46 South Korean seamen, and subsequent

⁵ On North Korean military strategy, see Office of the Secretary of Defense, *Military and Security Developments Involving the Democratic People's Republic of Korea: Annual Report to Congress, 2012*, Washington D.C.: U.S. Department of Defense, February 15, 2013; Office of the Secretary of Defense, *Military and Security Developments Involving the Democratic People's Republic of Korea: Annual Report to Congress, 2013*, Washington, D.C.: U.S. Department of Defense, February 4, 2014; Office of the Secretary of Defense, *Military and Security Developments Involving the Democratic People's Republic of Korea: Report to Congress, 2015*, Washington, D.C.: U.S. Department of Defense, January 5, 2016; and Republic of Korea Ministry of National Defense (MND), *2016 Defense White Paper*, Seoul, May 2017 (see also the Republic of Korea's 2008, 2010, 2012, and 2014 defense white papers).

⁶ Ken Gause, *North Korea's Provocation and Escalation Calculus: Dealing with the Kim Jong-un Regime*, Arlington, Va.: CNA, August 2015.

⁷ Mazarr et al., forthcoming, pp. 109–168.

⁸ See, for example, the three-part series in Adam Rawnsley, "The Great Leader's Shadow War," *War Is Boring*, May 24, 2016a; Adam Rawnsley, "North Korea's Special Operations Assassins," *War Is Boring*, May 26, 2016b; and Adam Rawnsley, "How South Korea Thwarted Kim Il-sung's Shadow War," *War Is Boring*, May 30, 2016c.

⁹ Sebastien Roblin, "In 1996, a Dead North Korean Spy Submarine (Armed with Commandos) Nearly Started a War," *National Interest*, March 13, 2017.

shelling of South Korea's Yeonpyeong Island. Since then, North Korea has sent small drones over the South, but these appear to have been intelligence-gathering activities rather than provocations per se.¹⁰ The North has allegedly also engaged in jamming of maritime navigation in the area and fired test missiles over Japanese islands.¹¹

However, North Korean possession of a secure, survivable, and growing nuclear arsenal might reverse this restraint. As North Korea gains more confidence in its own deterrent posture, it might feel that it can stage gray zone provocations with some degree of impunity. The evidence on this score from other cases is mixed: Not all new nuclear powers have behaved more aggressively because of their arsenals. But North Korea is a historically belligerent actor dedicated, at least in theory, to the destabilization and absorption of South Korea into the North Korean political system. All evidence suggests that North Korean leaders have laid these territorial objectives aside as imminent goals of the regime. Whether the possession of a secure nuclear deterrent revives more-active consideration of such objectives is yet to be seen.

Therefore, we conclude that the potential high-end North Korean gray zone actions against South Korea, short of territorial aggression, could include the following:

1. *Maritime aggression near the Northern Limit Line.* North Korea currently disputes the existing international maritime boundaries in the western seas off North and South Korea.¹² Its 2010 provocations (the *Cheonan* sinking and attacks on other vessels and island bases) fell into this category. To harass South Korean military or civilian maritime assets in the future, North Korea could employ other tactics, including direct assault by surface or submarine vessels, air attack, missile attack, or swarming attacks by small boats.¹³
2. *Hostile actions along the DMZ.* In 2015, two South Korean soldiers were maimed when they tripped land mines just inside the South Korean half of the DMZ, and South Korean leaders blamed the North for planting the land mines.¹⁴ But the incident might have been purely an accident rather than an intentional provocation by North Korea. In the future, though—at the highest end of violence

¹⁰ Dageum Ji, "Suspected N. Korean Drone Took Photos of THAAD Deployment Site: ROK Army," *NKNews*, June 13, 2017.

¹¹ "122 Ships Affected by Suspected N. Korea GPS Jamming," *Korea Times*, May 4, 2012; Michelle Nichols, "South Korea Tells UN That North Korea GPS Jamming Threatens Boats, Planes," Reuters, April 11, 2016; and Sheryl WuDunn, "North Korea Fires Missile over Japanese Territory," *New York Times*, September 1, 1998.

¹² International Crisis Group, *North Korea: The Risks of War in the Yellow Sea*, Asia Report No. 198, December 23, 2010; and Robert Lauler, "Divergent Perspectives: The U.S.–South Korea Disagreement over the Northern Limit Line in the Mid-1970s," *International Journal of Korean History*, Vol. 18, No. 2, August 2013.

¹³ Paul Pryce, "North Korea and Asymmetric Naval Warfare," Center for International Maritime Security, February 15, 2016.

¹⁴ Choe Sang-hun, "South Korea Accuses the North After Land Mines Maim Two Soldiers in DMZ," *New York Times*, August 10, 2015b.

short of major war—potential North Korean coercive actions involving direct military force could include a sustained artillery harassment barrage against Seoul or populated areas between Seoul and the DMZ.

3. *Large-scale, physically destructive cyberattacks against South Korea, Japan, or the United States.*¹⁵ North Korea could launch cyberattacks beyond mere probing or low-level harassment. Large-scale cyberattacks would be designed to do serious damage to military or civilian systems, such as information networks, or to specific institutions, such as government departments or South Korean or U.S. corporations.
4. *Conventional missile strikes on remote, military, or limited civilian targets.* North Korea possesses an extensive suite of ballistic missiles that could be employed in actions short of major war.

We do not consider North Korean nuclear development activities, such as nuclear or missile tests, to be forms of gray zone aggression. These behaviors are certainly provocative, but their main purpose is technical—to underwrite the development of a nuclear force. North Korea might also time or scale these actions for maximum political effect, but their primary role is not as a form of aggression.

Applying the Framework to North Korea's Gray Zone Aggression

Having identified these four potential actions (see previous section) as the range of high-end gray zone activities that the United States and South Korea might need to deter, we applied the eight criteria of the assessment framework to judge the health of the current deterrent policies aimed at gray zone aggression by North Korea.

1. Are North Korea's Motivations So Extreme as to Make Its Actions Nearly Impossible to Deter?

This criterion speaks to the mindset and motivations of the aggressor. If a potential aggressor believes that it must act, it will not be subject to effective deterrence. In the case of North Korea, this criterion indicates a mixed level of deterrence.

On the one hand, there is little evidence that North Korea feels a sense of urgency or a degree of desperation that would mandate even highly risky aggression. U.S. intelligence has concluded that regime survival and economic improvement, as well as

¹⁵ For information on past North Korean cyber activities, see Choe Sang-hun, "Computer Networks in South Korea Are Paralyzed in Cyberattacks," *New York Times*, March 20, 2013a; Michael Corkery and Matthew Goldstein, "North Korea Said to Be Target of Inquiry over \$81 Million Cyberheist," *New York Times*, March 22, 2017; Paul Mozur and Choe Sang-hun, "North Korea's Rising Ambition Seen in Bid to Breach Global Banks," *New York Times*, March 25, 2017; Jose Pagliery, "North Korea-Linked Hackers Are Attacking Banks Worldwide," CNN, April 4, 2017; and Ellen Nakashima, "The NSA Has Linked the WannaCry Computer Worm to North Korea," *Washington Post*, June 14, 2017a.

nuclear deterrence, rank as chief regime priorities.¹⁶ The U.S. Department of Defense agrees that North Korea has

largely abandoned unilaterally enforced reunification as a practical goal. North Korean goals and strategies reflect the reality of political isolation, significant economic deprivation, a deteriorating conventional military, and the increasing political and military power of nearby states.¹⁷

North Korean leader Kim Jong Un's own statements suggest a priority of economic development rather than territorial aggrandizement.¹⁸ Moreover, North Korea appears to interpret its goal of unification in gradual, long-term ways rather than as an imminent military requirement.

More broadly, there appears to be no sense of urgency or desperation at the moment in North Korean policy. Pyongyang, in recent years, appears to have been acting confidently, believing that the strategic situation is turning in its favor.¹⁹ The economic situation appeared to improve somewhat in 2017, and the regime has been able to claim some progress in bringing more prosperity to the North Korean people. The election of Moon Jae-in brought to power in Seoul a government determined to seek better relations with the North. After some initial harsh rhetoric in early 2018, the U.S. government turned to engagement, summits, and friendly rhetoric, leaving North Korea with the strategic initiative. In sum, there is no reason to believe that North Korea has a sense of urgency to take aggressive actions that would override deterrence.

North Korea is also engaged in a seemingly extended charm offensive directed at both South Korea and China. It could be aiming to open the door to increased economic investment to improve its domestic economic situation. But, whatever the reason, since the 2018 Winter Olympics were held in South Korea, the North has undertaken a broadly nonprovocative stance toward the South. History suggests that this stance can change very quickly—but, for the moment, it creates a context in which North Korea has almost no immediate motive to risk high-end gray zone aggression.

On the other hand, North Korean provocations appear to serve domestic political purposes, and these incentives can arise unpredictably and without warning. If Kim Jong Un's rule were to be threatened—or, in a very different scenario, if he decided to take a bold initiative that required him to shore up support among hard-liners—his incentive for provocation might suddenly emerge. Any judgment of his motivations is therefore exceedingly changeable.

¹⁶ James R. Clapper, "Statement for the Record: Worldwide Threat Assessment of the US Intelligence Community," testimony presented before the House Permanent Select Committee on Intelligence, Washington, D.C., February 25, 2016, p. 17.

¹⁷ Office of the Secretary of Defense, 2013, p. 5.

¹⁸ Kim Jong Un, "Kim Jong Un's New Year Address," National Committee on North Korea, January 2, 2018.

¹⁹ Ri Hyon Do, "DPRK's Strategic Decision Is Just," *Rodong Sinmun*, January 8, 2018.

Kim might also suddenly acquire an incentive for escalation.²⁰ If a challenge to the regime emerged at home, for domestic political or economic reasons, he might decide to distract domestic attention with a new provocation. North Korea's sense of its strategic position can also change quickly, altering its relative sense of urgency: A change in U.S. declaratory doctrine or regional posture could spark such shifts in a matter of days or weeks. Moreover, such changes in North Korean motives are very difficult to anticipate, tied as they sometimes are to relatively unpredictable domestic political dynamics and leadership perceptions.

2. Can North Korea's Role Be Clearly Identified and Proved in a Specific Event or Action?

The question of attribution will depend on the specific character of North Korean gray zone activities. Broadly speaking, many of the North's leading techniques in this sphere, including military provocations in the West Sea and at the DMZ, are likely to be fairly attributable. As in the 2010 *Cheonan* sinking and other maritime attacks, even if North Korea attempts to conceal its hand, its direct use of military assets will ultimately be uncovered. If it employs artillery, there is no question that it will be exposed. Given the political fallout from the *Cheonan* sinking incident, North Korea is unlikely to assume that it can avoid responsibility for those classes of gray zone activities.

Similarly, cyber forensics appears to be improving across the board, and several major cyberattacks in recent years appear to have been traced back to Pyongyang. North Korea would have to calculate that especially large and aggressive cyberattacks would be aggressively investigated and that the United States and South Korea would have strong motives to assign blame in such cases. Broadly speaking, the more wide-ranging and destructive a cyberattack is, the more likely that it is eventually attributed, which suggests that, even in the cyber realm, deterrence threats could carry strong credibility when aimed at averting highly destructive potential events.

3. How Aggressive Is the Specific Event or Action?

When a potential gray zone activity would reflect a physical change in the status quo or outright territorial aggression, the defender will have an easier time signaling its deterrent threats and potential responses. In other words, the more aggressive the action, the easier it is for the defender to meet the classic criteria for successful deterrence. In part, this is true because the damage will be significant enough that the attacker can presume that the defender will be able to politically justify a strong response. Therefore, the attacker will find the deterrent threats to be credible in advance.

Most of the high-end gray zone activities available to North Korea appear to be relatively aggressive on this scale, even if they do not involve territorial aggression. Sinking South Korean vessels; shooting artillery or missiles at South Korean (or U.S.

²⁰ Gause, 2015.

or Japanese) targets; or doing major damage to South Korean, U.S., or Japanese infrastructure with cyberattacks would be viewed as highly aggressive moves. Indeed, they already have been: The 2010 maritime attacks sparked South Korea's policy of disproportionate retaliation, and the cyberattack against U.S.-based Sony Pictures reportedly led to direct U.S. cyber retaliation. (For more details about South Korea's policy of disproportionate retaliation and its possible effects, see the appendix.) To some degree, then, the four categories of gray zone aggression noted earlier in this chapter would appear to pass the threshold of sufficiently aggressive actions to be identifiable and therefore deterrable. North Korea should assume that South Korean, U.S., and Japanese threats of retaliation are credible because these states have retaliated in the past.

On the other hand, North Korea could convince itself that past responses to such actions were constrained enough—that is, the price it paid for the gray zone aggression was low enough—to justify taking additional actions in the future. Not only could internal political calculations override North Korean perceptions of likely responses, but the North could also try to adjust future gray zone attacks to fall just below the threshold already established—say, of attacking South Korean frigates or U.S. multinational entertainment conglomerates. The North could try to evade deterrent policies by choosing forms of aggression that are just slightly less aggressive so as to avoid retaliation.

But such calculations would depend on North Korean perceptions of the South Korean and U.S. willingness to respond. If North Korea believes that Seoul and Washington have powerful political incentives to punish its provocations, even if they are slightly below the threshold of the 2010 maritime attacks, and that the nations are committed to doing so, then Pyongyang will likely be deterred. The evidence for this criterion does suggest, however, that deterrence will be complicated by North Korea's search for just the right level of provocation: one strong enough to achieve its goals but not so aggressive that it triggers a South Korean or U.S. response.

4. Do the United States and South Korea Have Specific and Agreed-Upon Outcomes That They Will Not Accept? Do They Agree on What They Are Trying to Deter?

The United States and South Korea are strongly aligned on the general commitments of the alliance—and the fact that these commitments cover a wide range of forms of aggression, not only major war. There remains some degree of ambiguity, however, regarding precisely what gray zone activities the two countries will and will not accept.

U.S. leaders have made a range of unqualified statements committing the United States to the defense of South Korea. President Obama said in 2013,

I want to make clear the United States is fully prepared and capable of defending ourselves and our allies with the full range of capabilities available, including the deterrence provided by our conventional and nuclear forces. As I said in Seoul last

year, the commitment of the United States to the security of the Republic of Korea will never waver.²¹

After a handful of more-confusing signals, the Trump administration has reiterated these commitments. During the June 2017 U.S.–South Korean summit, the U.S. side issued a statement reaffirming that

the commitment of the United States to the ROK's defense remains ironclad. President Trump reaffirmed that the United States will defend the ROK against any attack and both presidents remain committed to jointly addressing the threat posed by the Democratic People's Republic of Korea.²²

The United States has also reaffirmed its commitment in the wake of recent North Korean provocations. After the 2010 *Cheonan* sinking, the United States condemned the attack, reaffirmed its commitment to South Korea's security, and supported the South's cautious but firm response to the aggression.²³ Some U.S. members of Congress also discussed the possibility of once again adding North Korea to the list of terrorist-sponsoring nations.²⁴

Similarly, renewed statements of U.S. commitment were issued after the land mine crisis of August 2015. At the time, a senior U.S. defense official noted that

the United States is very concerned by [North Korea's] August 4 violation of the armistice agreement and we are monitoring the situation very closely. We are in close touch with our commanders and with our ROK ally, and the United States remains steadfast in its commitments to the defense of its allies and will continue to coordinate closely with the Republic of Korea.²⁵

Washington also released the summary of a telephone call, which made clear that U.S. Chairman of the Joint Chiefs of Staff Martin Dempsey “reaffirmed the unwavering commitment of the United States to the defense of South Korea and reiterated the strength of the U.S.-ROK Alliance” and promised to cooperate closely with his South Korean counterparts to deter provocations.²⁶

²¹ Barack Obama and Park Geun-hye, “Remarks by President Obama and President Park of South Korea in a Joint Press Conference,” Washington, D.C., White House, May 7, 2013.

²² White House, “Joint Statement Between the United States and the Republic of Korea,” June 30, 2017.

²³ Scott Snyder and See-won Byun, “Cheonan and Yeonpyeong: The Northeast Asian Response to North Korea's Provocations,” *RUSI Journal*, Vol. 156, No. 2, April–May 2011, p. 78.

²⁴ See the discussion in “The Sinking of the Cheonan,” North Korean Economy Watch, August 27, 2012.

²⁵ David Shear, “Department of Defense Press Briefing by Assistant Secretary Shear in the Pentagon Press Briefing Room,” transcript, U.S. Department of Defense, August 21, 2015.

²⁶ Greg Hicks, “Readout of Chairman Dempsey's Phone Call with Republic of Korea Chairman of the Joint Chiefs Adm. Choi Yoon-Hee,” U.S. Department of Defense, Release No. NR-337-15, August 22, 2015.

The United States has also made repeated statements that place gray zone–style aggression in the category of potential attacks covered by the security treaty with South Korea. In the Joint Communiqué of the 49th ROK-U.S. Security Consultative Meeting issued on October 28, 2017, the two sides reaffirmed their “mutual commitment to the fundamental mission of the Alliance—which is to defend the ROK through a robust combined defense posture, and to enhance the mutual security of both nations under ROK-U.S. Mutual Defense Treaty,” promising that “any North Korean aggression or military provocation will not be tolerated.”²⁷ In May 2018, senior U.S. military officers declared that the United States was ready to respond to any “provocative actions” by North Korea.²⁸

Nonetheless, these statements can be only so specific. Neither the United States nor South Korea is likely to be able to predict every potential form of gray zone aggression. Moreover, the South Korean and U.S. history of responses has been inconsistent enough to provide North Korea with the opportunity for wishful thinking, believing that some gray zone actions would fall below the threshold of explicit threats of response. If South Korea and the United States were to specify additional forms of gray zone aggression that would be explicitly covered by their treaty, the North would simply aim below that new threshold.

This framework criterion points to the importance of giving joint consideration to, and being very explicit about, the specific forms of higher-end gray zone aggression that would provoke an immediate, and very possibly military, reaction from South Korea and the United States. There is some risk that such redlines would merely cause North Korea to ratchet down its actions below the threshold for response. But that would be part of the deterrent goal: to constrain the severity of possible provocations and to avoid escalatory cycles that might otherwise arise.

5. Are the United States and South Korea Fully Aligned on the Need to Respond to Specific High-End Gray Zone Provocations and the Means of Doing So?

In institutional terms, the allies meet many of the criteria for alignment. They have extensive coordinating mechanisms through the alliance, including both regular and special forums that would be available in times of crisis. The allies coordinate at both the military and civilian senior official levels, as well as throughout the chain of command in a unique joint command structure.²⁹

²⁷ “Joint Communiqué of the 49th ROK-U.S. Security Consultative Meeting,” Seoul, U.S. Department of Defense, October 28, 2017, p. 2.

²⁸ “Pentagon ‘Ready to Respond’ to Any North Korea Provocations,” CNA, May 25, 2018.

²⁹ Terence Roehrig, *Restructuring the U.S. Military Presence in Korea: Implications for Korean Security and the U.S.–ROK Alliance*, Washington, D.C.: Korea Economic Institute of America, Academic Paper Series, Vol. 2, No. 1, January 2007.

The United States and South Korea have also maintained a consistent series of military exercises. These have included Key Resolve, Foal Eagle, and Ulchi Freedom Guardian. The U.S.–South Korean Combined Forces Command also conducts frequent activities—such as alerts, musters, and operational readiness inspections—to ensure the combat readiness of the alliance for a range of contingencies, including gray zone aggression scenarios.³⁰ The United States declared a pause in these exercises in 2018 as part of ongoing nuclear negotiations with North Korea, but they could be restarted at any time and, in some cases, with relatively little notice.

Historically, the United States and South Korea have been intermittently aligned regarding their responses to North Korean provocations. The degree of alignment has been primarily a function of the political and strategic worldviews of the administrations in power and the degree to which they differ in strategy toward North Korea. As noted earlier, the United States and South Korea were reasonably well aligned in the post-2010 period of enhanced deterrence—although, in some cases, South Korean commitments went beyond those with which the United States was comfortable. Nonetheless, the general story, especially since 2010, has been strong alignment on the categories of gray zone activities that the two sides would not tolerate and some degree of agreement on what they would do in the event of violations of these threats.

6. Do the United States and South Korea Have Proportionate Means of Rapidly Responding?

Deterrence of gray zone aggression can suffer if the defender lacks proportionate means of responding and the aggressor therefore thinks that it can undertake a form of aggression that will force the defender either to do nothing or to significantly escalate. Such gaps in the defender's suite of capabilities can tempt gray zone adventurism.³¹

In the Korean case, the United States and South Korea possess a wide range of capabilities in each domain to use in response to North Korean gray zone aggression. In the past several years, the following are some of the major capabilities that have been employed:

- diplomatic condemnation, including the use of international forums, such as the United Nations, to rally opinion against North Korea
- halted or postponed bilateral dialogues with North Korea
- expanded economic sanctions, either multilateral or bilateral
- military posture enhancements in the region, either temporary or permanent
- military exercises or demonstrations
- cyberattacks against North Korea

³⁰ U.S. Forces Korea, “CFC Announces Start of Key Resolve and Foal Eagle 2016,” press release, March 6, 2016; and U.S. Forces Korea, “Mission of the ROK/US Combined Forces Command,” webpage, undated.

³¹ The importance of proportional responses is emphasized by Gause, 2015, pp. 49–50.

- threatened or actual political warfare, such as propaganda broadcasts at the DMZ and approval for South Korean nongovernmental organizations to deploy balloon-borne information campaigns into the North.

In the military realm, South Korea is likely to lead in responding to gray zone aggression. The South has an extensive array of capabilities from which to choose in the air, land, sea, and cyber domains, including advanced capabilities across all South Korean military services, as well as the specialized capabilities of special operations forces, cruise and ballistic missiles, and cyber capabilities. We did not uncover any specific categories of weapons or capabilities that would be necessary to close an existing gap in potential, proportionate deterrent responses to North Korean aggression.

7. Can the United States and South Korea Generate Significant Regional and Global Support for Response Options?

This criterion has posed somewhat of a challenge to the United States and South Korea and is likely to become even more difficult in an environment of strategic competition. Support outside the region is likely to be forthcoming from typical sources: Europe, Japan, and Australia, for example. More importantly, though, will be the position taken by two critical actors with significant stakes and influence on the Korean Peninsula: China and Russia.

China has been hesitant to respond too belligerently to North Korean gray zone actions, seemingly concerned about both North Korean stability and Beijing's long-term relations with Pyongyang. Beijing declined to firmly condemn North Korea's 2010 maritime provocations and, in some ways, helped North Korea to cloud attribution for the event by refusing to agree with South Korea's official assessment of culpability.³² Through late 2019, Kim Jong Un has visited China four times, and the two sides have cultivated a new degree of friendship, or at least tolerance and mutually beneficial support. China will be hesitant to support U.S. and South Korean responses that injure or weaken its ally unless it has little choice.

Moreover, China has tools to obstruct the deterrent effect of gray zone responses. It could counteract the effect of any economic sanctions with increased assistance to North Korea or could simply ignore the constraints on North Korean trade. As it did in 2010, China could take a public position that undermines the U.S. and South Korean effort to assign attribution to North Korea for an attack. It could reach out to Pyongyang directly to offer assurances that negate coercive measures aimed at the North. In extreme cases, it could reiterate the importance of the 1961 China-North Korea security treaty, even conducting military maneuvers to signal that it would respond to any significant escalation from the United States. All of these actions could reduce the effectiveness of gray zone deterrent threats in advance.

³² Snyder and Byun, 2011, p. 77.

Russia, too, is unlikely to be supportive of strong gray zone deterrent responses and could take actions to reduce the credibility or impact of U.S. and South Korean deterrent threats. Russia could help North Korea conceal attribution for its actions, offer direct economic or diplomatic support, and join China in threatening to respond militarily to any U.S. or South Korean escalation.

Taken together, the potential constraints that China and Russia could impose on U.S. and South Korean punishment of North Korea in the wake of gray zone aggression would degrade the likely effectiveness of the deterrent threats. These two great powers could help insulate North Korea from the implementation of those threats and thus reduce Pyongyang's risk calculus in advance. This factor does not seem to have created a powerful appetite for large-scale gray zone provocations; in fact, as noted earlier, there is reason to believe that South Korean deterrent policies since 2010 have had some effect. However, if a moment arose when Pyongyang had reason to consider such aggression more strongly, the role of China and Russia as potential buffers could reduce the effect of the deterrent threats.

8. Has the History of Interaction Fostered an Expectation of Meaningful Responses to High-End Gray Zone Acts?

Over time, the U.S. and South Korean positions on various forms of aggression have differed, as have their levels of risk tolerance in punishing North Korea or deterring future actions. The 2010 South Korean response, which was widely criticized as too weak, prompted the development of the country's disproportionate retaliation policy.

Since then, South Korea has taken a much firmer position—one that has been so belligerent that the United States has, at times, felt the need to moderate it. But this firmer position was a product of two hardline administrations, the Lee Myung-bak and Park Geun-hye governments, which have now given way to a South Korean president committed to better relations with North Korea. To what degree the disproportionate retaliation policy will remain in effect is unclear.

Assessment

Applying the framework developed in Chapter One to the case of North Korean aggression against South Korea highlights some strengths and weaknesses of South Korean and U.S. deterrence posture. Table 4.1 summarizes the assessment.

Overall, the table depicts a moderately strong deterrence posture on the Korean Peninsula, yielding lessons and implications for U.S. defense policy and the U.S. Army in particular. From a diplomatic and messaging standpoint, two of the most important elements of this posture are ensuring and maintaining the close alignment between the United States and South Korea and their commitment to respond to aggressive gray zone actions. To the degree that these countries can present a unified front about

Table 4.1**Assessment of High-End Gray Zone Deterrence: North Korean Aggression Against South Korea**

Criterion	Level of Deterrence	Details
1 Intensity of the aggressor's motivations	Mixed	North Korea's motives for aggression are minimal; there is no sense of desperation. However, gray zone provocations can be the result of domestic political incentives, which can change rapidly.
2 Attribution of the aggressor's role	Strong	Many North Korean gray zone actions are too obvious to conceal. Past instances (e.g., Cheonan sinking, Sony Pictures cyberattack) might suggest to North Korea that it will have a hard time concealing its role in gray zone actions, but the activities of local commanders and proxies could cloud its role.
3 Level of aggression	Strong	Key gray zone options for North Korea are very aggressive and risk significant escalation.
4 U.S. and partner alignment on unacceptable outcomes	Strong	Clear messaging abounds on the commitment of the U.S.–South Korean alliance and the fact that it applies to both provocations and major aggression. There is especially strong post-2010 positioning on responses to high-end gray zone aggression.
5 U.S. and partner alignment on deterrent responses	Mixed	There are strong and consistent institutional mechanisms for coordination and alignment between the United States and South Korea, plus a strong roster of exercises to sustain readiness. But there are intermittent gaps in the U.S. and South Korean alignment on provocations, and South Korea's Moon Jae-in administration is possibly divergent from U.S. views.
6 U.S. and partner proportionate response capabilities	Strong	The United States and South Korea have an extensive suite of capabilities in all domains. The South Korean systems across many domains are well developed, offer a wide range of proportionate responses, and are deployed on the peninsula. There are no clearly identified gaps that would tempt gray zone aggression.
7 Regional and global support for deterrence	Mixed	The general global consensus against provocations is strong, but there is a limited willingness to engage, and not much more can be done with sanctions. China has shown an unwillingness to attribute actions to North Korea, and the rising global competition with China and Russia reduces the chances for support from other nations.
8 Aggressor's expectation of meaningful responses	Mixed	The history of responses has been mixed: some strong, some minimal (even in the wake of provocations), and some nonexistent. North Korea has room for wishful thinking.

which actions will not be tolerated and which actions will be taken in response, the allies can lay a strong foundation for deterrence.

The experience since 2010 provides some hope that the scope of North Korean gray zone aggression can be bounded by a strong South Korean commitment to respond. Although it would be dangerous to make overly optimistic assumptions about the degree to which the South Korean posture of disproportionate retaliation has been the key factor in preventing more episodes like the *Cheonan* sinking, there is at least some possible causal relationship between the two.

On the other hand, North Korean provocations are also tied to broader geopolitical realities, including the status of inter-Korean relations. For the moment, Kim Jong Un has been on a charm offensive to reduce tensions with the Moon administration and, presumably, set the stage for boosted economic contacts between the two nations. In such an environment, new high-end gray zone aggression seems unlikely. That environment accounts for our coding of the aggressor motivation criterion within the framework, but these motives could change quickly, which is why we hesitated to code it as strong. North Korea remains an inherently paranoid state, and the United States and South Korea must be constantly on guard for shifts in North Korea's perceptions of its own strategic situation.

Finally, this assessment carries several implications for the U.S. Army. First, the assessment underscores that a U.S. forward presence is valuable to providing on-the-ground capabilities that reinforce the deterrent messages. It points to the equal importance of training, exercising, and advising, as well as arms sales and other forms of deep cooperation that help the United States reinforce South Korean capabilities, including against gray zone activities. And the assessment reemphasizes the range of capabilities that could be required to deter aggression in this region—a reality that demands a broad mosaic of ground force capabilities for the gray zone.

Conclusions and Implications for the U.S. Army

In this report, we have examined the requirements for deterring high-end forms of gray zone aggression and assessed the likely determinants of successful deterrence in three cases: China's gray zone aggression against the Senkaku Islands, Russia's gray zone aggression against the Baltic states, and North Korea's gray zone aggression against South Korea. We conclude that deterrence is in a reasonably strong, though mixed, condition in each of these three contexts.¹

As part of this study, we developed a framework for understanding the problem of gray zone deterrence (see Chapter One), and we sought to assess that framework by applying it to the three cases examined in this analysis. But the framework can also be applied in many other cases. When doing so, the utility and appropriateness of specific U.S. deterrence responses will depend on the situation in each particular case.

Although the mix of deterrence activities that will be appropriate will vary from one case to another, the general requirements for deterrence in the gray zone, and the specific suggestions from the three case studies, point to the following implications for the U.S. Army:

- *Maintaining a local presence and posture plays an important role in conveying likely responses to aggression, reaffirming their credibility.* Having ground forces stationed in Japan, the Baltic states, and South Korea, for example, is a major signal of resolve that underscores the U.S. promise to respond to aggression at various points on the conflict spectrum.
- *Clear statements of shared intent to respond to specific actions are critical.* To the extent possible, the United States and its local partners should be as explicit as possible about the aggressive actions that will provoke a response. One example is the clarification, through multiple statements by senior U.S. officials since 2010, that gray zone or other aggression against the Senkaku Islands would fall under the U.S.-Japan mutual defense agreement.

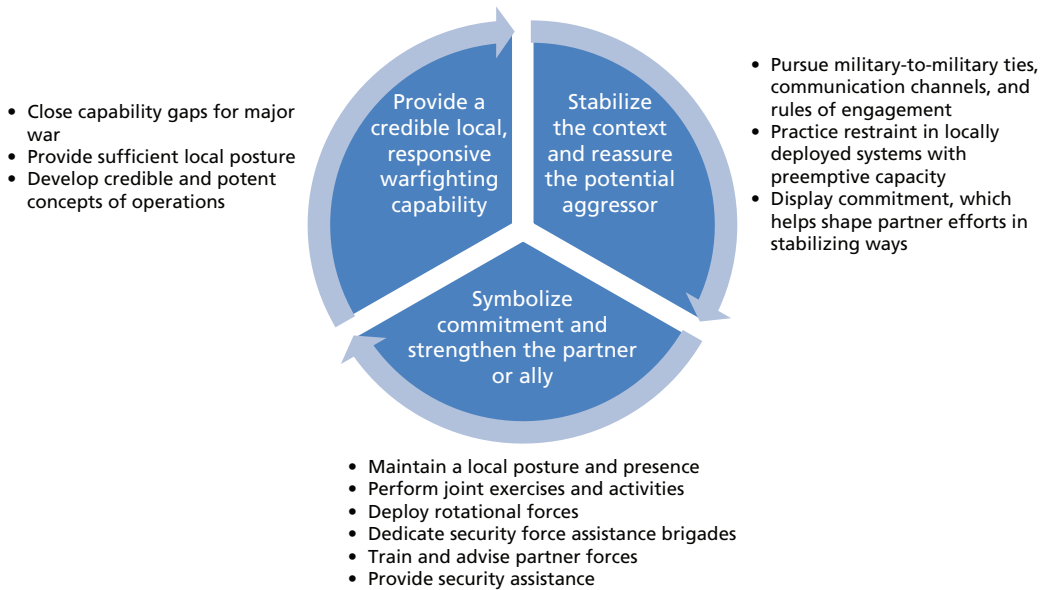
¹ We note again that the research and writing for this report were completed in mid-2019. Events and developments since that time are not captured in this narrative. However, although some facts may have changed or new circumstances developed, we believe that the general interpretations, findings, and recommendations remain valid.

- *The leading edges of the U.S. response will be training, advising, and security assistance missions, as well as military sales missions.* U.S. partners will be the first responders in all cases of gray zone aggression, and local exercises and partner engagements will be key to reinforcing these agreements and commitments. One or more of the Army security force assistance brigades could be specifically dedicated to gray zone partner assistance missions in places where partners could benefit from intense collaboration, as in the Baltic states. In other cases, arms transfers may be the dominant mode of engagement on gray zone preparation, as in Japan, where certain systems might be especially useful for the defense of distant islands against gray zone harassment.
- *Special forces capabilities can offer an important tailored policy option for gray zone contingencies.* In cases where large-scale conventional force presence or even rotational operations may be infeasible for political or logistical reasons, the capabilities of special operations forces can provide an ongoing or intermittent capacity to signal U.S. engagement, enhance local partner capabilities, and build local awareness to improve gray zone responsiveness. They could thus help meet many of the criteria for effective deterrence outlined in the report.
- *Awareness is critical for response, magnifying the importance of ISR.* Army ISR assets could be useful in detecting and anticipating potential gray zone aggression, but they might require a shift in priorities and potentially additional resources to perform this function effectively.
- *The integration of multiple instruments of power is critical to deterrence in the gray zone.* The Army's ability to meet many of the criteria for effective deterrence would be significantly enhanced by instruments of power that are tightly coordinated—for example, to deliver the right political messages and signal U.S. interests. The Army would be well served to devote resources to liaison elements that would link its commands with the U.S. State Department, the National Security Council, and other government entities involved in gray zone deterrence. Building gray zone fusion centers inside Army regional commands could be another way to improve coordination.

These findings generally support the basic emphasis of several recent RAND studies on Army and broader defense capabilities in relation to the gray zone: The United States needs a complex and modular mosaic of capabilities for this realm.² National decisionmakers will need a wide menu of tools to choose from, suited to the severity of the gray zone provocation, the risk tolerance of the U.S. partner(s), and the general geopolitical context. Figure 5.1 outlines a three-part framework for thinking about Army roles within this capability mosaic.

² See, for example, Morris et al., 2019.

Figure 5.1
Army Capabilities for Gray Zone Deterrence



Being serious about Army capabilities for the gray zone is not only a matter of employing existing capabilities in focused ways. Not all gray zone challenges can be viewed as lesser-included tasks of major combat operations. The requirement for deterring in the gray zone demands some degree of priority emphasis—in capability development, force design, posture, and technology investments. The Army is rightly focused on being ready for major combat operations; however, on a day-to-day basis, the capabilities that will be in highest demand are those for the ongoing competition below the threshold of war. That points to a necessary balance in the emphasis put on major conflict and gray zone capabilities.

In an era of rising global competition, U.S. challengers and rivals are increasingly looking to campaigns of gray zone actions to achieve competitive advantage. This analysis has taken the first step toward assessing a set of criteria that can gauge the strength of deterrent relationships in this realm of competition. If the United States wants to succeed in this realm, it will have to take gray zone aggression seriously as a distinct area of strategy and create concepts, capabilities, and technologies for the purpose of deterrence unique to this arena. These recommendations offer an initial road map toward achieving that goal.

South Korea's Policy of Disproportionate Retaliation

After North Korea's 2010 maritime attacks, including the *Cheonan* sinking and subsequent shelling of Yeonpyeong Island, South Korea implemented a policy of threatening disproportionate responses to potential North Korean gray zone provocations. The goal was to head off future forms of aggression comparable to those provocations. We assessed the possible effectiveness of the policy of disproportionate retaliation since its introduction.

Because we do not have direct evidence of North Korea's official perspectives on the strategy of disproportionate retaliation, our assessment must be inferential. There is no open-source evidence that speaks directly about the effects that this policy has had on the views of senior North Korean leaders, including Kim Jong Un. We can therefore base this assessment only on the evidence of North Korean behavior since that time and judge it against previous periods.

Following the incidents in 2010, South Korea did much to mitigate the internal shortcomings and policy ambiguities that had hindered a response to North Korea's aggression. The South Korean National Defense Ministry's Defense Reform Plan 307, which came into effect in early 2011, aimed to strengthen deterrence with enhanced defense investments and more-aggressive policies. The MND gained enough political and popular capital from the 2010 provocations to halt some of the defense reform policies that had been underway since 2005, many of which had called for military downsizing in favor of technological modernization. The MND, for instance, pressured South Korean President Lee Myung-bak to freeze the length of conscription for the military at 21 months despite his drive to reduce it to 18 months. The plan also empowered the South Korean Chairman of the Joint Chiefs of Staff at the expense of the particular service chiefs, a decisive step in resolving the organizational issues exposed by the 2010 provocations.¹

Most importantly, Defense Reform Plan 307 emphasized a new concept of "proactive deterrence," which called for proportional, joint, and quick responses to future provocations from the North. Defense Minister Kim Kwan-jin encouraged subordi-

¹ See Bruce Bennett, "The Korean Defense Reform 307 Plan," Asian Institute for Policy Studies, 2011.

nates to be “creative” in anticipating and responding to provocations, adding that constant discussions were necessary to continuously develop and hone planned responses to future antagonism.²

Since 2011, the South Korean military has certainly displayed greater efficiency when responding to flashpoints on and around the peninsula. In 2012, Seoul launched two advanced cruise missiles in reaction to a ballistic missile test conducted by Pyongyang, portending South Korea’s growing emphasis on targeting North Korean leaders with precision-guided weapons—a capability that the MND would advertise during many flare-ups throughout the mid-2010s. Later that year, in the throes of a propaganda battle with North Korea, the MND exhibited a willingness to escalate activity by holding a snap exercise that involved air and artillery forces.³ South Korea responded with similar efficiency to the 2013 “Korean Crisis” (which was spawned by North Korea’s underground test of a nuclear device), the 2014 naval gunfire brinksmanship around the Northwest Islands, and the 2015 mine detonation that wounded two South Korean soldiers.

South Korea, with support from the United States, relaxed range and payload limitations on its ballistic missiles in late 2012 and, in early 2014, tested 800-km-range missiles capable of striking any point in North Korean territory,⁴ underscoring the growing importance of precision-guided ballistic missiles to South Korea’s deterrence policy. Aside from their deterrent capability, these missiles also supported the long-term effort to modernize the South Korean military through advanced technology while downsizing conventional forces (largely because of gradually shrinking demographics).

The keystone of South Korean deterrence policy in the mid-2010s became what was known as a “three-axis” approach to deterrence, encompassing (1) a kill-chain preemptive strike strategy, (2) the Korea Air and Missile Defense system, and (3) Korea Massive Punishment and Retaliation (KMPR).⁵ The kill-chain strategy referred to employment of South Korean missile forces to “detect, track, and target” North Korean missiles.⁶ The Korea Air and Missile Defense system, though initiated in 2006, was spurred along by Pyongyang’s persistent missile tests in the mid-2010s.⁷ In 2013, the MND announced that it would speed up the system’s implementation by introducing an Air and Missile Defense Cell and upgrading the missile systems on board the

² Bennett, 2011.

³ “Military Vows Relentless Retaliation If Provoked by North,” *Korea Times*, June 11, 2012.

⁴ Jack Kim, “South Korea Extending Ballistic Missile Range to Counter North’s Threat,” Reuters, April 3, 2014.

⁵ Song Sang-ho, “Defense Reform Plan to Cut Generals, Create Ground Command, Retain 3-Axis System,” *Yonhap*, July 27, 2018.

⁶ Joshua H. Pollack, “The Emergence of an American/Korean Strategic Triangle,” Middlebury Institute of International Studies at Monterey, May 1, 2016.

⁷ Missile Defense Advocacy Alliance, “Republic of Korea,” Alexandria, Va., June 15, 2018.

navy's Aegis destroyers. KMPR—revealed in late 2016 after Pyongyang's fifth nuclear test—focuses on hitting back at North Korean leadership through missile strikes and commando raids in the event of an attack on South Korea.⁸ The enactment of KMPR represented little more than nominally instituting a policy that South Korea had been demonstrating since at least 2012, when North Korean propaganda bursts against President Lee were answered with South Korean missile tests against targets that resembled the locations of North Korean leaders.

Stark policy shifts came in 2017 with the accession of President Moon Jae-in, who has adopted a much softer approach than either his immediate predecessor Park Geun-hye or certainly former President Lee. A fixation on the North's developing nuclear and ballistic arsenals, the infrequency of provocations using non-nuclear weapons or weapons of mass destruction, and domestic political change had reduced the perceived threat or the need to address non-nuclear provocations along the lines of the *Cheonan* sinking. In late July 2018, the MND released Defense Reform 2.0, which focused on downsizing the military to a level not seen since the mid-1970s, cutting the length of draft terms, and completing the transfer of operational control of forces in Korea to South Korean command.⁹

Effects on North Korean Provocations Since 2011

Since 2011, North Korea has mostly refrained from provocations as overt as the 2014 direct naval bombardment of the Northwest Islands and certainly the 2010 sinking of the *Cheonan*. During the high notes of tensions during the mid-2010s, Pyongyang largely resorted to public statements and bombastic rhetoric against Seoul and Washington.

The most notable non-nuclear, conventional provocation came in August 2015, when the South accused North Korea of placing land mines near a South Korean military guard post, which resulted in the maiming of two South Korean soldiers.¹⁰ In response, South Korea began loudspeaker propaganda broadcasts aimed across the border. The flashpoint marked the first time since 1967 that units from the North had, apparently, deliberately placed land mines that inflicted casualties, and 11 years had passed since South Korea had last blasted loudspeaker propaganda across the DMZ, reflecting the peculiarity of both provocation and retaliation.¹¹ After trading a round of ineffectual artillery barrages while maintaining dueling loudspeaker broadcasts for

⁸ Ha Eo-young, "South Korea Announces 'Massive Punishment and Retaliation' in Response to Fifth Nuke Test," *Hankyoreh*, September 13, 2016.

⁹ Song Sang-ho, 2018.

¹⁰ "Alleged New Landmine Use by North Korea," International Campaign to Ban Landmines, August 24, 2015.

¹¹ Choe, 2015b.

roughly a month, Pyongyang agreed to tacitly acknowledge, though not admit guilt in, the land mine incident. A prominent expert on Korean affairs noted that the last time such a quasi-apology was offered was in 1976, and it was not even considered after the sinking of the *Cheonan*, which killed 46 South Korean service members.¹²

The means of retaliation, and Pyongyang's surprising willingness to negotiate a propaganda ceasefire, exhibited South Korea's ability to play on the Kim regime's hypersensitivity to criticism. (A similar calculation of the North Korean leadership's vulnerability had led to the KMPR strategy.) Nevertheless, dueling loudspeaker narratives resumed in January 2016 amid rising tensions and continued into 2018, with little sense of exigency from Pyongyang to negotiate their silence, perhaps an indication of North Korea's ability to adapt and gird itself against such means of deterrence once those capabilities have been deployed.

The North Korean military has also expanded its cyber capabilities since 2010, providing Pyongyang a means of provocation and retaliation that exposed a yawning gap in Seoul's deterrence policy. In early 2013, Pyongyang very likely launched a computer-network attack—dubbed Dark Seoul—that targeted prominent South Korean banks and left many citizens unable to withdraw funds, probably as a response to an annual joint U.S.–South Korean military exercise during a particularly tense period on the peninsula.¹³

North Korea's evolving capabilities in this field, including the extent of its hackers' reach, were even more conspicuous in the Sony Pictures hack of late 2014 and the release of WannaCry ransomware in early 2017. The MND's 2014 Defense White Paper similarly surprised many observers by declaring that the South Korean cyber force was 6,000 personnel strong, larger than previous estimates and almost double some estimates of North Korea's cyber force.¹⁴ Still, the three MND white papers released between 2012 and 2016 revealed few concrete steps toward forming a credible and implementable policy to deter cyberattacks, with most efforts revolving around greater information-sharing with the United States. Computer-network operations, such as the theft and exploitation of alleged U.S. military plans from South Korea's Integrated Data Center by likely North Korean hackers in late 2016, might have even granted North Korea a tool to affect traditional methods of deterrence.¹⁵

Friction between Seoul and Pyongyang in 2011 focused mostly on unrequited peace-talk outreach and did not manifest into provocations remotely resembling those of 2010, as North Korea resorted to propaganda and as the MND followed through on reforms prescribed by Defense Reform Plan 307. The South Korean military stood

¹² Victor Cha, "Kim Jong Un Versus The Loudspeaker," *Foreign Policy*, August 26, 2015.

¹³ Brian Krebs, "The Case for N. Korea's Role in Sony Hack," *Krebs on Security*, December 23, 2014.

¹⁴ Center for Strategic and International Studies, "South Korea 2014 Defense White Paper Highlights DPRK Nuclear Threats," Washington, D.C., Korea Chair Snapshot, January 6, 2015.

¹⁵ Center for Strategic and International Studies, 2015.

up the Northwest Island Defense Command in June 2011 to boost capabilities in that contentious zone as part of a drive to streamline and improve command and control.¹⁶ In August 2011, the North conducted an artillery barrage ostensibly as part of a military exercise, but some shells landed near the Northern Limit Line. The South responded with equally ineffective artillery fire but did exhibit a new determination to leave no potential provocation unanswered.¹⁷

The most significant theme of 2012 pertained to Seoul's advancements of ballistic missile platforms and its abolition of payload and range restrictions, both of which were announced in October in response to a series of North Korean aggressions. In April of that year, the MND launched two ballistic missiles in response to the North's earlier test of its missile systems; the MND also released footage of its missile striking a precise target with the dimensions of a small window.¹⁸ Other provocations from the North elicited quick and proportional responses from the South Korean military, such as the MND's scramble of F-15K fighters to respond to growing air incursions by North Korean aircraft since mid-May.¹⁹ The South Korean military also launched a snap exercise of its missile command and artillery forces in response to Pyongyang's public targeting of South Korean media outlets with anti-regime messaging.²⁰ The MND's heightened alert on these fronts throughout 2012 reflected President Lee's public commitment to firmly respond to any provocations from the North,²¹ but perhaps not with the disproportionate force recommended in the heated aftermath of the *Cheonan* sinking.

In 2013, Pyongyang probably committed fewer non-nuclear provocations than most observers expected. Nonetheless, the MND demonstrated its continued policy of guaranteed deterrence in the face of realized or impending provocations. The most notable events centered on diplomatic initiatives, such as Pyongyang's resumption of a state of war on South Korea and the withdrawal of workers from the joint South Korean–North Korean Kaesong industrial complex. In late March, Seoul and Washington announced a “counter-provocation” plan that explicitly dealt with threats similar to the *Cheonan* and Yeonpyeong incidents three years earlier.²² To answer Pyongyang's intent to conduct a ballistic missile test in early April, the South Korean navy dispatched destroyers equipped with new radar systems to patrol the eastern and west-

¹⁶ MND, *2012 Defense White Paper*, Seoul, 2012.

¹⁷ “N Korean Shells ‘Land Near S Korea Island,” *Al Jazeera*, August 10, 2011.

¹⁸ Kim Hee-jin, “South Shows Off Missiles of Its Own,” *Korea JoongAng Daily*, April 20, 2012.

¹⁹ Kim Young-jin, “Fighters Scramble Against NK Jet Near Ganghwa Island,” *Korea Times*, June 6, 2012.

²⁰ “Military Vows Relentless Retaliation If Provoked by North,” 2012.

²¹ Barack Obama and Lee Myung-bak, “Remarks by President Obama and President Lee Myung-bak in Joint Press Conference,” Seoul, South Korea, White House, March 25, 2012.

²² Choe Sang-hun, “South Korea and U.S. Make Plans for Defense,” *New York Times*, March 25, 2013b.

ern coasts of the peninsula south of the Northern Limit Line.²³ In the cyber realm, the glaring exception to the seeming effectiveness of deterrence of large-scale cyberattacks remains the large-scale cyberattack on South Korean banks and media outlets, which—for the most part—went unanswered, despite its salience in the South Korean and international press. And because of the increased frequency of North Korean missile and nuclear tests, 2013 probably marks when South Korean deterrence policy began to shift heavily to threats of using nuclear weapons or weapons of mass destruction as opposed to more-conventional provocations.

Roughly four years after the 2010 incidents, naval brinksmanship resumed in 2014 around the typical hotbeds of provocation near the Northwest Islands. However, the activity was not nearly as aggressive or impactful as the sinking of the *Cheonan* or the outright bombardment of Yeonpyeong, probably at least partly because of Seoul's demonstrated resolve to address provocations with proportional force. In March 2014, the South Korean navy lobbed warning shots at what was purportedly a North Korean fishing vessel that was encroaching on the Northern Limit Line in the Yellow Sea, and South Korean forces eventually seized the ship despite loud protestations from Pyongyang.²⁴ About two months later, a North Korean patrol ship fired on two South Korean navy vessels, which returned fire, echoing a similar encounter three days earlier that had elicited a strong public rebuke from Pyongyang.²⁵ In October, North Korean anti-aircraft units fired on propaganda balloons released by civil-society organizations on the South Korean side of the DMZ, prompting a retaliatory artillery barrage from South Korean units, all with no resulting casualties or discernible damage.²⁶ The MND's test of an 800-km-range ballistic missile that same month is one of the most important events germane to South Korean deterrence since 2010, reflecting the growing emphasis of precision strikes on North Korean leadership. Overall, 2014 probably showed the most diverse and consistent non-nuclear provocation and response since 2010.

Unmistakably, the highlight of Seoul's deterrent activity for 2015 remains the response to the August wounding of two South Korean soldiers in a detonation of land mines, likely implanted by North Korean forces, as noted earlier. The incident had been brewing for months. Earlier that summer, the MND had test-fired two ballistic missiles that it claimed could reach any target in North Korean territory, possibly as a countermeasure to Pyongyang's claim to have successfully tested a submarine-launched missile in May.²⁷ In further response to North Korea's potential advancement

²³ "South Korean Destroyers Watch for Possible North Korean Missile Launch," *Naval Today*, April 5, 2013.

²⁴ "S Korea Fires Warning Shots, Seizes N Korea Boat," *The Nation*, March 25, 2014.

²⁵ Per Liljas, "North Korean and South Korean Ships Exchange Fire in Yellow Sea," *Time*, May 23, 2014.

²⁶ "North Korea, South Korea Exchange Fire over Propaganda Balloons," NBC News, October 10, 2014.

²⁷ Choe Sang-hun, "South Korea Says It Tested Missile That Can Strike Anywhere in North," *New York Times*, June 3, 2015a.

in mobile launchers, Seoul and Washington had signed a bilateral defense compact in April that established a joint Deterrence Strategy Committee, which emphasized development of the “4D concept” in deterrence: detect, defense, disrupt, and destroy.²⁸ Aside from the mine detonation tensions in August, the year reflected a greater emphasis on deterring Pyongyang’s growing missile and nuclear ambitions than on deterring its more-conventional means of provocation.

In 2016, Pyongyang’s two nuclear tests, alongside its intermittent ballistic missile developments, led to frenetic activity in the United Nations Security Council and policy deliberations in Washington, leaving little bandwidth on either side of the DMZ for non-nuclear provocations or deterrence. The MND in January, however, resumed loudspeaker broadcasts into North Korean territory in retaliation for Pyongyang’s nuclear test that month, prompting North Korea to follow suit. This time, North Korea demonstrated less concern about ending the broadcasts than it had in the previous year, possibly reflecting the importance of nuclear tests to the regime. Seoul unilaterally suspended operations at the Kaesong complex in February, exhibiting the utility of diplomatic measures in deterrence. According to the MND, Pyongyang largely resorted to a battle of public opinion regarding tensions later in the year surrounding the deployment of U.S. missile defenses on the peninsula; in particular, North Korea used “cyber-psychological warfare” to disseminate messaging.²⁹ In March, the MND announced a new marine unit, named Spartan 3000, capable of attacking North Korean territory “behind the lines” in the event of impending or actual conflict.³⁰ The MND unveiled its KMPR policy in September, describing it as a bombing campaign mostly targeting North Korean leaders in Pyongyang.³¹ For the most part, 2016 was a period of mounting nuclear deterrence challenges and limited non-nuclear provocations, during which Seoul and the MND were only partially leading policy.

In September 2017, the MND publicly announced the formation of a “decapitation unit” amid rising tensions related to North Korea’s continued nuclear testing, doubling down on the deterrent strategy of provoking fear in Pyongyang by directly threatening Kim Jong Un.³² Roughly a week earlier, the MND had conducted an exercise involving live-fire drills and simulated missile strikes on North Korean nuclear facilities.³³ In January 2017, the South Korean navy had conducted an exercise to preempt any potential provocation from the North as South Korea managed a difficult

²⁸ Song Sang-ho, “Korea, U.S. to Devise Plan to Negate N.K. Launchers,” *Korea Herald*, April 16, 2015.

²⁹ MND, 2017.

³⁰ “Marine Corps Launches Expanded Mobile Unit for N.K. Contingencies,” Yonhap, March 19, 2016.

³¹ “S. Korea Unveils Plan to Raze Pyongyang in Case of Signs of Nuclear Attack,” Yonhap, September 11, 2016.

³² Choe Sang-hun, “South Korea Plans ‘Decapitation Unit’ to Try to Scare North’s Leaders,” *New York Times*, September 12, 2017.

³³ Justin McCurry, “South Korea Holds Live-Fire Drills and Warns of More Launches by North,” *The Guardian*, September 4, 2017.

period in its national politics.³⁴ The transition from President Park to President Moon marked a significant change in deterrence policy and Seoul's overall approach to relations with the North, as Moon publicly adopted a comparatively softer approach than Park had. In June, Moon suspended the contentious deployment of U.S. missile defense systems to the peninsula and, in November, announced his five principles for establishing peace, the tone of which was somewhat less harsh toward Pyongyang than previous policy had been.³⁵ For much of the year, Seoul remained a mostly passive partner with the United States, as hostile rhetoric between Washington and Pyongyang reached a crisis point not seen since at least 2013.³⁶

South Korean Deterrence Policies

South Korea's deterrence policy and defense reforms after 2010 probably led to an improved ability to respond to non-nuclear provocations from the North, but the flash-points summarized in the previous section offer too few instances to accurately assess the overall effectiveness of Seoul's heightened deterrence of non-nuclear threats. Simultaneous factors—such as North Korea's and South Korea's domestic politics, changing demographics in South Korea, and the U.S. role in securing the peninsula—further cloud such an investigation. The late 2014 whiplash—involving the surprising and highly publicized visit of top-ranking North Korean officials to Seoul, followed by the North's decision to incite an exchange of naval gunfire three days later—showcases the unpredictability of deterrence on the peninsula. Only the annual Foal Eagle joint exercises between the United States and South Korea and the telegraphed North Korean missile or nuclear tests offer any sort of predictability, and they can help forecast only the general timing—not the scale—of likely provocations.

Nonetheless, since 2010, South Korea has matched almost every non-nuclear, conventional provocation committed by North Korea with proportionate and focused force, as seen in everything from the air incursions of early 2012 to the naval skirmishes of 2014 and through the land mine incident in 2015. In several cases, Seoul exhibited a lower threshold for conducting preemptive military activity, such as the January 2017 maritime drill that was partly aimed at deterring provocations while South Korea underwent a rocky political transition.³⁷ Even before the codification of

³⁴ "S. Korean Navy Conducts New Year Maritime Drill amid N.K. Threats," Yonhap, January 2, 2017.

³⁵ Kim Ji-eun, "President Moon Lays Out Five Principles for a Peaceful Korean Peninsula," *Hankyoreh*, November 2, 2017.

³⁶ Because the research for this report concluded in 2018, this summary of provocations ends in 2017; however, we acknowledge that there have been many incidents since the conclusion of our research and the publication of this report.

³⁷ "S. Korean Navy Conducts New Year Maritime Drill amid N.K. Threats," 2017.

a more assertive defense policy, Seoul displayed strengthened resolve roughly a month after North Korea had bombarded Yeonpyeong in November 2010; in particular, the South held a military exercise of unprecedented scale, which Pyongyang had publicly claimed would lead to retaliation, but it left these threats unfulfilled.³⁸ In terms of preventing another *Cheonan*, South Korean deterrence policy throughout the mid-2010s appears to have been effective.

These policies have nonetheless fallen far short of deterring nontraditional provocations, chiefly the North Korean military's ever-expanding computer-network operations. The banking hack of early 2013 was a deliberate strike on a particularly vulnerable and sensitive infrastructure, and the WannaCry attacks of early 2017 exhibit an alarming willingness to release malicious code without distinguishing between civilian or military targets—or, for that matter, national borders (Russia was hit the hardest).

Since 2010, Pyongyang has likewise reportedly demonstrated an unsettling willingness to jam signals and radio traffic well across the DMZ into South Korea, occasionally taking steps to interfere with air traffic at Incheon International Airport.³⁹ Seoul and Washington alike have long struggled to develop a coherent response to such activity.

The North's determination to continue developing these capabilities and its broadening use and scope of cyber activity clearly indicate that merely hacking back will fail to deter the behavior, which is unsurprising considering North Korea's overall lack of connectivity and the South's deep digital dependence. Little is publicly known about whatever offensive cyber operations the MND might conduct, and responses to North Korea's cyber warfare seem concentrated on computer-network defense. For example, the South's Information Operation Condition barometer uses a five-tiered system to anticipate and prepare for any cyberattacks emanating from the North.⁴⁰ The suspicious blackouts that have hit Pyongyang concurrent with peninsular or international tensions have been overwhelmingly attributed to U.S., not South Korean, action.

³⁸ Pollack, 2016.

³⁹ Kyle Mikozi, "North Korea Is Jamming GPS Signals," *Popular Mechanics*, April 5, 2016.

⁴⁰ Philip Iglauer, "South Korea Raises Cyber Attack Warning amid Heightened Regional Tensions," *ZDNet*, February 16, 2016.

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https://japan.kantei.go.jp/96_abe/statement/201401/22speech_e.html

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In an era of rising global competition, U.S. challengers and rivals are increasingly looking to achieve competitive advantage through gray zone activities—that is, acts of aggression that remain below the threshold of outright warfare. In this report, RAND researchers identify eight common characteristics of such aggression (e.g., unfolds gradually, is not attributable) and develop a framework for assessing the health of U.S. and partner deterrence in the gray zone. They apply the framework to three cases: China’s aggression against the Senkaku Islands, Russia’s aggression against the Baltic states, and North Korea’s aggression against South Korea. The authors conclude that U.S. and partner deterrence of gray zone activities is in a reasonably strong, though mixed, condition in each of these three contexts. Finally, the authors outline the implications of their findings for the U.S. Army. Among these implications are that maintaining a local presence and posture plays an important role in conveying likely responses to aggression, and clear statements of shared intent to respond to specific actions are critical.

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