North Korean Calculus in the Maritime Environment

Covert Versus Overt Provocations

Ken E. Gause
<table>
<thead>
<tr>
<th>Report Documentation Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. REPORT DATE</strong></td>
</tr>
<tr>
<td>JUL 2013</td>
</tr>
<tr>
<td><strong>4. TITLE AND SUBTITLE</strong></td>
</tr>
<tr>
<td>North Korean Calculus in the Maritime Environment: Covert Versus Overt Provocations</td>
</tr>
<tr>
<td><strong>5a. CONTRACT NUMBER</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>5d. PROJECT NUMBER</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>6. AUTHOR(S)</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</strong></td>
</tr>
<tr>
<td>CNA Analysis &amp; Solutions, 4825 Mark Center Drive, Alexandria, VA, 22311-1850</td>
</tr>
<tr>
<td><strong>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>12. DISTRIBUTION/AVAILABILITY STATEMENT</strong></td>
</tr>
<tr>
<td>Approved for public release; distribution unlimited</td>
</tr>
<tr>
<td><strong>13. SUPPLEMENTARY NOTES</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>14. ABSTRACT</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>15. SUBJECT TERMS</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>16. SECURITY CLASSIFICATION OF:</strong></td>
</tr>
<tr>
<td>a. REPORT</td>
</tr>
<tr>
<td>unclassified</td>
</tr>
<tr>
<td>b. ABSTRACT</td>
</tr>
<tr>
<td>unclassified</td>
</tr>
<tr>
<td>c. THIS PAGE</td>
</tr>
<tr>
<td>unclassified</td>
</tr>
<tr>
<td><strong>Standard Form 298 (Rev. 8-98)</strong></td>
</tr>
<tr>
<td>Prescribed by ANSI Std Z39-18</td>
</tr>
</tbody>
</table>
Strategic Studies is a division of CNA. This directorate conducts analyses of security policy, regional analyses, studies of political-military issues, and strategy and force assessments. CNA Strategic Studies is part of the global community of strategic studies institutes and in fact collaborates with many of them.

On the ground experience is a hallmark of our regional work. Our specialists combine in-country experience, language skills, and the use of local primary-source data to produce empirically based work. All of our analysts have advanced degrees, and virtually all have lived and worked abroad.

Similarly, our strategists and military/naval operations experts have either active duty experience or have served as field analysts with operating Navy and Marine Corps commands. They are skilled at anticipating the “problem after next” as well as determining measures of effectiveness to assess ongoing initiatives. A particular strength is bringing empirical methods to the evaluation of peace-time engagement and shaping activities.

The Strategic Studies Division’s charter is global. In particular, our analysts have proven expertise in the following areas:

- The full range of Asian security issues
- The full range of Middle East related security issues, especially Iran and the Arabian Gulf
- Maritime strategy
- Insurgency and stabilization
- Future national security environment and forces
- European security issues, especially the Mediterranean littoral
- West Africa, especially the Gulf of Guinea
- Latin America
- The world’s most important navies
- Deterrence, arms control, missile defense and WMD proliferation

The Strategic Studies Division is led by Dr. Eric V. Thompson, who is available at 703-824-2243 or thompsoe@cna.org.

Cover photo: North Korean news media

Approved for distribution: July 2013

Eric V. Thompson, Ph.D.
Vice President and Director
CNA Strategic Studies

This document contains the best opinion of the authors at the time of issue.
Cleared for public release, distribution unlimited.

Copyright © 2013 CNA
This work was created in the performance of Federal Government Contract Number N00014-11-D-0323. Any copyright in this work is subject to the Government’s Unlimited Rights license as defined in DFARS 252.227-7013 and/or DFARS 252.227-7014. The reproduction of this work for commercial purposes is strictly prohibited. Nongovernmental users may copy and distribute this document in any medium, either commercially or noncommercially, provided that this copyright notice is reproduced in all copies. Nongovernmental users may not use technical measures to obstruct or control the reading or further copying of the copies they make or distribute. Nongovernmental users may not accept compensation of any manner in exchange for copies. All other rights reserved.
Contents

Executive summary ............................................................................................................ 1
  Findings.................................................................................................................. 2
  Sources and acknowledgments ........................................................................... 4

North Korean calculus in the maritime environment: Covert versus overt provocations ........................................................................................................ 7
  Introduction ........................................................................................................ 7
  Range of provocations ...................................................................................... 8
  Clashes and provocations along the NLL ................................................... 11
    Changing nature of North Korean provocations .......................................... 13
  North Korea’s calculus/capabilities for conducting overt and covert provocations ........................................................................................................ 17
    Calculus for overt provocation ................................................................. 19
    Capabilities for overt provocation .......................................................... 27
    Calculus for covert provocation .............................................................. 29
    Capabilities for covert provocation ......................................................... 33
  Escalation dynamics ....................................................................................... 40
    North Korean calculus in responding to the response ........................... 46
  Conclusion ........................................................................................................ 54

List of figures ............................................................................................................ 59
Executive summary

In March and April 2013, North Korea manufactured its first crisis under the new leadership of Kim Jong-un. This was not entirely unexpected, given Pyongyang’s penchant for testing the mettle of new South Korean administrations, its need to burnish its new leader’s military credentials, and its abiding desire to secure a peace treaty with the United States. Yet, the intensity of the crisis surpassed similar crises during the Kim Jong-il era and forced Pyongyang watchers to question their long-held beliefs regarding North Korea’s risk calculus. A growing consensus within leadership circles in Washington and Seoul is that this was not a one-off event. In fact, this new, bolder brinksmanship strategy on the part of North Korea will come in cycles. As with this crisis, these cycles will begin with North Korean provocations and move up what is no longer a necessarily predictable escalation ladder. The potential for miscalculation on both sides will be real.

This paper examines the calculus behind North Korea’s decisions to conduct provocations and its capability to carry them out. While it will examine the range of provocations, the focus will be on the maritime, where North Korea is likely to conduct its most violent actions. Since the 1990s, North Korea has conducted different types of provocations depending on Pyongyang’s objective: furthering defense development, highlighting demarcation disputes and setting the table for negotiations, or promoting politics inside the regime. The paper will explore how the North Korean regime balances the risks of escalation with potential benefits to be gained by provocation. It will also consider the impact of South Korea’s “Proactive Deterrence Strategy” on Pyongyang’s risk calculus. Finally, it will examine the events of March–April 2013 for indications of change in how North Korea views the issue of escalation and whether it has changed its risk calculus.
Findings

At the time of this writing (May 2013), the Pyongyang-watching community is still wrestling to understand North Korean security policy in the Kim Jong-un era. A critical question is whether the assumptions that were made about why and how Kim Jong-il conducted provocations still hold true. For that reason, we must look on the following findings as judgments in progress. They may change as Kim Jong-un consolidates his position as leader and as the outside world becomes more acquainted with how his regime operates.

- It would be wrong to assume that North Korea conducts provocations just because it is a “rogue” nation or it wants to create problems for the international community. While from the outside world’s perspective, these assumptions may often feel right, in reality they reveal a lack of understanding of how Pyongyang views the world and what it wants to do. North Korea’s coercive—or, as it is often called, “brinksmanship”—strategy is neither crafted on the spur of the moment nor intended to be used for no reason.

- An examination of North Korea’s coercive strategy during the Kim Jong-il era shows that Pyongyang is willing to engage in three types of provocations: (1) tests of national programs, (2) non-violent demonstrations, and (3) violent attacks. Each is associated with a set of goals and objectives that the North Korean regime wants to achieve. While the tests of national programs and non-violent demonstrations can have, but are not restricted to, a maritime context, the regime’s violent provocations have to date been restricted to the maritime arena.

- Up to 2009, Pyongyang’s rhetoric and threats surrounding the Northern Limit Line (NLL) were mostly tied to its political maneuvering. A continuing leitmotif of North Korean regional foreign policy was its aim to establish diplomatic relations with the United States while isolating South Korea from the regional diplomatic and security forums.

- In 2010, Pyongyang’s calculus changed because of dynamics related to the ongoing succession and the need to build up the credentials of the heir apparent, Kim Jong-un. This led to a dramatic increase in the level of violence associated with North
Korean provocations, with the sinking of Cheonan and the shelling of Yeonpyeong Island. These violent provocations led South Korea to adopt a much more aggressive posture, embodied in the Proactive Deterrence Doctrine.

- North Korea has capabilities to conduct both overt and covert provocations. The motivations for them are often different. For overt provocations, the motivations can be diverse—from testing new defense systems, to building support around a new leader. In all of these cases, North Korea will have to be able to justify its actions both internally and to the outside world. Covert provocations, however, are almost entirely tied to internal reasons, notably leadership dynamics. The regime chooses to distance itself from these actions because it has no justification for them and is not willing to accept the responsibility for them.

- Kim Jong-un appears to have adopted much of his father’s playbook regarding provocations. North Korea tested both its missile and nuclear programs, which unleashed a series of moves that culminated in the March–April 2013 crisis. While his motives for conducting these non-violent demonstrations are allegedly tied to his need to follow the dictates of Kim Jong-il’s last will and testament, the way that his regime executed the subsequent crisis suggests a much bolder decision-making style and a higher tolerance for risk.

- Kim Jong-un has not consolidated his power and has a strong motivation to burnish his leadership credentials and unify the regime behind him. He currently relies on a number of regents and key advisors at the second and third echelons. This leadership style impacts how he makes decisions regarding crisis management and provocations. It is a leadership style that is likely to change as Kim gains experience and develops the relationships needed for independent decision-making.

- Unlike under Kim Jong-il, Kim Jong-un’s regime is unlikely to deescalate quickly. North Korea does not appear to be manufacturing crises and conducting provocations in order to secure short-term economic concessions. Instead, Pyongyang appears to be looking to force fundamental changes in how the world interacts and treats North Korea on the foreign policy, security,
and economic fronts. This cycle of crises and provocations will likely continue until North Korea is able to engage the United States and South Korea on its own terms, or until it is sufficiently cowed by Chinese threats—which Beijing currently appears unwilling to pursue aggressively.

- Therefore, U.S. and ROK strategies for dealing with North Korea’s behavior must be reevaluated. It is important for South Korean and U.S. policymakers to understand that there can be no “umbrella” deterrent for the myriad kinetic and non-kinetic maritime provocation options available for North Korea, especially because of the varied triggers or pressures that might lead Pyongyang to strike. Instead, several guidelines should support any U.S.-ROK counter-provocation strategy toward North Korea.

  — Provide strong, clear language that makes clear red lines and promises a forceful response to any provocation, but be prepared for such language to ultimately fall on deaf ears in Pyongyang.

  — Make it abundantly clear that the United States and South Korea are united in their commitment to deterrence and will respond forcefully to any provocation.

  — Make it clear that the Alliance is able to respond in a proportional way to a range of North Korean provocations.

  — Ensure that intelligence on North Korean movements is current, and thoroughly analyze potential motivations.

  — When responding to a provocation, do so in a timely and proportional manner.

Sources and acknowledgments

This paper made extensive use of sources in Northeast Asia, including South Korea, Japan, and China. The author interviewed skilled Pyongyang watchers who are adept at reading the subtle, and not so subtle, signals coming from North Korea. Particularly useful was a trip to Seoul in April 2013, in which the author discussed North Korean leadership dynamics and provocations with subject matter experts in the government and leading think tanks. These discussions
added nuance to the paper and placed some of the arguments in context. Because these discussions were on background and off the record, the sources are not revealed in this paper.

The author would also like to express his gratitude to Sylas Lee, his research assistant in Seoul, who facilitated the meetings and took notes. Without his assistance, this paper would not have been possible.
North Korean calculus in the maritime environment: Covert versus overt provocations

Introduction

In the months after Kim Jong-il’s death and the onset of the Kim Jong-un era, speculation within the Pyongyang watching community centered on whether the new leadership carried with it new views on how to deal with the outside world. Would North Korea resort to provocations or embrace some form of engagement? In December 2012 and February 2013, North Korea confirmed the former with a successful launch of a three-stage ballistic missile and the third test of a nuclear device. At the time of this paper (May 2013), North Korea has engaged in a two-month-long, self-manufactured crisis that began with the abrogation of the Armistice Treaty. Even though the tension has died down, Pyongyang has threatened additional provocations. Some contend that North Korea is resorting to a coercive strategy in order to create the tension necessary to help Kim consolidate power. Others argue that North Korea may seek to inflame tensions as a means of testing the new Park Geun-hye administration in Seoul. Still others believe that the rise in tensions is not unexpected given the U.S.-ROK joint military exercises (Key Resolve and Foal Eagle) that took place over the span of two months (March–April). Either way, ever since the sinking of Cheonan and the shelling of Yeonpyeong Island in 2010, Seoul and Washington see North Korean provocations not as an irritation that must be managed but rather as a potential threat to stability on the Korean Peninsula.

Since the beginning of the Kim Jong-il era, North Korea has used the seas around the Korean Peninsula to threaten and signal its neighbor to the south. The area around the Northern Limit Line (NLL) provides Pyongyang with a venue that is uniquely suited to carry out its strategy of brinksmanship.¹ In a speech at the ROK Navy’s 2nd Fleet

---

Command at Pyeongtaek, South Korea’s Minister of Defense Kim Kwan-jin suggested that provocations under Kim Jong-un may follow this pattern: “North Korea may provoke in a way in which we cannot expect, although they are currently focusing on waters (in the Yellow Sea).”

This paper will discuss North Korean thinking on provocations in the maritime environment. It will begin with a brief discussion of the variety of provocations that North Korea could undertake. Since the 1990s, North Korea has conducted different types of provocations, depending on Pyongyang’s objective: furthering defense development, highlighting demarcation disputes and setting the table for negotiations, or promoting politics inside the regime. The paper will then consider Pyongyang’s calculus and capabilities for executing overt and covert provocations. Both internal and external considerations impacting Kim Jong-un and his leadership’s decision-making will be examined. The paper will explore how the North Korean regime balances the risks of escalation with potential benefits to be gained by provocation. The impact of South Korea’s “Proactive Deterrence Strategy” on Pyongyang’s risk calculus will also be considered. Finally, the events of March–April 2013 will be examined for indications of change in how North Korea views the issue of escalation and in how it figures its risk calculus.

Range of provocations

It would be wrong to assume that North Korea conducts provocations just because it is a “rogue” nation or it wants to create problems for the international community. While from the outside world’s perspective, these assumptions may often feel right, in reality they reveal a lack of understanding of how Pyongyang views the world and what

---


3 This paper was presented to the Sixth Annual KIMS-CNA conference in Seoul in November 2012. It has since been updated to reflect the unfolding events on the Korean Peninsula.
it wants to do. North Korea’s coercive, or as it is often called “brinksmanship,” strategy is neither crafted on the spur of the moment nor intended to be used for no reason. An examination of North Korea’s provocations since the late 1990s reveals that the regime engages in such behavior to further one of several clear agendas.

An examination of North Korea’s coercive strategy during the Kim Jong-il era shows that Pyongyang is willing to engage in three types of provocations: (1) tests of national programs, (2) non-violent demonstrations, and (3) violent attacks. Each is associated with a set of goals and objectives that the North Korean regime wants to achieve. The tests of national programs and non-violent demonstrations can have, but are not restricted to, a maritime context; however, the regime’s violent provocations have to date been restricted to the maritime arena. After a cursory examination of the first two types of provocations, this paper will focus on the final category.

North Korea has a relatively sophisticated defense industrial complex that, on the high end, is dedicated to the development of a capable missile and nuclear program in support of the country’s strategic deterrent. Over the past 40 years, North Korea has pursued an expanding nuclear program to the point where it now possesses all the requisite technologies, personnel, and infrastructure to produce nuclear weapons that are, at a minimum, comparable to first-generation U.S. nuclear weapons. Current open-source estimates are that it has reprocessed enough plutonium for four to eight nuclear weapons. Should its uranium enrichment program continue unchecked, it will soon be able to produce highly enriched uranium weapons as well. North Korea is capable of employing such weapons throughout the Korean Peninsula and, to a lesser degree, against Japan. In terms of provocation, North Korea conducted nuclear tests in 2006 and 2009. In April 2012, North Korea declared itself a nuclear state in its constitution. In February 2013, rumors began circulating to the effect that it would conduct another test as a way of bolstering Kim Jong-un’s credentials as a powerful leader in the region.

Since the late 1970s, North Korea also has pursued a robust and expanding ballistic missile development program that has been assigned a national priority at least equal to the nuclear program. Due to this emphasis, the ballistic missile program has steadily progressed
in spite of economic failure and cyclical famines during the past 30 years.

North Korea possesses the largest ballistic missile force in the developing world, with an inventory of 800 to 1,000 systems, and it is on the threshold of deploying space launch vehicles (SLVs) and intercontinental ballistic missiles (ICBMs) that could eventually threaten the continental United States. This is an ominous development since there is little doubt that North Korea perceives the ballistic missile to be the delivery system of choice for nuclear weapons.

In terms of provocations, North Korea has conducted numerous missile tests and satellite launch attempts for almost 30 years. The most notable have been the 1998 launch of the Paektusan 1 with the Kwangmyongsong 1 satellite; the 2006 launch of the U’nya 1 with a Kwangmyongsong 2 satellite; and the 2009 launch of the U’nya 2 with a Kwangmyongsong 2 satellite. In the lead up to the 100th anniversary of Kim Il-sung’s birth in April 2012, North Korea launched the U’nya 3, which broke up shortly after takeoff and fell into the Yellow Sea. In December 2012, North Korea joined a small club of just 10 nations that can launch a satellite on their own, as its U’nya 3 rocket successfully put a 200-pound, or 90-kilogram, earth surveillance satellite (Kwangmyongsong-3, or Shining Star-3) into orbit.

In addition to the promotion of national programs, North Korea also engages in a range of non-violent provocations. These include a range of incidents, from artillery exhibitions and harassment of Alliance aircraft and ships, to cyber-attacks against South Korean targets. In April 2012, North Korean rhetoric increased dramatically in vitriol, threatening to carry out “special actions” against the South. The threats were apparently sparked by President Lee Myung-bak’s comments on “strengthening” South Korea’s national “self-defense capabilities,” statements which Pyongyang characterized as provocational and threatening the North’s “supreme headquarters.” Ultimately, North Korea decided to follow through with its threats—not with violent military attacks, but with a more muted, week-long campaign to jam global positioning system (GPS) signals near South Korea’s two

---

4 Yonhap, 19 April 2012.
5 Pyongyang Radio, 23 April 2012.
largest airports outside its capital city, Seoul, and across the center of the Korean Peninsula. The jamming caused no accidents or loss of life, but it demonstrated that North Korea was getting more and more brazen in its efforts to interfere with South Korea's high-tech infrastructure.  

Clashes and provocations along the NLL

Since the advent of the Kim Jong-il era, North Korea has on occasion resorted to violent provocations. Without a permanent peace treaty, the two Koreas have not agreed upon a mutual recognition of maritime borders, and they lack the formal diplomatic channels that could help prevent the escalation of border clashes both on land and at sea. This became clear over the span of ten years from 1999 to 2009, when the navies of both countries engaged in a number of armed engagements:

- **First Battle of Yeonpyeong.** On June 15, 1999, North and South Korean warships exchanged fire, resulting in the sinking of two North Korean ships. It was after this clash that the Korean People’s Army General Staff issued a special communiqué declaring the current NLL void and proposing a different line that did not challenge UNC/ROK control of the Northwest Islands (NWI) but drew a line that was approximately equidistant from the two coasts.

- **Second Battle of Yeonpyeong.** North and South Korean ships clashed again in June 2002, this time with greater casualties. After a 20 minute exchange, the North Korean ships moved back across the NLL and the South Korean ships did not pursue.

---

6 In 2010, South Korean Defense Minister Kim Tae-young said that North Korea had imported truck-based jamming systems from Russia that could jam GPS signals out to a 100-kilometer radius. Since then, there have been at least three GPS-jamming incidents along the border. GPS jamming could conceivably be used by itself or in combination with other electronic and network-based attacks to disrupt South Korea's highly digital society, and perhaps cause aircraft or ships to stray into North Korean territory. Experts debate over the extent of disruption that North Korea could cause through such jamming.

7 This section first appeared in Gause, “Dealing with North Korean Provocations.”
South Korea suffered 5 killed and 19 wounded while estimates of North Korean casualties were around 30 killed and an unknown number wounded.

- On 1 November 2004 three North Korean vessels crossed the NLL. They were challenged by South Korean patrol boats, but did not respond. The South Korean vessels opened fire and the North Korean boats withdrew without returning fire. No casualties were reported.

- **Battle of Taecheong.** On November 10, 2009, a North Korean gun boat crossed the NLL and entered waters near Taecheong Island. South Korean vessels opened fire reportedly causing serious damage to a North Korean patrol ship and one death.

Subsequent inter-Korean talks made some progress on claims in contested waters, but these diplomatic efforts faltered in recent years. In October 2007, an inter-Korean summit meeting between Roh Moo-Hyun, the South Korean president (2003-2008), and Kim Jong-il yielded a declaration that committed both sides to concrete measures toward improving inter-Korean relations. Both pledged to negotiate a joint fishing area and agreed to a proposal to create a “peace and cooperation zone” in the West Sea, which was aimed at transforming the heavily militarized waters into a maritime region for economic cooperation. Significantly, in that declaration North Korea agreed to leave the NLL intact.

Yet, within months, President-elect Lee Myung-bak rescinded the October 4 Declaration and later abrogated the inter-Korean accord from the 2000 summit, which had provided a common approach for both North Korea and South Korea to work toward reconciliation and eventual reunification. Relations deteriorated further in 2009 when North Korea protested South Korea’s decision to fully participate in a U.S.-led naval interdiction initiative, which North Korea regarded as a violation of its national sovereignty. In response, North Korea renounced all diplomatic and military agreements with South Korea.
Changing nature of North Korean provocations

Up to 2009, Pyongyang’s rhetoric and threats surrounding the NLL were mostly tied to its political maneuvering. A continuing leitmotif of North Korean regional foreign policy was its aim to establish diplomatic relations with the United States while isolating South Korea from the regional diplomatic and security forums. Couched within this larger strategic vision was a cold economic reality—the competition for maritime resources. The immediate causes of the pre-2009 clashes were largely economic and tied to the concentration of valuable blue crab south of the NLL and the consequent sharp increase in the frequency of both South and North Korean vessels crossing the NLL to catch crabs, the latter ever more frequently accompanied by North Korean naval vessels.

Figure 1. Clashes in the West Sea

---

* This section first appeared in Gause, “Dealing with North Korean Provocations.”
A leadership shuffle in early 2009 accompanied the start of another period of tension over the NLL, when in January the North Koreans stepped up their rhetoric with regard to the disputed area, threatening an “all out confrontational posture” against the South in response to what they called violations of the sea border. Just weeks later, Gen. Kim Kyok-sik, who had been Chief of the General Staff, was transferred to command of the Fourth Corps of the North Korean army, whose area of responsibility borders the NLL. Kim Kyok-sik was known to be one of Kim Jong-il’s most trusted generals, and was likely put in his new position so that he could help plan activities in the NLL area. Soon thereafter, the head of the Operations Department (which at the time was under the authority of the Korean Workers’ Party), General O Kuk-ryol, was moved to a senior position on the National Defense Commission (NDC), the chief command and control organ of North Korea’s armed forces. Within weeks of this move, the Operations Department was then placed under the control of the newly enhanced Reconnaissance General Bureau (RGB)—North Korea’s military intelligence organization with responsibility for operations against South Korea— which reports directly to the NDC.

In the months following these appointments, the nature of North Korea’s provocations changed, becoming much more violent. Instead of the Navy, North Korea relied on the RGB, as well as its coastal artillery, two military organizations tied to the heir apparent and by extension to the unfolding political succession, to conduct provocations along the NLL.

- **Sinking of the Cheonan.** On 26 March 2010, the Cheonan (PCC-772), a 1,200-ton South Korean navy corvette, was severed in half and sank in the waters off Paengnyong Island, the northern-most of the West Sea Islands in the contested waters near the NLL. Forty-six South Korean sailors died in the sinking. The Joint Civil-Military Investigation Group (JIG), a multinational commission led by South Korea, concluded after nearly two months of investigation that a North Korean torpedo sank the Cheonan.

---

9 The island is on the South Korean side of the Northern Limit Line, but within the North Korean contested waters.
Tensions around the peninsula were immediately raised, with South Korean and U.S. forces on alert for additional provocations, and the North preparing for retaliatory strikes by heightening readiness and even repositioning some SA-5 anti-aircraft missiles in the coastal region near where the Cheonan went down. This was followed by U.S.-South Korean joint exercises in the East Sea, South Korean Navy exercises in the West Sea, and North Korean threats of “physical response” and bolstered nuclear deterrent.

- **Shelling of Yeonpyeong Island.** On November 23, 2010, military troops from the South Korea and the United States conducted war-simulation exercises, dubbed “Hoguk” [“Defend the State”], a massive joint endeavor involving 70,000 soldiers, 600 tanks, 500 warplanes, 90 helicopters, and 50 warships. According to the South Korean Ministry of National Defense, the units on those islands, including Yeonpyeong Island, fired 3,657 times, or over 900 shells per hour, into contested waters near the Northern Limit Line (NLL).

Pyongyang issued repeated warnings demanding that South Korea halt the exercises and cease its firing of artillery into North Korean territorial waters. Following the warnings, North Korea launched several MiG-23ML fighter aircraft from the 60th Air Regiment at Pukchang-ni Air Base. These aircraft flew southwest and assumed a patrol pattern over southern Hwanghae Province. Meanwhile, Korean People’s Navy (KPN) coastal defense missile units went on alert and a number of patrol vessels sortied from their bases on the West Sea. Additionally, some Fourth Corps long-range artillery units reportedly moved to pre-surveyed firing positions. These were moves that most likely could not have occurred without Kim Jong-il’s authorization.\(^\text{10}\)

At 14:34 hours on 23 November, the southern 122 mm MRL battery located 1.2 km south of Kaun-gol launched an artillery strike on the South Korean-controlled island of Yeonpyeong. After the initial North Korean barrage, there was a 15-minute

pause then at 15:10 hours a second barrage commenced. This lasted for approximately 30 minutes. The South Korean Ministry of National Defense estimated that during the hour-long engagement, North Korean artillery fired approximately 170 rounds while the ROK Marine K-9s expended 80 rounds. Total South Korean casualties as a result of the attack were 2 Marines and 2 civilians killed and 15 Marines and 3 civilians wounded.\textsuperscript{11}

The ROK military was put in a difficult situation because of rules of engagement that governed its actions at the time—presidential approval was required to engage North Korean forces except for instances of self-defense. In anticipation of a third artillery barrage and as a defense against hostile activity by the KPA Air Force, the ROK Air Force launched F-15K and KF-16 aircraft. The F-15K and KF-16 were subsequently given Presidential authorization to attack KPA artillery positions should they commence a third artillery barrage. Ultimately the KPA did not conduct a third barrage and these aircraft did not launch any strikes or engage the MiG-23s.\textsuperscript{12}

Pyongyang has consistently portrayed its 23 November artillery strike against the South as a self-defensive reaction to South Korean military artillery exercises, which the North claims resulted in shells landing in its territorial waters. North Korea issued a statement calling the civilian deaths “very regrettable,” but it also criticized South Korea for creating what the North called “a human shield by placing civilians around artillery positions and inside military facilities.”\textsuperscript{13} On 29 November, South Korea canceled a series of scheduled artillery drills from Yeonpyeong Island, offering no explanation for the change. The massive U.S.-South Korean joint war exercises resumed in the West Sea, but they took place outside the immediate zone of contested waters, staged approximately 125 miles south of the NLL.

\textsuperscript{11} Ibid.

\textsuperscript{12} Ibid.

\textsuperscript{13} "Who is to Wholly Blame for Armed Clash in West Sea of Korea,” KCNA, 27 November 2010.
On 10 August 2011, North Korean artillery fire was reported by South Korean forces in the area of the Northern Limit Line. It was unclear whether the fire, reported to have originated from Yongmae Island, was intended to land on the North or South Korean side of the boundary. One of the shells was reported to have landed near Yeonpyeong Island. It was unclear whether the North Korean artillery fire had been part of a training exercise. An hour later, after sending a warning on an internationally recognized radio frequency, South Korean forces fired shells into the disputed area in response. A second round of North Korean shelling was later reported.

The North Korean response, also on 10 August, claimed that South Korea had mistaken “normal blasting in the area of South Hwanghae Province,” said to be part of a development project, for artillery fire. It added that South Korea had responded with artillery fire without adequately verifying the nature of the disturbance.

In October 2011, North Korea reportedly test-fired anti-ship missiles in the West Sea. The missiles were modified versions of the Styx ground-to-ship missile and were launched from a KPAF IL-28 bomber. According to a South Korean source, “Should the North send IL-28s beyond the Northern Limit Line and fire anti-ship missiles, they will present major threats to our patrol ships and destroyers.” Other sources noted that South Korea would likely counter with its indigenously developed Chunma ground-to-air missile, which it had deployed to the border islands in the wake of the Yeonpyeong Island shelling.

North Korea’s calculus/capabilities for conducting overt and covert provocations

At the beginning of October 2012, speculation began to rise that North Korea might resort to provocations as part of Kim Jong-un’s foreign and security strategy. The previous month (September), the North Korean media had made their first reference to a Southwest Front Command, which is responsible in part for operations in the
West (Yellow) Sea. In anticipation of upcoming South Korean naval exercises, the command, referencing a Kim Jong-un order, issued a fiery warning (September 9) that said that the North would respond if even an “ember” landed on their “sacred territorial waters,” an apparently deliberate effort to raise the tension around the Korean Peninsula. This was followed (September 12) by what appeared to be a baiting action when North Korean fishing boats strayed across the NLL, sparking South Korean warning shots and deployment of advanced fighter aircraft to the area. In response, Pyongyang, through the mouthpiece of the Southwest Front Command, portrayed ROK naval actions in the West Sea as a dangerous overreaction. While Pyongyang eventually toned down its rhetoric, it left commentators in South Korea and the region wondering whether this was an opening salvo in what could be a campaign of intimidation and bluster as Kim continued along the path of power consolidation and Seoul approached its nationwide election in December.

If North Korea resorts to violent provocations in the near term, they will likely take place in the West Sea along the NLL. The provocations could either be overt or covert, depending on Pyongyang’s calculus and ultimate objectives. In the following sections, this paper will consider North Korea’s possible motivations and thinking regarding those provocations that the regime is willing to take responsibility for and those it may want to disavow.

According to ROK military sources, the Southwest Front Command “is believed to be an organization separate from the IV Corps,” which had overall operational responsibility for the provocations in 2010. The Southwest Front Command appears to have been recently created to counter South Korea’s West Sea Defense Command, which was inaugurated in June 2011. See “The North Has Created the Southwest Front Command to Counter the South’s West Sea Defense Command,” Yonhap, 23 September 2012.

“KPA Southwest Command Warns Against ROK Military Drills in Mid-September,” KCBS, 09 September 2012.

It is worth noting that while denouncing the South Korea for firing into North Korean “territorial waters,” the 22 September Southwest Front Command communique omitted the more alarming term “sacred waters,” which it had used in its 9 September warning. The communique also refrained from references to “immediate retaliation,” most likely in an effort to walk back its earlier escalatory rhetoric.
Calculus for overt provocation

Over its history, and especially since the advent of the Kim Jong-il era, North Korea has not been averse to embracing a coercive strategy either to highlight a wrong it has perceived or to deal with internal regime politics. But it is important to understand that when Pyongyang carries out overt provocations, it does so through its own logic and is supported by its own sense of justice.

In the late 1990s and early 2000s, North Korea used the clashes in the West Sea to highlight its objections to the NLL, which the regime claims was drawn unilaterally by the United Nations Command at the end of the Korean War. By prompting military clashes along the NLL, Pyongyang was able to highlight its objections. If recent allegations in the South Korean media are true, North Korea may be able to use the controversial line of demarcation as a potential wedge issue to sow dissention inside South Korean politics, as well as between Seoul and Washington.  

In 2009, Pyongyang defined its calculus about when and under what circumstances the regime might conduct overt provocations. State media announced three types of South Korean action that would trigger North Korean military retaliation: infiltration into North Korean claimed waters in the West Sea, leaflet distribution, and propaganda broadcasts. This announcement came in response to what the regime portrayed as the Lee government's hostile policy toward

17 The NLL has served as the de facto maritime demarcation line bisecting the two Koreas since it was unilaterally declared by the U.S. commander right after the end of the Korean War. The North did not raise an objection to the line over the next two decades until 1973, when it abruptly insisted the NLL be redrawn farther south, raising military tensions in the area. In 2012, Rep. Chung Moon-hun of the ruling Saenuri Party brought to light a transcript from the 2007 inter-Korean summit in which President No My-hyon apparently told Kim Jong-il that he was “annoyed by the NLL because it was arbitrarily drawn up by the United States to win more territory...South Korea will not insist on the NLL from now on, and the issue will automatically die away if the two Koreas are pushing for joint fishing (in the NLL zone).” This allegation created a firestorm of controversy leading up to the South Korean presidential election in December. See “What’s The Truth Behind Roh’s Alleged NLL Remarks?” Yonhap, 09 October 2012.
Pyongyang and its rejection of inter-Korean accords signed by Kim Jong-il. They also correlated with unprecedented public leadership appearances at live-fire artillery demonstrations. To date, North Korea has taken direct military action to address only one category: naval maneuvers between Pyongyang’s claimed Maritime Military Demarcation Line (MMDL) and the UN Command’s Northern Limit Line (NLL).

In its open statements, North Korea is precise in its language and only takes stands that the regime feels it can defend. This was made clear with the lead up to the shelling of Yeonpyeong Island. In January 2009, a KPA General Staff spokesman issued a statement announcing that because the Lee Myung-bak government had continued to insist on a hostile policy toward North Korea, North Korea would conduct an “all-out confrontation” against the South. The statement did not threaten the South Korean islands immediately south of the NLL, but focused on the disputed area off the west coast. Although the announcement did not constitute a new threat, it was more pointed and explicit than former ones.

Pyongyang inched closer to a strike in May 2009, when it proclaimed that it could no longer guarantee the “legal status” of the five UN-controlled islands located north of Pyongyang’s demarcation line; it pointed to what it saw as the Lee Myung-bak administration’s hostile policy as justification. A year later, in August 2010, North Korea warned in unusually explicit terms that it planned to conduct a military strike in response to South Korean drills near the NLL. Using the voice of its “Western Zone” regional military command, the North stated that it had “adopted” a “determined decision” to “suppress” South Korean “naval firing” exercises by way of a “physical counter-strike.” Just after the exercises ended, the North fired 130 rounds of artillery into the West Sea near Paengnyong Island.

Then, in November 2010, North Korea escalated its actions by firing on Yeonpyeong Island, killing South Korean civilians and marines.

18 Rarely, KPA General Staff announcements have been used to highlight increased states of North Korean readiness.
19 Pyongyang Radio, 3 August 2010.
While internally, motivation behind the escalation in violence was apparently tied to the succession and transfer of power that was unfolding in Pyongyang, the regime was careful to justify its actions by claiming that it was responding to a South Korean live-fire exercise that had violated North Korean sovereignty by landing shells in the waters around Yeonpyeong Island—territorial waters that North Korea claims as its own.

At the time of this paper, it is unclear how much North Korea’s calculus has changed with regard to overt provocations. While Pyongyang continues to dispute the NLL, the internal politics which drove the shelling of Yeonpyeong Island in 2010 seem to have been tempered as the transfer of power has apparently gone smoothly from Kim Jong-il to Kim Jong-un. While Pyongyang has portrayed recent ROK naval actions in the West Sea as provocative, it has also downplayed the immediate military implications for the North—a rhetorical shift that seems designed to signal Pyongyang’s openness to discussions on the NLL.

In terms of North Korea’s calculus, it was difficult to find a compelling motivation to conduct overt provocations before the end of 2012 and the South Korean elections. The three candidates vying to replace South Korean President Lee Myung-bak (Park Geun-hye, Moon Jae-in, and Ahn Cheol-soo) had all declared their intention to scrap Lee’s hardline North Korea policy for a more engagement-based policy—something that had to be very appealing to Kim Jong-un and his leadership, who are looking for foreign assistance to add to that which North Korea receives from China. Using fishing boats (vice warships) to violate the NLL in September allowed Pyongyang to keep its objections alive and test the ROK military’s ability to respond under its Proactive Deterrence Strategy without serious escalation, which could have undermined the North’s larger goal of getting a more compliant administration in Seoul.

Now that the Park administration has taken power, this calculus seems to have changed. In the past, as North Korea has gone through a leadership transition at the top, the regime has been on guard against South Korean influence seeping into the North. While North Korea may covet South Korean investment and economic aid, it worries about becoming too close to an engagement-minded South Korean leadership that might attempt to use aid to insinuate itself into
Pyongyang’s internal politics. Since Kim Jong-un’s consolidation of power will probably take up to three years, it is possible that Pyongyang will on occasion use provocations to keep some distance in its relationship with Seoul. This could account in part for the missile and nuclear tests in late 2012 and early 2013.  

In addition to establishing boundaries, North Korea has used provocations to test a new administration in Seoul. In February 1998, at the start of the Kim Dae-jung’s term in office, the North launched its Taepodong 1 missile; this was followed a year later by the Yeonpyeong sea battle. At the start of the Lee Myong-bak presidency in 2008, the North again launched a long-range missile; this was followed in 2009 by a nuclear test and the Taechong sea battle. Pyongyang has promised additional tests of its military systems in the near future. Part of its rationale might be to see how much Seoul is willing to offer in order to prevent such tests and how Seoul reacts after such tests take place. By doing so, the Kim Jong-un regime could adjust its calculations regarding the Park administration.

Pyongyang can also use overt provocations to try to engineer a bilateral relationship with the United States. At the beginning of March 2013, North Korea ramped up its rhetoric toward the United States. Kim Yong-chol (director of the Reconnaissance General Bureau) delivered a statement on behalf of the Supreme Command announcing North Korea’s intention to respond to “the high-handed hostile act of the United States and all other sorts of hostile forces” and to scrap the Korean Armistice Agreement. This language was followed days later by a threat of a preemptive nuclear strike on the United States. A close reading of the North Korean media suggests that this rhetoric

21 There is some debate over the reasoning behind North Korea’s decisions to conduct the missile and nuclear tests. Some point to Kim Jong-il’s will, which allegedly called for the regime to be vigilant in its pursuit of these capabilities. Other noted that the purges of 2011 made it important for Kim Jong-un to take actions that would ensure the high command that the regime had not abandoned its Military First policy. Others believe it could be part of a strategy to test the new Park administration, as well as examine red lines for future engagement with the United States.

22 This may have been the first time that an officer attached to an intelligence service has spoken for the Supreme Command. Normally a General Staff spokesman does so.
was part of an evolving strategy by Pyongyang to engage with the United States more directly. By withdrawing from the Armistice architecture, North Korea hopes to give the United States no alternative but to negotiate directly with Pyongyang without resorting to UN mechanisms or military channels. While this rhetoric does not mean that provocations are imminent, it does mean that they are more likely and that, if they do occur, they will be more difficult to manage. The North Koreans could use shots across the DMZ, incidents at sea along the NLL, and other such actions in order to highlight the danger that now exists on the peninsula, thus pressuring the United States to come to the negotiating table.

North Korea could also give overt demonstrations of force in response to U.S. and ROK demonstrations of force, such as the Key Resolve and Foal Eagle exercises that took place in March and April.

---

23 The discussion about withdrawing from the Armistice is different from similar threats during the Kim Jong-il period. When Kim Jong-il announced North Korea’s withdrawal from the Armistice architecture, he did it as a matter of form—simply redesignating the KPA contingent at Panmunjom as being "present" at Panmunjom. This latest withdrawal appears more unconditional, with no semantic tricks. The termination of the hotline, used for crisis management, is meant to underline the seriousness of this threat. This is in keeping with the bolder style of the Kim Jong-un regime.

24 North Korea signaled that it seriously viewed the exercises and strong South Korean statements about response to provocations. It did this through overt acts of camouflaging buses, trucks and automobiles, as reported by Japanese media sources in Pyongyang. This is a civil defense measure that usually does not occur in isolation. It is part of a systematic process whose end state is conversion of the civilian population and economy from peacetime pursuits to increased defensive readiness for war. Other measures in the process include testing air raid sirens; cleaning, preparing, and provisioning air raid shelters; holding citywide evacuation drills; placing guards at public buildings; holding drills by units of the Worker-Peasant Red Guard; indoctrinating civil defense wardens and workers; and activating anti-aircraft sites by reservists.

Increased civil defense activities outside Pyongyang are the best indicators of changes to civil normality. If civil defense preparations are observed in the industrial cities, such as Hungnam, Wonsan, Kim Chaek, Sinuiju, and Chengdu, the civil defense system will have been activated nationwide. That would justify an increase in regional tension. NightWatch, 06 March 2013.
As those exercises unfolded, North Korea engaged in an escalatory signaling campaign, showing signs of gearing up to conduct large-scale military drills involving land, air, and sea forces, as well as special force units. In early March, Kim Jong-un inspected KPA island defense units on Jangjae and Mu Islets in the West Sea. He was accompanied by VMAR Choe Ryong-hae (Director of the KPA General Political Department), Jang Song-taek (Vice Chairman of the National Defense Commission), Gen. Kim Kyok-sik (Minister of the People’s Armed Forces), Gen. Kim Yong-chol (Chief of the Reconnaissance General Bureau and spokesman of the KPA Supreme Command), Lt. Gen. Pak Jong-chon (Staff member of the KPA Supreme Command), Maj. Gen. An Ji-yong (regional KPA commander for islet defense), and Rim Kwang-il. According to KCNA, Kim Jong-un reconfirmed in detail reinforced firepower strike means and targets of the enemy deployed on five islets in the West Sea including Yeonpyeong… and gave detailed instructions to more satisfactorily equip the detachment with weaponry, increase the density of firepower on targets and ensure intensive shelling in order to cope with the frantic arms build-up of the enemy entrenched under the very eyes of the soldiers.

General Staff statements, for example, listed the movements and deployments by U.S. forces that North Korea considered reckless, strategic and provocative: B-52s, B-2s, F-22s, submarines, destroyers and an aircraft carrier task group. The primary way North Korea learns about such movements is from U.S. official announcements. North Korea registers and reacts to every military move the U.S. announces. The announced moves are not deterrent to the North Koreans, they are provocative and escalatory.

The asymmetry of capabilities and the shortness of time to attack compel North Korean decision makers to evaluate these measures as real war preparations. Their statements indicate they perceive no restraint in U.S. military movements, only a building threat. The placement of a ballistic missile in plain view not at a test site is their sign of earnest.

KCNA, 07 March 2013. This rhetoric dovetailed with strong signals coming from the United States. In early April, U.S. B-52, B-2, and F-22 bombers conducted over-flights of the peninsula.
As the crisis progressed, North Korea kept the potential of a violent provocation open but began to signal that it might conduct a non-violent demonstration instead. Pyongyang designated no-fly zones over the East and West seas and restricted ship traffic, leading some analysts to speculate that North Korea might launch Scud, Nodong, or KN-02 short-range missiles or coastal artillery. ROK sources pointed out that this training was tied to the Alliance exercises, but was much bigger than the normal exercises associated with the KPA’s spring training.
Is North Korea’s calculus changing under Kim Jong-un?

Many Pyongyang watchers believe that if the United States had kept up the pressure in April 2013, Kim would have run out of rhetorical space and might have authorized a provocation. It is impossible to know for sure whether it would have been a violent provocation or a non-violent demonstration. An initial assessment suggests that unless Pyongyang’s motivation is associated with internal regime politics (either to build cohesion within the regime or to bolster Kim Jong-un’s leadership credentials), the regime is unlikely to conduct another violent provocation along the lines of the Yeonpyeong shelling, as it would strain its relationship with China as well as destroy any nascent goodwill that the new South Korean administration may have toward the North. Naval clashes along the NLL (or even in the East Sea) or non-violent demonstrations, however, are not beyond the realm of possibility, as their fallout can be managed more easily.

The nature of future provocations aside, a question that faces policymakers in Seoul and Washington is whether the crisis of March and April was a one-off incident or was a foreshadowing of a more strident and uncompromising North Korea. The answer to this question lies in whether Pyongyang’s calculus is changing on the strategic level. Under Kim Jong-il, provocations were used to set the table for negotiations, as well as to raise tensions in order to extract near-term economic concessions from the international community. Even though North Korea used its dispute over the NLL or its inherent right to space as a justification for a provocation, it often had ulterior motives that drove its actions and determined how far up the escalation ladder Pyongyang was willing to go.

Under Kim Jong-un, the calculus is more focused on the enduring goal of reshaping North Korea’s relationship with the United States. On March 23, the North Korean Ministry of Foreign Affairs made clear that its use of escalation was not designed to extract near-term economic concessions, stressing that “the U.S. is seriously mistaken if it thinks that the DPRK had access to nukes as a bargaining chip to barter for economic reward.” At the CC Plenum in March, Kim’s doctrine of the twin development of the economy and the nuclear program was announced. By developing a nuclear deterrent, the regime hopes to be able to divert needed resources to the economic sector. This, of course, will require additional nuclear (and missile) tests to ensure the future deterrent. Such tests could bring additional sanctions on North Korea, which would be met with additional crises and follow-on provocations. After his recent discussions with the Chinese military leadership, General Dempsey noted the likely change in North Korean behavior:

> We are no longer in a period of cyclical provocations — where a provocation occurs and then there is a period of time when concessions are made.... I think we are in a period of prolonged provocations... I think the risk of miscalculation is higher, and the risk of an escalation is higher.

27 It remains unclear what would trigger Kim Jong-un to give a launch order, but during the March/April 2013 crisis, U.S. deployments publicized as deterrent measures prompted a succession of North Korean escalation moves, culminating in the deployment of the Musudan ballistic missile.

28 There could be an exception to this assumption. If China adopts a harder-line North Korea policy, as some believe the new Xi Jinping administration is doing, Pyongyang may engage in violent provocations in order to try to force Beijing to return to its more one-sided Korea stance.


In the end, Pyongyang chose not to carry out a provocation associated with the Foal Eagle exercise. But it did exhibit the range of capabilities that it could use to engage in a very open escalatory competition with South Korea and the United States.

**Capabilities for overt provocation**

North Korea has a wide-ranging capability to engage in overt provocations—from the land, air, and sea. Through a combination of coastal artillery and naval assets, North Korea is able to leverage an asymmetrical strategy of threats backed by violent and non-violent provocations.

North Korea has more than 10,000 artillery pieces, many of them deployed along the coasts that can be used for demonstration events as well as for attacks on South Korean targets. The Fourth Corps, which has operational control over the West Sea, deploys numerous long-range artillery systems capable of placing munitions all throughout the Northwest Islands and along the NLL.

Although North Korean doctrine places an emphasis on artillery, the KPA faces some challenges in its employment. The North’s inventory is antiquated, and the KPA must rely on mass to make up for a lack of modernization. According to the South Korean Ministry of National Defense’s assessment of the Yeonpyeong shelling, North Korea’s artillery bombardment suffered from a lack of accuracy. Of the 170 rounds fired at Yeonpyeong Island, 90 (53 percent) landed in waters surrounding the island, leaving 80 (47 percent) that impacted the island (25 percent of which did not detonate). In 2011, the South Korean media reported that the North was reinforcing artillery bases along the west coast in the lead-up to the first anniversary of the shelling of Yeonpyeong Island. Intelligence sources had detected signs that North Korea was building new coastal artillery bases in Kaemori and on Jangsan cape across from the is-

---

31 North Korean coastal defense artillery includes 122-mm, 130-mm, and 152-mm systems.

32 According to defector sources, Kim Jong-un did his thesis at Kim Il-sung Military University on artillery doctrine.

According to one source, it is unclear whether this indicates that North Korea will look to artillery as a preferred means of provocation in the future. That said, if Pyongyang decides to go down this route, it cannot rely on artillery to send precise signals, only a blunt message.

In addition to artillery, the KPA has other non-maritime-based assets that can threaten targets at sea, including new surface-to-sea missile systems. On the east and west coasts, North Korea deploys Samlet and Silkworm missiles that have a range of 80-90 kilometers (49-56 miles). Silkworm missiles are estimated to be capable of striking vessels as far away as Deokjeok Island on the west coast and Sokcho on the east coast. At the end of 2011, North Korea conducted missile tests in the West Sea. According to some reports, these tests were part of a program to extend the range of the Samlet/Silkworm missiles, thus enhancing the capabilities of the North’s coastal missile batteries.

North Korea could use shore-based aircraft to carry out attacks on Alliance surface combatants and shipping around the peninsula. Such a provocation would almost certainly be overt, as there would be almost no chance of deniability. Some reports claim that North Korea has modified the decades-old Soviet SSN-2-C short-range anti-ship missile, also known as the Styx, which can be launched from a KPAF MiG or IL-28 bomber.36 The North could also use a shore-based helicopter against smaller South Korean surface combatants. Some reporting says that the KPA has recently realigned some military units, moving approximately 50 upgraded Mi-2 and Mi-4 attack helicopters to the Taetan and Nuchon air bases, nearer the West Sea border. Provocations using these assets would require in-close engagement, would carry significant risk, and would eliminate any chance

34 “N. Korea Reinforces Coastal Artillery,” Chosun Ilbo Online, 18 November 2011.

35 A covert strike using an air-launched cruise missile is possible, but is unlikely given other means of covert provocation.

36 At the end of October (2011), North Korea tested anti-ship missiles by firing them from IL-28 bombers in the West Sea. “N. Korea Reinforces Coastal Artillery,” Chosun Ilbo, 18 November 2011. According to a South Korean military source, “It’s more likely that North Korea is reacting to our military’s reinforcement of military and artillery capacity in Paengnyong and Yeonpyeong islands recently.”

of deniability. Such an attack could, however, use the NLL as cover by claiming encroachment by South Korean naval vessels, or claim to be warning away illegal fishing vessels.

While the KPA Navy is ageing and has limited capabilities, it remains the most viable tool for violent provocation—ship-on-ship. In addition to its three frigates and six corvettes, the KPAN has several guided missile patrol boats armed with anti-ship Styx missiles. Deployed near the disputed NLL as part of the 8th Naval Command (as well as on the east coast as part of the 1st Naval Command), these ships routinely patrol coastal waters and often shadow North Korean fishing vessels and stand ready to engage their South Korean counterparts. Such overt provocations are particularly useful for Pyongyang because they give the regime the ability to control escalation (by keeping it off the peninsula) and, at the same time, highlight the problems North Korea has with the demarcation of the NLL and the maritime boundary around the Northwest Islands.

Finally, North Korea has an inventory of short-, medium-, and long-range missiles as part of its provocation inventory. In the crisis of March–April 2013, Pyongyang used this inventory to send increasingly threatening signals in response to the Foal Eagle exercise. Toward the end of April, North Korea deployed two additional short-range ballistic missile complexes to its east coast. The two mobile missile transporter-erector-launchers (TELs) enhanced the ballistic missile division in South Hamgyeong Province where seven TELs had been deployed earlier in April. Also, two mid-range Musudan missile complexes were positioned near city of Wonsan, a mere 180 km from the South Korean capital of Seoul. In the end, these missiles were not launched as part of this crisis, but sent a signal that North Korea is positioned to launch with little or no warning.

**Calculus for covert provocation**

The North Korean regime is not called the “Guerrilla Dynasty” for no reason. Its leadership traces its roots back to Kim Il-sung’s covert struggle against the Japanese. This struggle codified an ethos of self-reliance

---

38 The Musudan is a North Korean variant of the Soviet SS-N-6 submarine-launched ballistic missile. Its range is 4,000 km, long enough to reach Guam. The North Koreans have adapted it for launch from a large military truck-mounted launcher. North Korea has never test-launched a Musudan, but it has been imaged in parades or in static displays since 2003.
among the leadership, which was solidified by a war (the Korean War) that has never formally concluded and years of tensions with its own benefactors (Soviet Union and China). Since the end of the Cold War, North Korea has become increasingly isolated from the rest of the world. In terms of provocational behavior, Pyongyang keeps its politics closely held and if those politics become contentious, the regime can lash out in a covert manner.

During the Kim Jong-il era, there was one clearly covert provocation, the sinking of Cheonan. The regime’s calculus was apparently driven by internal reasons (the desire to ensure the transition of power), but bounded by a desire for deniability.\(^{39}\) In the spring of 2010, Kim Jong-il was faced with a disastrous currency revaluation that had thrown the succession into jeopardy. He also had a high command that not only was fuming over lost largess (because of the currency revaluation’s impact on hard currency gains), but also was smarting over the loss of one of its ships in a dust-up with the South Korean navy (in November 2009). Kim could have unleashed a purge to deal with the growing anger within the leadership. This probably would have been a temporary solution, but it could have sown the seeds of opposition to the hereditary transition of power, which was already being challenged by some sectors of the old guard within the military. Kim could have allowed the military to conduct an overt provocation, such as another at-sea clash with the South Korean Navy. This most likely would have resulted in another North Korean defeat. He also had to weigh the impact that such an overt provocation would have on Sino-North Korean relations. Therefore, the regime was presented with the challenge of diverting the anger outward while not inviting an immediate response. The solution was a covert attack where Pyongyang’s fingerprints were faint, if not non-existent.

As the Cheonan incident suggests, the North Korean calculus for covert provocation is most likely tied to internal regime considerations. In other words, it is not driven by a desire to respond to external stimuli or even to highlight perceived wrongs against the regime. Instead, the decision to mask a violent attack will be tied to, or be a collateral result from, activities inside Pyongyang. These activities (motivations) will probably be opaque.

---

to the outside world, although the dots may be able to be connected at a later date.

As Kim Jong-un seeks to consolidate his power, there has been much speculation that North Korea will at some point carry out another covert provocation. According to this line of argument, such an attack would be the most effective way of carrying out a coercive strategy because it would undermine a key component of South Korea’s new Proactive Deterrence Strategy: immediate retaliation.\(^{40}\) Because the source of the attack will be obscured, South Korea will be challenged to make its case for a military response—and then, as time passes, the wheels of diplomacy will begin to turn, allowing North Korea time to de-escalate the situation.\(^{41}\)

There are a number of reasons why North Korea might carry out a provocation in the near future. Most (e.g., keep South Korea out of internal Pyongyang politics, draw China close to North Korea in a period of tension on the Korean Peninsula) would suggest an overt provocation, not a covert one. However, a couple of scenarios could lead to a decision to sanction a covert provocation. They both are tied to problems with the transfer of power ongoing in Pyongyang. Under these circumstances, North Korea could engage in covert provocation.

The two scenarios are as follows:

\(^{40}\) South Korean officials and defense analysts look on covert provocation as a daunting challenge. In the absence of evidence, the South Korean government might decide to assume that the provocation came from the North in order to respond in a timely manner, even though it could draw criticism from the international community. Author’s discussions in Seoul, May and September 2012.

\(^{41}\) This probably in part explains President Park’s April instructions to the ROK military. According to South Korean reporting, she instructed the military to set aside any political considerations and respond powerfully in the event of North Korean provocations. During a policy briefing at the Defense Ministry, she stressed that “if any provocations happen against our people and our country, it [the ROK military] should respond powerfully in the early stage without having any political considerations.” She went on to say that “as commander-in-chief of the armed forces, I will trust the military’s judgment on abrupt and surprise provocations by North Korea as it is the one that directly faces off against the North.” See “Park tells military to respond powerfully to N.K. provocations,” Yonhap, 01 April 2013.
• **Kim Jong-un tries to assert (or reassert) his authority.** A year and a half after his father’s death, Kim Jong-un has the authority, but not the power, to exert his will on the leadership. While he is the ultimate decision-maker, he is supported by a fractured collective leadership. Thus, the system still allows him a certain measure of situational awareness, but he is unable to enforce his decisions. In many respects, if this scenario either is currently in force or plays out in the future because Kim Jong-un is not able to consolidate his power, he will be hostage to an increasingly contentious collective leadership.

If Kim Jong-un either is seeking to burnish his credentials as a leader or is trying to build cohesion within the leadership, he might authorize a covert attack to placate one or another faction. Therefore, for foreign intelligence agencies, such an attack could be an indicator of tension within the North Korean leadership, suggesting that Kim’s consolidation of power might be in trouble. Such an attack would have the added benefit (if carried out successfully) of securing a blow against South Korea (which could be internally portrayed as a victory) while restricting Seoul’s ability to respond in kind (which could also be portrayed as a victory)—two considerations that support the merits of covert provocations as a tool for internal North Korean politics.

• **Rogue operation is undertaken in a period of weak command-and-control.** In a scenario where the North Korean leadership is fractured, the chains of command from Pyongyang could be compromised. This could lead to provocations being undertaken at the regional command level. Kim Jong-un’s rise to power has paralleled that of many SOF commanders. In addition to RGB director Kim Yong-chol, the new chief of the General Staff (Hyon Yong-chol) and the commander of XI Corps (Choe Kyong-song) are examples of officers with special forces backgrounds who have risen through the ranks. All three sit on the powerful KWP Central Military Committee. In the absence of strong oversight (as postulated in this scenario), these commanders could embark on provocations as a means of

---

42 Being increasingly surrounded by SOF commanders could have an impact on how Kim Jong-un views provocations. Unlike his father, he could view covert operations as being better than overt operations in a brinksmanship strategy.
enhancing their own power or in retaliation for actions by South Korea / United States, such as exercises, that they feel threaten the sovereignty and security of North Korea. As members of the third generation of military leaders, many of these commanders have been subjected to intense levels of indoctrination to ensure their loyalty to the Kim regime. Because of this, they could engage in rogue operations as a means of righting past wrongs that they feel South Korea has perpetuated against North Korea.

Capabilities for covert provocation

Although covert provocations have been rare in the history of North Korea’s brinksmanship strategy, the regime does not lack the resources to engage in this realm. Of particular note are its special operations forces and its submarine fleet.

North Korea has one of the largest special operations forces in the world, numbering over 200,000 members. These SOF units are trained to conduct operations along the Korean Peninsula littoral, including the Northwest Islands. In addition to their missions of infiltration and reconnaissance, these forces are capable of carrying out limited raids against South Korean infrastructure. As the Blue House raid of 1968 proved, these forces stand at the ready to support operations of the most sensitive nature.

The primary SOF command that focuses on operations against the South is the Reconnaissance General Bureau (RGB) under the command of Col.

---

43 2010 Defense White Paper (Seoul: Ministry of National Defense, 2010). North Korea has over twenty brigades of special operations forces whose mission is to conduct deep operations in the enemy’s rear.

44 North Korean doctrine is a combination of Soviet and Chinese doctrine, adapted to conditions on the Korean Peninsula: it has been tempered by lessons learned in the Korean War and by observation of all major operations up through Iraq. It relies heavily on speed, shock, and surprise. North Korea views special operations forces as a key force multiplier on the battlefield and has developed a doctrine surrounding this force. It calls for the use of SOF to open a "second front," with the purpose of creating confusion, panic, and paralysis, thereby disrupting Combined Forces Command/United Nations (CFC/UN) combat operations. See Ken E. Gause, “A Maritime Perspective of North Korean WMD,” The Republic of Korea’s Security & the Role of the ROK-US Navies (Seoul: Korean Institute for Maritime Strategy, 2011).
Gen. Kim Yong-chol. In 2009, as part of a restructuring of the intelligence apparatus, the RGB was created out of an apparent merging of three entities: the KWP Operations Department (charged with conducting infiltration and espionage operations against South Korea); the KWP Office 35 (charged with subversive operations against South Korea); and the KPA’s Reconnaissance Bureau. Previously, the Reconnaissance Bureau, which became the home for this new “general bureau,” had reported up to the Ministry of People’s Armed Forces through the General Staff Department. The RGB now reports directly to the National Defense Commission and reportedly exists on the same level as the General Staff.  

The RGB has strong ties to the Kim family. Both Kim Yong-chol and his boss, Vice Chairman of the National Defense Commission O Kuk-ryol, were close to Kim Jong-il and have figured prominently in the Kim Jong-un era.

Gause, “A Maritime Perspective.”
RGB operations in the littoral revolve around four sea-based commands or escort units dedicated to conducting maritime infiltration/exfiltration operations with regard to South Korea and Japan. These four com-

---

47 This chart is based on the author’s interviews with ROK subject matter experts in Seoul in May 2012.

48 North Korea has been conducting maritime infiltrations of South Korea and Japan since the 1950s. What little is known about the units conducting these missions is gleaned from failed or aborted missions. One of the most notable cases occurred in 1996 when North Korean Special Operation Forces infiltrated the South Korean eastern coast near the town of Kangnung. The crew of 26 (reportedly from the Reconnaissance Bureau) abandoned their stranded submarine and rushed from the beach into the surrounding hills. What followed was a two-month bloody manhunt for the infiltrators that left all but two of the North Koreans dead. During the manhunt, 16 South Korean soldiers and civilians died and 27 were wounded. Other examples include Sokcho,
mands/units, the approximate numbers of their forces, and their operational areas are as follows:

- **Haeju**: 1,100 forces, dedicated to operations along South Korea’s west coast
- **Nampo**: 1,200 forces, dedicated to operations along South Korea’s southern coast including Cheju-do and Pusan
- **Wonsan**: 1,000 forces, dedicated to operations along South Korea’s east coast down to Pusan
- **Chongjin**: 1,100 forces, dedicated to operations against Japan.\(^{49}\)

These seaborne escort units are equipped with a number of transport ships, submarines (coastal and midget), “mother ships,” and infiltration craft. Many of these assets have been specially constructed to conduct infiltration operations along South Korean and Japanese coasts. Some surface infiltration craft are even disguised as fishing boats in order to blend in with the local fishing communities. Although the full order of battle of North Korean maritime SOF is not known, some of the more noteworthy assets, which could be used to conduct a provocation, include:

- **Whiskey, Romeo, and Sango general purpose submarines.** These submarines belong to the North Korean navy, but could be used to transport SOF forces.
- **Sango-class (SSC) infiltration submarines.** These submarines, were developed for the Maritime Department of the Reconnaissance Bureau (predecessor to the RGB). They do not carry torpedoes, but have a diver lock-out chamber. They can operate in approximately 150 meters of water.
- **Midget submarines (SSMs).** North Korea has several of these submarines, a fraction of which represented a majority of the former KWP

---

Operations Department’s inventory of submersible infiltration assets. The known classes of SSMs include Yano, Jango, Chono, and Gonghi. These submarines can carry approximately six to eight personnel. A Yano submarine has been linked to the Cheonan sinking, which the RGB is rumored to have orchestrated.

- Semi-submersible infiltration craft (SILC). North Korea began to build these specialized high-speed infiltration craft in the 1950s. One of them, the SP-10H SILC, a five-ton craft, was involved in the Kanghwa-do and Impo-ri operations. An improved version of the SP-10H (I SP-10H SILC) became operational in 1995.

- Mother ships. North Korea has several mother ships, which are outfitted with a well deck that can carry infiltration craft. Many of these ships are disguised as fishing boats.

- Agent ships. The KWP Operations Department possessed a number of commercial ships for its illicit activity. These were included in the approximately 10 cargo ships operating directly under the KWP and the Ministry of People's Armed Forces. In addition, there are over 60 other oceangoing vessels in the merchant marine operating under the flag of the Ministry of Sea Transportation, which could be used for infiltration operations. These operations, however, are probably hindered by South Korea’s ban on North Korean cargo ships in its waters.\(^50\)

While in recent years North Korea has apparently not resorted to the use of SOF forces in support of maritime provocations, examples from the late 1990s suggest a potential role for the RGB. In November 1998, a semi-submersible vessel was located off the waters of Kangwha Island trying to infiltrate commandos or spies into South Korean territory.\(^51\) The vessel was captured, but North Korean soldiers escaped back to the North. A month later, another such vessel attempted to infiltrate the South Korean coast near Yosu. The semi-submersible tried to return to the North after being detected but was sunk by the South Korean navy and air force. These actions suggest that with new military facilities being constructed on the Northwest Islands and additional South Korean military stationed forward

---

\(^{50}\) Gause, “A Maritime Perspective.”

\(^{51}\) Ibid.
on the islands there are attractive targets for covert or special forces infiltration and clandestine provocation.

In addition to infiltration operations, the RGB, with its inventory of submarines, is equipped to conduct maritime provocations along the lines of the Cheonan sinking. A submarine attack has the advantage of surprise and potential single-shot lethality as well as a good possibility of non-attribution—through the use of either torpedoes or sea-deployed mines. As the Cheonan sinking showed, it could take South Korea weeks to confirm what happened and who was responsible, all the while allowing Pyongyang to deny responsibility.

Although North Korea would probably use the RGB to carry out a covert provocation, note that such an act could also be carried out by the North Korean navy, which has over 60 attack and coastal submarines based on both the east and west coasts.
Does North Korea signal its intentions to conduct provocations?

At the end of October 2012, tension on the Korean Peninsula was high. North Korean threats to retaliate for leaflet launches by balloons from South Korea were followed by U.S. and South Korean military exercises. Finally, Pyongyang announced a nationwide semi-state of war alert, the second highest readiness level, just below a state of war alert. This could signal one of two things—either a North Korean provocation or precautions against a surprise attack by the Allies. Key indicators of such an alert include closing of international border crossing points, recalling of diplomatic and trade missions, and canceling of international air travel.

In March 2013, North Korea’s rhetoric escalated as it announced an abrogation of the Armistice Agreement and threatened nuclear attacks on South Korea and the United States. Pyongyang closed the hotline at Panmunjom and began a campaign of camouflage across the country. Kim Jong-un was reported making visits to front-line KPA units on two of the southwest islands in the West Sea. North Korea also allegedly declared no-fly zones over the East and West seas.

A close reading of the North Korean media can provide other clues to forthcoming North Korean coercive behavior. While breaking the code on North Korean escalatory language is a work in progress for the Pyongyang-watching community, some lessons have been learned from observing past crises.

- A harsh message from the General Staff with a parallel communique from the Supreme Command raising the level of combat readiness likely would signal that the regime is gearing up for a new round of escalations. Pyongyang used this multi-vehicle response package in the lead up to the sinking of the Cheonan in 2010.

---

53 A semi-war state of readiness may be called nationwide or just for the armed forces. A nationwide call for a semi-war state of readiness raises the civilian population and the military to a high state of defensive readiness to prepare it to receive damage with minimal losses and to prepare it to go on the offensive if ordered. It raises national readiness to within days of being capable of supporting the onset of war. North Korea does this when it anticipates an attack by the Allies, either in response to a North Korean provocation or because it misreads Allied training as genuine war preparations. The North can sustain this level of readiness and inconvenience for months. See Night Watch Blog, 26 October 2012.

54 According to the North Korean media, Kim inspected the Jangjae Islet Defense Detachment and Mu Islet Hero Defense Detachment located in the biggest hotspot in the southernmost part of the southwestern sector of the front. KCNA, 07 March 2013.

55 Based on author’s discussions with analysts at the Open Source Center.
• When a General Staff pronouncement stipulates that a branch of the armed forces (such as the navy) will be involved in the North’s response, it is highly unusual and could signal a more aggressive posture or enhanced alert posture.⁵⁶

• In 2010, North Korea used a front-line zone commander to issue warnings. This menacing voice was used twice in response to South Korean propaganda operations. A warning in August signaled strongly that the North was preparing to conduct a strike in the West Sea.

• Alternatively, if North Korea uses the Panmunjom Mission Statement as its high-water mark, this suggests an effort on the part of the regime to soften its rhetorical response.

• Another sign that North Korea is attempting to de-escalate is its use of the Foreign Ministry to respond to U.S./South Korean actions that Pyongyang opposes. If the MFA is not used to respond to actions, such as an exercise, it could signal that a provocation may soon follow.

Source: These observations are from analysis done by the author and from conversations with other Pyongyang watchers in the region.

Escalation dynamics

Given the heightened tensions on the Korean Peninsula in the aftermath of the 2010 provocations, one of the unknowns facing the region is how escalation dynamics will play out in the future. Not only is North Korea now under new leadership, which may have a new calculus, but South Korea’s views on how to handle future provocations have radically changed. Fundamental questions, such as how one or the other side will respond or counter-respond and what red lines exist, pose challenges to decision-makers on both sides. Does Pyongyang believe South Korea’s promises to follow through with its more aggressive Proactive Deterrence Strategy? Does Seoul believe this new strategy will deter North Korea under all circumstances? Unless both sides have a common understanding of how future escalation will unfold, the potential for a crisis to get out of control is very real.

In the past, both sides had a shared understanding of escalation, which was driven in large measure by Seoul’s largely diplomatic response to North Korean provocations. While there had been tactical exchanges between ships in the vicinity of the NLL, there had been no purposeful and proportionate military operation launched in retaliation. This emphasis

⁵⁶ Ibid.
on diplomacy gave Pyongyang a sense of assuredness that it could control escalation resulting from its coercive strategy. At the same time, it may have emboldened the North’s leadership to take the more aggressive actions it did in 2010—provocations that brought to the forefront longstanding political divisions among South Koreans over the best policies for dealing with their dangerous neighbor.  

The fundamental question facing South Korean leaders was whether a more forceful stance toward North Korea would deter Pyongyang or, on the contrary, increase the possibility of a crisis. More purposeful (and proportionate) responses by the South and a willingness to respond with forceful retaliation can carry a very real potential for escalation into crisis.  

For decades, it had been a singular aspect of the Korean standoff that North Korea holds a disproportionate number of deterrence cards in its asymmetric ability to threaten Seoul. Whatever policies of response to North Korean provocations the South adopts, they will not change the fundamental strategic reality on the peninsula: in a crisis, Pyongyang has the advantage of being less risk averse than Seoul; South Korea has much more to lose. As for the United States, its calculus with regard to responding to North Korean provocations was grounded in restraint—to restrain South Korean impulses to retaliate and seek international sanctions and condemnation against the North. In both Seoul and Washington, there

---


58 Joint Chiefs of Staff spokesman Army Major General Kim Yong-hyun warned on 6 March, "If North Korea carries out provocations that threaten the lives and safety of South Koreans, our military will carry out strong and resolute retaliations." The South Korean statement advised that if provoked by North Korea, the South would attack the North’s 'command leadership.' The language indicates the South has a decapitation strategy for dealing with North Korea. Such tough rhetoric is designed to increase the stakes for any North Korean provocation and give Kim Jong-un and his lieutenants a reason to pause before engaging in escalation.


60 In March 2013, the United Nations Security Council adopted Resolution 2094 in response to Pyongyang’s February 12th nuclear test. The resolution, reportedly proposed by the United States and China, added three new individu-
was an appreciation that tit-for-tat violent exchanges could quickly spiral out of control.\(^{61}\)

The common understanding that seemed to exist with regard to provocation and escalation changed in 2010 with North Korea’s two violent attacks. In May 2010, following the sinking of Cheonan, South Korean President Lee Myong-bak made the following declaration in an address to the nation:

> From now on, the Republic of Korea will not tolerate any provocative act by the North and will maintain the principle of proactive deterrence. If our territorial waters, airspace or territory are violated, we will immediately exercise our right of self-defense.\(^{62}\)

Nine months later, after the Yeonpyeong shelling, President Lee again raised the stakes rhetorically by shifting the rules of engagement to a posture of “manifold retaliation” from the former “controlled response.”\(^{63}\)

The events of 2010, therefore, changed the calculus of the South Korean (and by extension U.S.) response. In March 2011, the South Korean Ministry of National Defense published a new Defense Reform Plan (DPR), known as DRP 307, which embodied and expanded the doctrinal changes evident in speeches by the South Korean president since the Cheonan incident. It also laid out changes in command and control and increased emphasis on joint structures in the South Korean military command structure. Much of this reform was designed to give teeth to a new doctrine for dealing with the North below the level codified in the existing OPLANs. The goal of the Proactive Deterrence Strategy was to send an

\(^{61}\) Park Geun-hye’s administration has announced its intention to establish a security office as part of a government reorganization. This security office will serve as a “control tower” on security issues. One of the shortcomings of the Lee administration’s reaction to the Cheonan sinking was a lack of clear guidance from the Blue House on how to proceed in the early hours and days after the incident. Yonhap, 06 March 2013.

\(^{62}\) Full text of President Lee Myong-bak’s national address, Yonhap, 24 May 2010.

unambiguous signal that South Korea was ready, willing, and able to respond to any provocation so as to prevent future adventurism by the North. But Minister of National Defense Kim Kwan-jin made clear that if this should fail South Korea would no longer fall back on diplomacy:

If the enemy attacks our people and territory, I will use force to punish the enemy to make sure it doesn’t even dare to think about it again. The enemy should be punished thoroughly until the source of hostility is eliminated.  

DRP 307 called on the South Korean military to move beyond self-defense and take prompt, focused, and proportional retaliatory actions in order to raise the costs of small-scale attacks to North Korea.

The South Korean response to the Yeonpyeong shelling revealed the efficacy of the ideas spelled out in the DPR 307. Therefore, it could be argued that the operational changes spawned by the Proactive Deterrence Strategy position the South Korean military to deal effectively with North Korean overt provocations.

---


65 According to one Asia watcher: “While many of the defensive reforms undertaken or called for within the rubric of these reforms were undeniably necessary and positive, crisis management and military defense are considerably different missions than deterrence. Establishing deterrence over small-scale attacks from the North is far more complex than defending against them, and carries with it a significantly greater risk of unintentional escalation. Much of this is due to the reality that the intention to deter small-scale attacks, and even the decision to increase the price of small-scale attacks through proportional retaliation, does not change the fundamental strategic dynamics of the Korean peninsula, in which North Korea is able to successfully bring tensions to the brink of crisis secure in the belief that, ultimately, Seoul is more risk averse than Pyongyang and is less willing to accept significant physical or economic damage.” Denmark, Proactive Deterrence.

66 Following North Korea’s third nuclear test in 2013, the South Korea Ministry of National Defense unveiled ship-to-shore and submarine-to-ground cruise missiles. Dubbed the Haeseong-2 and Haeseong-3, respectively, the missiles are modified versions of a surface-to-surface cruise missile unveiled in 2012 but are designed to be launched from a ship or a submarine. The Haeseong-3 will be carried by a new Type 214 submarine, and the Haeseong-2 on a 4,500-ton-class Korean Destroyer (KD) vessel or a 7,600-ton-class Aegis destroyer. Their
In 2013, as North Korea ratcheted up its rhetoric, promising to set Seoul ablaze in response to U.S.-South Korean military exercises, the head of operations for the ROK Joint Chiefs of Staff, Maj. Gen. Kim Yong-hyun warned that “if North Korea pushes ahead with provocations that would threaten the lives and safety of our citizens, our military will strongly and sternly punish the provocations’ starting point, its supporting forces and command.” This was Seoul’s first enunciation of a decapitation strategy designed to raise the stakes for Pyongyang’s decision-making calculus. The challenge comes in how to deal with a covert provocation.

maximum range allegedly covers all of North Korea. According to ADM Cho Yun-hee, the ROK Navy chief of naval operations, this enhanced naval capability gives South Korea the ability conduct pinpoint strikes on North Korea’s core facilities. Presumably, this capability is to serve as a deterrent against North Korean provocations and, if needed, respond to a variety of overt provocations.

67 “Seoul Vows ‘Stern’ Response to North Korean Provocation,” Chosun Ilbo Online, 07 March 2013. A military source in Seoul clarified Maj. Gen. Kim’s statement by noting, “When we refer to command, it usually signifies divisional or corps commanders, but if Seoul comes under attack, the top levels of North Korea’s regime including Kim Jong-un could become targets.”
It is worth noting that the 2013 crisis took place during North Korea’s winter training cycle. The winter training cycle that begins every year in December and is the most intense training period of the year for the KPA. The last week of March is the most intense training period in the cycle. It is the time for the most complex training by the entire army, annually. In a vigorous winter training cycle, all units in the army are raised to full combat readiness as a matter of course and graded by umpires on their speed in attaining that readiness level and the thoroughness of war preparations. If a unit receives a poor grade, it must perform remedial training in April, which is the start of spring planting season. As KPA units must grow much of their own food, remedial training is a hardship. See NightWatch, 26 March 2013.
In the event of a provocation, South Korean planners could be faced with different sets of conditions that would have little in the way of fingerprints. They might have no sign of attribution whatsoever, the circumstances neither confirming nor denying North Korean complicity. Or, they could be almost certain that the act was the work of the North, but have no evident “proof” with which to publicly confront Pyongyang. In either event, South Korea would want to respond, especially if there were a general feeling among the South Korean population that North Korea was responsible.  

The case of Cheonan offers another likely outcome: the proof seems irrefutable, but the North continues to deny culpability. Responding with force in such a case is problematic because time has likely gone by in establishing blame, and, as in the case of Cheonan, China is likely to have at least tacitly taken the side of the North. Also, without conclusive, publishable proof, the United Nations is unlikely to be as helpful as it might otherwise be.

In any response to a North Korean provocation, whether covert and hazy as to authorship or overt and unquestioned, there are challenges. The key elements are timing, which means getting the required permissions in a timely manner, and achieving a proportionality that is accepted by the North and will not raise the specter of continued escalation. It will be important to maintain the distinction between self-defense and outright retaliation for punishment.

**North Korean calculus in responding to the response**

Responding to a North Korean provocation does not necessarily conclude the engagement or put a halt to the ascension up the escalatory ladder.

---

69 One of the major issues that the leadership in Seoul will have to contend with is public opinion. As was seen in public debates over the sinking of Cheonan, the shelling of Yeonpyeong Island, and other security-related events, neither the South Korean polity nor public speak with one voice—whereas North Korea is adept at manipulating its polity and public voice. A third of South Koreans still do not believe their government’s report on the sinking of Cheonan. Therefore, the more time it takes to attribute an attack to the North, the more constrained South Korea is in its ability to militarily respond. This risks undermining domestic legitimacy, since so much hype has been forthcoming from the Blue House and Ministry of National Defense. This provides incentive for the North in the form of an opportunity to embarrass and undermine conservative support in the South.
How North Korea decides to respond to South Korea’s response to its initial provocation will be critical to how the crisis proceeds. Central to Pyongyang’s calculus will likely be its original motive for conducting the provocation in the first place.

In addition to motivation, Pyongyang’s decision-making on how to respond will be tied to its evaluation of the South Korean response primarily in two respects: timing and proportionality. Did South Korea respond fast enough that its actions can be considered defensive and directly associated with the initial provocation? If so, it will be difficult for Pyongyang to disassociate the response from the provocation and characterize it as an offensive act. Did South Korea overreact in its response? If so, North Korea may feel the need to respond in order to avoid looking like the loser in the engagement.

North Korean decision-making in a crisis

As with any country, a number of considerations are likely to influence North Korea’s behavior during a crisis. These include:

- Elite perceptions and beliefs
- Perceptions of the international environment
- Decision-making structure and processes
- Distinctive features that may be unique to the leadership itself.

During the 2013 crisis, North Korea was facing a unique set of circumstances in that Kim Jong-un had only been Supreme Leader for a little over a year and was still working on consolidating his power. He was working within the guidance laid down by his father’s last will and testament, which laid out the need to test critical defense systems (nuclear weapons and ballistic missiles). This tenet of the will led to the sanctions and set North Korea on the path to increased tensions on the peninsula. The will also reportedly called for Kim Jong-un to find a way of securing a peace treaty with the United States that would allow for enduring security for the regime. Only with such a treaty in hand can Pyongyang feel secure enough to turn its attention to the economy, allegedly an area that Kim Jong-il felt that his son needed to address in order to consolidate his power. Finally, Pyongyang, as it had done with every new South Korean administration since 1992, needed to test the Park administration in order to identify red lines and determine areas of weakness and flexibility.

Motivations behind the crisis are one thing. North Korea’s way of conducting the crisis is another. But other aspects—such as the unconditional manner in which North Korea took actions (e.g., nullifying the Armistice Agreement), and the willingness with which it raised the tensions to such a high level while shutting off lines of communication—were probably tied to Kim Jong-un’s leadership style and his desire to make a clear break.
with how his father ran the regime. The fact that Kim was most likely working under a compressed timeline for escalation would partly explain how the regime carried out the crisis. He does not enjoy his father’s legitimacy within the larger regime and thus is under pressure to show results. Therefore, he must react to every perceived insult and provocation from the United States, South Korea, and the international community (UN) in order to avoid looking weak—something Kim Jong-il did not need to worry about. He also lacks his father’s instincts on how to manage a crisis; thus, he must rely on his advisors and placate institutional interests within the regime. Therefore, once the crisis began, the North Korean decision-making and execution process for crisis management most likely became restricted to a group of individuals at various levels of the regime.\footnote{For a more detailed discussion of North Korean leadership dynamics and decision-making under Kim Jong-un, see Ken E. Gause, \emph{North Korean Leadership Decision-making Under Kim Jong-un: A First Year Assessment}, CNA Occasional Paper (forthcoming in 2013).}
The chart above shows the various individuals who were likely involved in the decision-making and execution during the crisis. The inner circle includes Kim Jong-un (the final decision-maker) surrounded by his key advisers and regents: (L-R) Kim Kyong-hui (regent), VMAR Chae Ryong-hae (director of the General Political Bureau), and Jang Song-taek (regent).

The second echelon includes those officials who hold critical portfolios within the high command and Party and are responsible for relevant policy areas or have control over critical resources that could be used in the crisis. These officials can provide advice and intelligence, but have no decision-making authority. They have also cultivated a close relationship with Kim Jong-un since 2010 when he became the heir apparent. They include: (L-R) Kim Yong-kon (KWP Secretary for ROK Affairs), Gen. Kim Yong-chol (Director, RGB), VMAR Hyon Yong-chol (Chief, GSD), Gen. Kim Kyok-sik (MPAF), Gen. Ri Yong-kil (Director, GSD Operations Bureau), Pak To-chun (KWP Secretary for Defense Industry), Chu Kyu-chang (Director, KWP Munitions Department), Gen. O Kuk-ryol (Vice Chairman of the NDC), Gen. Choe Pu-il (MPS), Gen. Kim Won-hong (MSS), Kim Yong-il (KWP Secretary for International Affairs), and Kang Sok-chu (Vice Premier and senior Foreign Policy adviser).

The third echelon is composed of military officers who are responsible for executing operations. They have limited influence and contact with Kim Jong-un other than during guidance inspections and field exercises. He may reach out to them for subject matter expertise. During this crisis, the most likely officers responsible for executing operational orders included: (L-R) Gen. Pak Chong-chun (Director, Artillery Command), LTG Pak Jong-chon (Supreme Command HQ), MG An Ji-yong (Commander, Island Defense), CG Choe Kyong-song (Commander, XI Corps), CG Kang Pyo-yong (Vice MPAF), CG Pyon In-son (Commander, IV Corps), VADM Kim Myong-sik (Commander, KPA Navy), LTG Kim Rak-gyom (Commander, Strategic Rocket Forces), Gen. Ri Pyong-chol (Commander, KPA Air Force), and Gen. Pak Jae-gyong (Vice MPAF).

---

71 In May, following the crisis, Hyon Yong-chol was replaced as Chief of the General Staff by Kim Kyok-sik, who himself was replaced as the Minister of People’s Armed Forces by Jang Jong-nam. Hyon was appointed commander of the V Corps.

72 O Kuk-ryol has close ties to the Kim family and allegedly provides critical advice on issues of crisis management. On some occasions, he might enter the inner circle of decision-making.

73 Recent reporting indicates that CG Pyon In-son has been replaced as commander of IV Corps by Ri Song-kuk. Like Gen. Kim Kyok-sik before him, CG Pyon may have moved into Kim Jong-un’s Personal Secretariat as a military adviser. “North Replaces Commander of Key Frontline Unit,” JoongAng Daily Online, 30 April 2013.
The calculations surrounding timing and proportionality will be central to North Korea’s response, but they will not be the determining factors. Most likely, Pyongyang’s decision-making will be worked out in advance of the provocation and tied to the motivation for the attack. If the motivation is tied to North Korean complaints about issues in the international arena, such as the demarcation of the maritime boundary, it is unlikely to continue up the escalation ladder as long as South Korea’s response is not disproportionate. Overt provocations that North Korea conducts around the NLL are designed to highlight a wrong that Pyongyang feels needs to be corrected. The leadership feels that it is on solid (even legal) footing in its justification for the provocation. The provocation in and unto itself serves the regime’s purpose. There is no reason to escalate the crisis.

If the motivation is tied to internal regime politics, however, the North Korean response is a much more complicated affair. The regime’s calculus at this point is no longer driven by a set of rules or a game plan that it has adhered to in the past, but is hostage to very-near-term political considerations, which are likely opaque to the outside world.  

- In a situation where the regime is trying to burnish the credentials of the Leader, as was suspected to be the case with the Yeonpyeong Island shelling, the regime will likely respond to the South Korean response, but may not be willing to escalate beyond a certain point. Many Pyongyang watchers believe that the response–counter-response dynamics that followed the initial shelling had been pre-planned by North Korea, which quickly began to de-escalate following the South Korean response.

---

54 Pyongyang is trying to signal that North Korea acts by different rules and calculations than it did under Kim Jong-il. Three cases in point have been the unconditional manner in which Pyongyang has handled questions regarding its nuclear program, the Kaesong Industrial Complex, and the Kenneth Bae affair. In all three cases, North Korea has gone out of its way to call outside expectations into question, pointing out that North Korea is not looking for short-term economic gains or trying to get the United States to send a high-level envoy to Pyongyang. It remains to be seen whether this is a short-term strategy to draw a clear distinction between the Kim Jong-il and Kim Jong-un eras or represents a fundamental shift in the regime’s foreign and security policy.
• In a situation where the regime is engaged in a serious internal struggle tied to the Leader or the transfer of power, as was suspected to be the case with the Cheonan sinking, the regime will likely resort to covert provocations and be willing to respond to any South Korean response and not back down as the two sides move up the escalatory ladder. The regime sees its survival in jeopardy. Showing weakness at this point is not an option. In addition, the regime also likely believes that keeping its artillery aimed at Seoul will ensure that South Korea backs down first.

On the Korean Peninsula, one of the most dangerous aspects of possible uncontrolled escalation is the failure to fully comprehend motives, perspectives, or desired end states of other actors involved.

**Understanding the adversary’s calculus**

Actions such as force movements and exercises by the United States and its allies can have unintended consequences as adversaries try to interpret what they are seeing. If these allied actions feed into an adversary’s preconceptions of threat and overlap with certain internal dynamics that make the leadership feel particularly vulnerable, they can enhance a growing paranoia in times of tension. Recently declassified reporting suggests that this happened in 1983 during the NATO exercise ABLE ARCHER, which simulated a period of conflict escalation, culminating in a coordinated nuclear release. The realistic nature of the 1983 exercise, coupled with deteriorating relations between the United States and the Soviet Union and the anticipated arrival of strategic Pershing II nuclear missiles in Europe, led some members of the Soviet Politburo and Soviet military to believe that ABLE ARCHER 83 was a ruse of war, obscuring preparations for a genuine nuclear first strike.

While the U.S.-ROK exercises (KEY RESOLVE/FOAL EAGLE) on the Korean Peninsula in March/April 2013 apparently did not raise fears in Pyongyang to a similar level, the anxiety portrayed in the North Korean media suggested the very real possibility for miscalculation. There is no question that the exercises, which included B2, B52, and F22 flyovers, played on the North Korean leadership’s long-held fears that grand exercises could be used to mask an all-out attack. As with the ABLE ARCHER exercise, FOAL EAGLE overlapped with a major North Korean holiday (Kim Il-sung’s birthday on April 15), which may have enhanced the fear that the attack might come when the regime’s focus was in another direction. The chart below shows some similarities between the events in 1983 and 2013 and serves as a reminder to U.S. and allied planners that something as innocuous as a routine exercise could have impacts not intended if it plays to the fears of an adversary’s leadership. It should also be remembered that an adversary’s situational awareness on which its concerns and fears may be based will likely be opaque to the outside world.

<table>
<thead>
<tr>
<th>ABLE ARCHER (1983)</th>
<th>KEY RESOLVE/FOAL EAGLE (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dates:</strong> November 2-11, 1983</td>
<td><strong>Dates:</strong> March 1-April 30, 2013</td>
</tr>
<tr>
<td><strong>Type:</strong> NATO Command Post Exercise. Involved</td>
<td><strong>KEY RESOLVE:</strong> Exercise Key Resolve 2013 exe-</td>
</tr>
</tbody>
</table>
numerous NATO allies. The 1983 exercise incorporated a new, unique format of coded communication, radio silences, participation by heads of government, and a simulated DEFCON 1 nuclear alert.

Foal Eagle: Foal Eagle 2013 consisted of a series of 20 separate but inter-related joint and combined field training exercises conducted by Combined Forces Command and US Forces Korea components spanning ground, air, naval, expeditionary, and special operations. The exercises included both US and Republic of Korea (ROK) forces. Approximately 10,000 US forces, along with ROK military personnel, would participate in Exercise Foal Eagle.

Adversary’s Calculus: Two years before in May 1981, the Soviet leadership concluded that the United States was preparing a secret nuclear attack on the USSR. To combat this threat, the KGB initiated Operation RYAN to look for indications of an imminent nuclear attack.

With the loss of its Soviet patron at the end of the Cold War and the decline in China’s support for Pyongyang, Kim Il-sung concluded that the United States (supported by the ROK) would try to execute regime change in North Korea. This view was crystallized under Kim Jong-il and the actions of the Bush administration, which characterized North Korea as a member of the “Axis of Evil.” Kim Jong-il’s Will allegedly warned of U.S. aspirations to undermine the Kim regime.

Why This Exercise: Yurii Andropov was ill and in the hospital, thus enhancing worries within the Soviet leadership. On September 1, 1983 the Korean Air Lines Flight 007 (KAL 007) was shot down over the Sea of Japan raising Soviet concerns that the United States would use this incident as a reason to launch an attack. The planned deployment of intermediate-range Pershing II missiles in Western Europe raised Soviet concerns. These missiles, deployed to counter Soviet SS-20 intermediate-range missiles, were a new, untested leader. He had not yet consolidated his power. At age 29, he was also looked on by some within the North Korean high command as incapable of seeing the country through a crisis. For this reason, Kim and his advisors had a strong motive for raising the tension level well beyond what his father had done in similar circumstances in order to show strong resolve in the face of the “enemy.” The 2013 drills were unusual in the level of fury they inspired from the North — Pyongyang threatened nuclear war —
range missiles, represented a major threat to the Soviets. This fear of an undetected Pershing II attack was explicitly linked to the mandate of Operation RYAN. On the night of September 26, 1983, the Soviet orbital missile early warning system (SPRN), code-named Oko, reported a single intercontinental ballistic missile launch from the territory of the United States. While deemed a false alarm, it heightened fears in Moscow. On November 2, 1983, as Soviet intelligence services were attempting to detect the early signs of a nuclear attack, NATO began to simulate one. Some within the Soviet leadership came to the conclusion that the exercise may have been a cover for an actual attack.

Additional Complicating Factors: This exercise overlapped with the November 7 celebration of the Russian Revolution, a national holiday. Soviet planners had long believed that the United States would take such an opportunity to conduct a first strike.

FOAL EAGLE overlapped with the April 15 celebration of Kim Il-sung’s 101st birthday, a national holiday. North Korean planners had long believed that the United States and the ROK would take such an opportunity to attack.

Adversary’s Situational Awareness: Spies on both sides sent messages to the leaderships in Moscow and London (and on to the United States) regarding leadership thinking on the other side.

North Korea is largely cut off diplomatically from the United States and South Korea. During the crisis, Pyongyang was apparently not even reaching out to China for guidance. It interpreted signals in isolation.

Adversary’s Reaction: There is debate on how close the Soviet Union came to launching a nuclear strike.

North Korea threatened an artillery strike in the West Sea. It moved short and intermediate range missiles to the East Coast. At one point, it began to take measures to suggest that a launch of one or more of these missiles was imminent.

U.S./Allied Understanding: Robert Gates, Deputy Director for Intelligence during Able Archer 83, has concluded:

“The information about the peculiar and remarkably skewed frame of mind of the Soviet leaders during those times that has emerged since the collapse of the Soviet Union makes me think there is a good chance—with all of the other events in 1983—that and in the tougher-than-usual U.S. response that some call a case of Washington overplaying its hand. In late March, two nuclear-capable B-2 stealth bombers took off from their Missouri base and flew more than 6,500 miles (10,400 kilometers) to drop dummy munitions on an uninhabited South Korean island before returning home. The United States made a calculated decision to show North Korea that a wave of threatening rhetoric—feverish even by Pyongyang’s standards, and linked to the drills and to U.N. sanctions in early March aimed at punishing North Korea for its latest nuclear test — would be met with strength. Washington made the unusual announcement that the drills would include appearances by both the B-2s and B-52s, the nuclear-capable bombers that have a long and — from the North Korean perspective — menacing history on the Korean Peninsula.

The United States policymakers seemed to recognize a month into the crisis that something needed to be done to de-escalate the situation on the Korean Peninsula. In a shift in signaling (away from the escalatory signals of March), the United States delayed a long-planned test of the Minuteman III ICBM and publicly revealed a new “counter-provocation” plan that described how the United States and South Korea would respond propor-
they really felt a NATO attack was at least possible and that they took a number of measures to enhance their military readiness short of mobilization. After going through the experience at the time, then through the postmortems, and now through the documents, I don’t think the Soviets were crying wolf. They may not have believed a NATO attack was imminent in November 1983, but they did seem to believe that the situation was very dangerous. And US intelligence [SNIE 11–9–84 and SNIE 11–10–84] had failed to grasp the true extent of their anxiety.”

Conclusion

As Kim Jong-un works to consolidate his power in the coming months and years, South Korea and the United States should expect that provocations will continue to be a part of North Korea’s strategy for dealing with the outside world. While provocations may come in many forms, Pyongyang is likely to continue using them to highlight its desire to redraw the maritime demarcation line and do away with the NLL. Now that a new administration has assumed power in Seoul, Pyongyang has revealed its intention to test the mettle of the new administration or even temper any new engagement policy by Seoul that could interfere with internal North Korean politics. Provocations could be a part of this strategy. More worrisome would be North Korean provocations triggered by instability inside the regime. Whatever the motivation, it might not be entirely clear to the outside world.

It is important for South Korean and U.S. policymakers to understand that there can be no “umbrella” deterrent for the myriad kinetic and non-kinetic maritime provocation options available for North Korea, especially because of the varied triggers or pressures that might lead Pyongyang to strike. Strong, clear language that makes clear red lines and promises a forceful response to any provocation is useful, but may ultimately fall on deaf ears in Pyongyang. Even the promise of extending South Korean missile ranges may ultimately prove more symbolic than useful in the tit-for-tat back-and-forth surrounding provocations in the maritime arena.

The dilemma of whether and how to respond to North Korean provocations is not new. In 2010, the National Security Archive released a major new collection of declassified security documents that shed light on the
U.S. government’s attempts to devise military plans to respond to North Korean armed affronts 40 years ago. The study clearly shows that the problems facing the military and diplomatic strategists today are the same in spirit as those faced by U.S. and South Korean policymakers and military commanders in the late 1960s and early 1970s. According to the study:

Perhaps the most prominent overarching theme is the growing realization that, while there are clear and logical reasons for the political leadership to want options that would limit the risks of provoking escalation to wider, and less controllable, conflict, there were no plans that could combine limited action with a guarantee against retaliation and escalation.\(^{75}\)

That said, what can South Korea and the United States do either to deter future provocations or, failing that, to better respond?

**Make it abundantly clear that the United States and South Korea are united in their commitment to deterrence and will respond forcefully to any provocation.**

- Policymakers must avoid public disagreements on how and when to respond to North Korean provocations.

- U.S. policymakers and military commanders must take every opportunity to reinforce U.S. support of South Korea and the defense of the South Korean people.

**Make it clear that the Alliance is able to respond in a proportional way to a range of North Korean provocations.**

- Conduct combined maritime exercises close to the NLL, where the meaning cannot be missed.

- Train and conduct demonstrations to show the South Korean Navy’s ability to conduct anti-submarine warfare (ASW).

- Make defense investments and doctrine toward a forward, active defense that preserves stability and maximizes the safety of South Ko-
rean military and civilian assets from a sudden, small-scale attack from the North.  

- On land, invest in the construction and hardening of modern shelters within civilian population centers, as well as increased training of police and emergency responders to rapidly identify and mitigate North Korean incursions.

- At sea, invest in advanced maritime domain awareness and anti-submarine warfare capabilities (e.g., helicopters to defend against small-boat special forces incursions, and armed unmanned aerial vehicles to patrol the DMZ and vulnerable areas of coastline).

- When North Korean rhetoric and military movements warrant, make it clear that the Alliance is ready for any eventuality.

Ensure that intelligence on North Korean movements is current, and thoroughly analyze potential motivations.

- Be consistent in the use of ISR assets to monitor North Korean activity in and around the coastline.

- Consider being visible in some ISR operations above the NLL in order to show readiness. Be wary that such activity could also prompt a provocation.

- Conduct Red Team analysis on assumptions of North Korean motivations and internal regime dynamics.

---

76 Denmark, *Proactive Deterrence.*

77 Ibid.

78 Ibid.

79 In October (2012), North Korea’s National Defense Commission issued a statement condemning President Lee Myung-bak’s recent visit to the island of Yeonpyeong. The South Korean military responded by stepping up combat readiness by deploying artillery and tank brigades and combat air patrols by F-15K and KF-16. This was accompanied by a statement from the Ministry of National Defense: “If (the North) launches attacks, (the South Korean) military will strongly and thoroughly retaliate against the origin of the attacks and their supporting forces under the right of self-defense...We are closely watching the North Korean military’s movements.”
• Use games and table-top exercises to better understand escalation dynamics with regard to different types of provocations driven by different motivations.

**When responding to a provocation, do it in a timely and proportional manner.**

• Focus on the point of attack, if it is possible to discern.

• Remain in the same domain. If an attack is in the maritime realm, respond in the maritime realm. A response against the base from which the attack originated is acceptable, but indiscriminate attacks on the peninsula are not.

• Pay close attention to North Korean media for possible signals of escalation or de-escalation.
This page intentionally left blank
List of figures

Figure 1. Clashes in the West Sea .......................................................... 13

Figure 2. Jaejang and Mu Islets in the West Sea visited by Kim Jong-un in March 2013 ........................................................ 25

Figure 3. Reconnaissance General Bureau’s structure for maritime operations ............................................................. 35

Figure 4. Escalation dynamics on the Korean Peninsula during the March–April 2013 crisis ................................................ 45