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Deterrence is Crumbling in Korea: How We Can Fix It

Markus Garlauskas and Lauren D. Gilbert





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Acknowledgments

A version of this report was originally written for the US Defense Threat Reduction Agency (DTRA), but it does not necessarily express the views of DTRA or any other US government organization. The principal investigator thanks DTRA for sponsorship, guidance, and support for this study, particularly the members of the Strategic Trends team and the DTRA liaison element at US Indo-Pacific Command (INDOPACOM) headquarters. Thanks also go to all the experts and stakeholders, inside and outside of government, who participated in the study's program events and contributed their perspectives to enrich the analysis. Special appreciation on this point goes to members of the staffs of US Strategic Command, INDOPACOM, and of United Nations Command/Combined Forces Command/US Forces Korea for their willingness to repeatedly donate from their limited time to inform this study with invaluable operational and strategic perspectives at multiple stages throughout the process.

The principal investigator would also like to thank the Indo-Pacific Security Initiative team for their contributions to this project: Lauren Gilbert for her expert insights and co-authorship, Katherine Yusko for her support in the editing and publication of this report, and Kyoko Imai and Emma Verges for their key supporting roles. He extends his appreciation to Commander (USN, Ret.) Fredrick "Skip" Vincenzo for his indispensable contributions to the study and report. Thanks also go to Frederick Kempe, the Atlantic Council's president and CEO, as well as to Gretchen Ehle, Nicholas O'Connell, Caroline Simpson, and James Hildebrand, without whom this study would not have been possible. Lastly, the principal investigator would like to acknowledge Vice President and Scowcroft Center Senior Director Matthew Kroenig and his predecessor Barry Pavel, whose leadership, encouragement, and support was invaluable. This report is intended to live up to their charge to meet General Brent Scowcroft's standard for rigorous, relevant, and nonpartisan analysis on national security issues.



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Cover: A general view of fire assault drill at an undisclosed location in North Korea March 10, 2023 in this photo released by North Korea's Korean Central News Agency (KCNA). KCNA via REUTERS

ISBN: 978-1-61977-314-1

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November 2023

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Executive Summary

hen US experts, policymakers, and commanders assess the state of deterrence today, the conventional wisdom is that deterrence in Korea is strong—other areas, like the Taiwan Strait, are where deterrence needs attention. Upon examination, this widespread confidence in the strength of deterrence in Korea is based on a backward look at long-standing assumptions that are no longer tenable, along with politico-military conditions that are already shifting and are very likely to change even more dramatically in the next five to ten years.

To address this analytic gap, we undertook the "Preventing Strategic Deterrence Failure on the Korean Peninsula" study to instead look forward at the future conditions for deterrence in Korea five to ten years from now, assess the challenges, and recommend actionable mitigation measures. By convening more than one hundred outside experts and stakeholders, consulting extensive existing literature, and conducting a virtual tabletop exercise, this study identified and examined key variables expected to drive the potential for escalation on the Korean Peninsula over the next decade and provided actionable analysis to help avoid a strategic deterrence failure on the Korean Peninsula.

This study found that ongoing changes in North Korean and PRC capabilities and intentions are very likely to combine to drive a dramatically increased risk of strategic deterrence failure on or around the Korean Peninsula in the next five to ten years. It also found that the current trajectory of South Korean and US deterrence capabilities and approaches is unlikely to effectively mitigate these risks. If the United States, in concert with South Korea, does not undertake major adjustments to its capabilities and approaches to strengthen deterrence and resilience in the face of aggression in and around the Korean Peninsula to counteract these drivers and mitigate these risks, the probability of strategic deterrence failure will increase markedly in comparison to today. Meanwhile, the stakes will grow ever higher, and the likely operational and strategic consequences for such failure will multiply as the odds of PRC involvement in a future Korea crisis grow.

Key Findings

 Of all the potential scenarios for strategic deterrence failure in the next decade, Pyongyang seizing an opportunity to launch a full-scale attack to reunify the Korean Peninsula is one of the least plausible. The path toward strategic deterrence failure is far more likely to begin with limited North Korean coercive escalation. Such coercion could result in an escalation cycle fueled by limited South Korean or US responses that lead Pyongyang to escalate further to retake the initiative, which would then drive escalation dynamics that trigger North Korea to launch a preemptive or preventive attack and motivate Beijing to intervene.

- A combination of more precise and capable conventional options for North Korea with a more robust second-strike nuclear deterrent will challenge the credibility of US deterrence by punishment over the next five to ten years, increasing the level to which North Korea believes it can escalate without triggering a regime-ending response. As Pyongyang grows more confident in its own nuclear deterrent and in the likelihood of assertive PRC involvement in Korea to counter its strategic rival, the United States, Pyongyang's perceived viable escalatory options to either press its advantage or retake the initiative will increase in intensity and diversity.
- The likelihood of PRC intervention and interference in a Korea crisis will increase in the coming decade, as PRC military capabilities grow and the PRC-US strategic rivalry heightens. The ROK-US alliance is not yet politically or militarily postured to deter or defeat PRC intervention, and both partners seem unwilling to pay the political costs to confront this growing challenge more directly. This is likely to encourage North Korean adventurism and complicate ROK-US deterrent responses, particularly in the Yellow Sea (also known as the West Sea) near China.
- The ROK-US alliance military posture (including authorities, capabilities, command structure, readiness, and training) has not been designed for the full spectrum of conflict from limited provocations to full nuclear war, and that is not on a path to change in the next ten years. This posture is designed almost exclusively for two possibilities: ROK self-defense against small-scale "provocation" by North Korea or a deliberate transition to combined ROK-US war operations in a large conventional war with North Korea. This posture is unsuited for a rapid, but limited, response to an attack beyond a provocation but short of full-scale war. It is also unsuited for deterring or defeating PRC intervention, or for fighting a war that includes nuclear strikes—all possibilities that the United States and its allies should prepare for.
- Pyongyang's regime almost certainly knows it cannot survive if it triggers an all-out nuclear exchange, but it

will probably see greater viability for limited nuclear employment in the next five to ten years. If North Korea were to employ a nuclear weapon, it would most likely be in a limited manner intended to pose a dilemma for and constrain the ROK-US (and PRC) response. North Korea's increasing capability to conduct a limited

nuclear "demonstration" or tactical strike will give North Korea options that could undermine US extended deterrence globally, even if the immediate US response to such use prevents a catastrophic near-term strategic deterrence failure.

Introduction

"Deterrence works, until it doesn't."

-Sir Lawrence Freedman¹

The time is now ripe to revisit the future of deterrence on and around the Korean Peninsula.

The Korean Peninsula is frequently held up as an example of the effectiveness of US extended deterrence guarantees, and of deterrence in general. Since the signing of the military armistice that brought an end to the Korean War in 1953 without a peace treaty, deterrence has been the watchword in maintaining an uneasy de facto peace. Though North Korea has engaged in threatening rhetoric and saber-rattling, development of weapons of mass destruction in defiance of United Nations (UN) resolutions, and even occasional acts of limited violence, deterrence of a major attack has held firm for nearly seventy years. While some skeptics question whether a nuclear-armed North Korea can be reliably deterred at all, the consensus among national security experts and politicians alike seems to be that deterrence will continue to hold in Korea.2

As a result, US efforts to shore up deterrence are primarily focused elsewhere, where deterrence seems to be much more at risk. When deterrence in Korea is mentioned at all by Americans, it is typically in terms designed to reassure allies that deterrence is strong rather than convey concern.³ In line with this perspective, a study by a prominent US research organization projected deterrence in Korea as "healthy," in marked contrast to the "mixed" situation in the Taiwan Strait.⁴ Deterring aggression against Taiwan is becoming an increasingly central focus of US public discussions on defense issues, with some high-level defense officials suggesting that the People's Republic of China (PRC) might attempt forcible reunification before the close of the decade if not deterred.⁵ Meanwhile, with Russia having successfully conducted a land grab of Crimea in

2014, and now threatening nuclear escalation in the midst of a full-scale war against Ukraine, deterrence in Eastern Europe appears to be teetering on a knife's edge, perhaps more fragile than in the Taiwan Strait.

"Upon examination, confidence in the strength of deterrence in Korea is based on a backward look at long-standing assumptions that are no longer tenable and politico-military conditions that have already begun to shift and are very likely to change even more dramatically in the next five to ten years."

In comparison to the might of Russia and the PRC, and the ambiguity of US defense commitments to Taiwan and Ukraine, effective deterrence in Korea appears simple—at first glance. It is hard to imagine why North Korea, a destitute country, with half the population and a tiny fraction of the wealth of the Republic of Korea (ROK; South Korea)—also backed by the United States—would not be deterred. Given that the Pyongyang regime seems vastly outmatched, so long as Washington or Seoul does not start a conflict, the conventional wisdom is that Pyongyang would not dare risk war or nuclear weapons use for the foreseeable future. As is typical of conventional wisdom, this premise's logic is simple, its implications are comforting, and it is hard to disprove.

¹ Freedman is a deterrence scholar and an emeritus professor of war studies at King's College London. This oft-cited quote is credited to him in: "Nuclear Weapons—The Unkicked Addiction," *The Economist*, March 7, 2015, https://www.economist.com/briefing/2015/03/07/the-unkicked-addiction.

For examples of skepticism on the ability to deter North Korea, see Alex Lockie, "McMaster Thinks North Korea Can't Be Stopped from Attacking the US or Allies," Business Insider, August 14, 2017, https://www.businessinsider.com/hr-mcmaster-north-korea-war-inevitable-deterrence-2017-8; Uri Friedman, "John Bolton's Radical Views on North Korea," The Atlantic, March 23, 2018, https://www.theatlantic.com/international/archive/2018/03/john-bolton-north-korea/556370/.

For example, see Katrin Fraser Katz, Christopher Johnstone, and Victor Cha, "America Needs to Reassure Japan and South Korea," Foreign Affairs, February 9, 2023, https://www.foreignaffairs.com/japan/america-needs-reassure-japan-and-south-korea.

⁴ Michael J. Mazarr, Nathan Beauchamp-Mustafaga, Timothy R. Heath, and Derek Eaton, What Deters and Why: The State of Deterrence in Korea and the Taiwan Strait, RAND Corporation, 2021, https://www.rand.org/pubs/research_reports/RR3144.html.

Jim Garamone, "U.S. Strengthening Deterrence in Taiwan Strait," *DOD News*, Department of Defense, September 19, 2023, https://www.defense.gov/News/News-Stories/Article/Article/3531094/us-strengthening-deterrence-in-taiwan-strait/; Jerry Hendrix, "Closing the Davidson Window," *RealClear Defense*, July 3, 2021, https://www.realcleardefense.com/articles/2021/07/03/closing_the_davidson_window_784100.html.

However, this conventional wisdom on deterrence in Korea could prove wrong—disastrously so. Upon examination, confidence in the strength of deterrence in Korea is based on a *backward* look at long-standing assumptions that are no longer tenable and politico-military conditions that have already begun to shift and are very likely to change even more dramatically in the next five to ten years. As a result, even when deterrence in Korea is examined in depth, such assessments are typically based on the premise of reinforcing it against erosion, not a fundamental re-look.

To address this analytic gap, we undertook the Preventing Strategic Deterrence Failure on the Korean Peninsula study to instead look *forward* at the future conditions for deterrence in Korea five to ten years from now, assess the challenges, and recommend actionable mitigation measures. By convening more than one hundred outside experts and stakeholders, consulting extensive existing literature, and conducting a virtual tabletop exercise, this study identified and examined key variables expected to drive the potential

for escalation on the Korean Peninsula over the next decade and provide actionable analysis to help avoid a strategic deterrence failure on the Korean Peninsula.

It is infeasible to deter every possible North Korean transgression, so this study was designed to focus on the risk of strategic deterrence failure, defined by this study as "adversary escalation to nuclear weapons strikes and/or to full-scale armed conflict against the United States or the Republic of Korea." To keep its scope manageable, the study concentrated on deterrence of military action involving the mass deaths of US and/or allied citizens, excluding less lethal scenarios such as major cyberattacks.

This report summarizes the study's findings, including analysis of the evolving threat capabilities and intentions of North Korea and the PRC, layered against the future deterrent posture of the United States and its allies, to synthesize new insights. The main body of the report concludes with a series of five analytic key findings and corresponding actionable recommendations for the US government and military.

Findings Summary

he study found that ongoing changes in North Korean and PRC capabilities and intentions are very likely to drive a dramatically increased risk of strategic deterrence failure on or around the Korean Peninsula in the next five to ten years while the current trajectory of South Korean and US deterrence capabilities and approaches looks unlikely to effectively mitigate these risks. If the United States, in concert with South Korea, does not undertake major adjustments to its capabilities and approaches to strengthen deterrence and resilience in the face of aggression in and around the Korean Peninsula—changes that would admittedly incur significant political and economic costs—to counteract these drivers and mitigate these risks, the probability of strategic deterrence failure will increase in comparison to today, while the likely operational and strategic consequences for such failure will also increase.

Five key findings of the study are summarized below and are explored later in greater detail along with corresponding recommendations to address the implications of these findings.

- Of all the potential scenarios for strategic deterrence failure in the next decade, Pyongyang seizing an opportunity to launch a full-scale attack to reunify the Korean Peninsula is one of the least plausible. The path toward strategic deterrence failure is far more likely to begin with limited North Korean coercive escalation. Such coercion could result in an escalation cycle fueled by limited South Korean or US responses that lead Pyongyang to escalate further to retake the initiative, which would then drive escalation dynamics that trigger North Korea to launch a preemptive or preventive attack and motivate Beijing to intervene.
 - This study focused on strategic deterrence failure and made no judgment as to the other strategic risks of adversaries' coercion. However, these risks comprise an important subject for future study, as the Biden administration's 2023 North Korea National Intelligence Estimate identifies coercion as the Kim regime's most likely strategy for achieving its foreign policy objectives through 2030.6

"Of all the potential scenarios for strategic deterrence failure in the next decade, Pyongyang seizing an opportunity to launch a full-scale attack to reunify the Korean Peninsula is one of the least plausible."

- We assessed that US and South Korean concessions as a tactic to de-escalate a confrontation are probably not a viable long-term approach, or one that could be used repeatedly without incurring high risks and costs. Such concessions would probably undermine deterrence and fuel a high-risk pattern by generating overconfidence in Pyongyang and Beijing.
- 2. A combination of more precise and capable conventional options for North Korea with a more robust second-strike nuclear deterrent will challenge the credibility of US deterrence by punishment over the next five to ten years, increasing the level to which North Korea believes it can escalate without triggering a regime-ending response. As Pyongyang grows more confident in its own nuclear deterrent and in the likelihood of assertive PRC involvement in Korea to counter its strategic rival, the United States, Pyongyang's perceived viable escalatory options to either press its advantage or retake the initiative will increase in intensity and diversity.
- 3. The likelihood of PRC intervention and interference in a Korea crisis will increase in the coming decade, as PRC military capabilities grow and the PRC-US strategic rivalry heightens. The ROK-US alliance is not yet politically or militarily postured to deter or defeat PRC intervention, and both partners seem unwilling to pay the political costs to confront this growing challenge more directly. This is likely to

⁶ US Office of the Director of National Intelligence, North Korea: Scenarios for Leveraging Nuclear Weapons through 2030, National Intelligence Estimate, June 15, 2023, https://www.dni.gov/files/ODNI/documents/assessments/NIC-Declassified-NIE-North-Korea-Scenarios-For-Leveraging-Nuclear-Weapons-June2023.pdf, i.

- encourage North Korean adventurism and complicate ROK-US deterrent responses, particularly in the Yellow Sea (also known as the West Sea) near China.
- 4. The ROK-US alliance military posture (including authorities, capabilities, command structure, readiness, and training) has not been designed for the full spectrum of conflict from limited provocations to full nuclear war, and that is not on a path to change in the next ten years. This posture is designed almost exclusively for two possibilities: ROK self-defense against small-scale "provocation" by North Korea or a deliberate transition to combined ROK-US war operations in a large conventional war with North Korea. This posture is unsuited for a rapid, but limited, response to an attack beyond a provocation but short of full-scale war. It is also unsuited for deterring
- or defeating PRC intervention, or for fighting a war that includes nuclear strikes—all possibilities that the United States and its allies should prepare for.
- 5. Pyongyang's regime almost certainly knows it cannot survive if it triggers an all-out nuclear exchange, but it will probably see greater viability for limited nuclear employment in the next five to ten years. If North Korea were to employ a nuclear weapon, it would most likely be in a limited manner intended to pose a dilemma for and constrain the ROK-US (and PRC) response. North Korea's increasing capability to conduct a limited nuclear "demonstration" or tactical strike will give North Korea options that could undermine US extended deterrence globally, even if the immediate US response to such use prevents a catastrophic near-term strategic deterrence failure.

Analysis

he study's analysis, summarized below, began with a focus on adversaries, including a forecast of the key variables impacting how future North Korean and PRC capabilities and intentions could affect the risk of strategic deterrence failure on the Korean Peninsula. The study then layered atop this analysis an assessment of how key US and allied capabilities, actions, and postures would either exacerbate or counteract those drivers. Finally, based on this synthesis, and with the help of many experts and stakeholders, the study laid out actionable recommendations for the US government, defense organizations, and military to better counteract or mitigate the risks of strategic deterrence failure.

Rising Deterrence Challenges From Pyongyang and Beijing

Taken individually, the PRC and North Korea each already pose growing risks to US efforts to maintain strategic deterrence in the Indo-Pacific. Recent studies warn of the PRC's increasing capacity to threaten strategic deterrence over the next ten years, while others examine how the growth of North Korean nuclear and missile capabilities in particular is likely to strain US extended deterrence. These two challenges are likely to combine to further heighten the challenges for strategic deterrence around the Korean Peninsula in the coming decade; according to the 2023 North Korea National Intelligence Estimate, for instance, North Korea is more likely to pursue an offensive (rather than coercive) strategy if it believes it can do so while retaining PRC support.

North Korea's Capabilities and Intentions in the Next Decade

As noted above, Korea has arguably been the longest-standing consistent strategic deterrence success story, even if denuclearization efforts have failed. However, the trajectory of North Korea's capabilities, combined with the coercive approach of Kim Jong Un's leadership, suggests that this "golden age" for deterrence in Korea

"The trajectory of North Korea's capabilities, combined with the coercive approach of Kim Jong Un's leadership, suggests that this 'golden age' for deterrence in Korea may soon come to an end."

may soon come to an end. Even though it is unlikely for Pyongyang to believe it could reunify Korea by force or to embark on "a war of choice" that would risk the regime's survival, its expected capability and intent to further stretch the boundaries of limited escalation—as part of its coercive approach—will put strategic deterrence at risk.

The study began with a foundational examination of current North Korean capabilities. Of these capabilities, we assess that North Korea will only have sufficient resources available to maintain the majority as "legacy" capabilities, with limited incremental or niche improvements at best. These "legacy forces" will remain sufficiently formidable, however, to still factor in North Korean and South Korean escalatory calculus in the coming decade. They include the following:

- A large and slowly modernizing, but qualitatively inferior and poorly sustained, ground force, with hundreds of thousands of personnel and thousands of armored vehicles—a force incapable of seizing and occupying the Korean Peninsula in the face of the ROK military's defensive capabilities, but capable of limited offensive operations and defense of North Korea against a counterattack⁹
 - O Large numbers of relatively inaccurate rocket and gun artillery systems capable of massing large

See Matthew Kroenig, *Deterring Chinese Strategic Attack: Grappling with the Implications of China's Strategic Forces Buildup*, Atlantic Council, November 2, 2021, https://www.atlanticcouncil.org/in-depth-research-reports/report/deterring-chinese-strategic-attack-grappling-with-the-implications-of-chinas-strategic-forces-buildup/; Markus Garlauskas, *Proactively Countering North Korea's Advancing Nuclear Threat*, Atlantic Council, December 23, 2021, https://www.atlanticcouncil.org/in-depth-research-reports/report/proactively-countering-north-koreas-advancing-nuclear-threat/; Markus Garlauskas, "The Evolving North Korean Threat Requires an Evolving Alliance," in *The Future of the US-ROK Alliance*, Atlantic Council, February 2021, https://www.atlanticcouncil.org/wp-content/uploads/2021/03/Chapter-4.pdf; Adam Mount, *Conventional Deterrence of North Korea*, Federation of American Scientists, December 18, 2019, https://fas.org/pub-reports/conventional-deterrence-of-north-korea/; Ankit Panda, "Hwasong-12 Test Signals Troubling New Phase in North Korea's Missile Programs," *NK Pro*, January 31, 2022, https://www.nknews.org/pro/hwasong-12-test-signals-troubling-new-phase-in-north-koreas-missile-programs/?t=1652220223738.

⁸ US Office of the Director of National Intelligence, North Korea, i.

⁹ See Kim Min-seok, *The State of the North Korean Military*, Carnegie Endowment for International Peace, March 18, 2020, https://carnegieendowment.org/2020/03/18/state-of-north-korean-military-pub-81232.

volumes of fire, including a small proportion that can reach the greater Seoul Metropolitan Area and a range of systems able to deliver chemical munitions¹⁰

- Large numbers of special operations forces, with the ability to operate at night, with multiple means of airborne, maritime, and land insertion and infiltration to reach targets in South Korea¹¹
- Dozens of mobile liquid-fueled and chemical-, nuclear-, and conventional-capable ballistic missile systems that can reach all of South Korea and most US bases in Japan (e.g., Scud and No Dong)¹²
- Coastal defense artillery, surface naval combatants, naval mines, fighter aircraft, and surface to air missiles in sufficient numbers to contest the airspace and waters surrounding North Korea at least temporarily¹³
- Diesel-electric attack submarines capable of contesting the waters around the Korean Peninsula and of ambiguous limited aggression with special operators, undersea mines, and surprise torpedo attacks¹⁴
- Millions of paramilitary and reserve personnel capable of supporting the defense of North Korea from a ground invasion, enabling domestic stability and control in a crisis, and potentially conducting guerilla warfare against foreign military forces operating in their home areas¹⁵
- Large stockpiles of chemical weapons and a bioweapons program with access to a wide variety of agents but uncertain volume of production capacity¹⁶

 Thousands of underground facilities that provide cover, concealment, denial, and deception for North Korean facilities, forces, and logistics, as well as command and control and other supporting assets¹⁷

In addition to these already-formidable legacy assets, North Korea is very likely to further develop its capabilities in several important categories, based on recent weapons tests, displays, and Kim Jong Un's public guidance. These capabilities have all been at least partially established already but will likely improve markedly in the next five to ten years.

- Growing numbers of new mobile close-, short-, and medium-range ballistic missiles, along with maneuvering (hypersonic) reentry vehicles and cruise missile systems, increasing capability to evade or overwhelm defenses, and improving accuracy to hit point targets with conventional, chemical, or nuclear warheads¹⁸
- A nascent ballistic missile submarine capability, sufficient to reinforce North Korea's second-strike nuclear capability against targets in Northeast Asia and help overcome missile defense of the ROK¹⁹
- Mobile liquid- and solid-fuel intercontinental ballistic missiles (ICBMs) and intermediate-range ballistic missiles (IRBMs), with multiple reentry vehicles and other defense evasion measures sufficient to pose a credible second-strike nuclear threat to Guam, Alaska, and the continental United States (CONUS)²⁰
- Cyberattack capabilities sufficient to achieve disruptive and destructive effects, particularly on civilian targets²¹

See D. Sean Barnett et al., North Korean Conventional Artillery: A Means to Retaliate, Coerce, Deter, or Terrorize Populations, RAND Corporation, 2020, https://www.rand.org/pubs/research_reports/RRA619-1.html.

¹¹ Defense Intelligence Agency, North Korea Military Power: A Growing Regional and Global Threat, 2021, https://www.dia.mil/Portals/110/Documents/News/NKMP.pdf.

¹² See "Hwasong-7 (Nodong 1)," *Missile Threat*, Center for Strategic and International Studies, August 9, 2016, last modified July 31, 2021, https://missilethreat.csis.org/missile/no-dong/; "KN-18 (Scud MaRV)," *Missile Threat*, Center for Strategic and International Studies, April 18, 2017, last modified July 31, 2021, https://missilethreat.csis.org/missile/kn-18-marv-scud-variant/.

¹³ Defense Intelligence Agency, North Korea Military Power, 32.

¹⁴ Ibid., 50-52.

¹⁵ Benjamin R. Young, "Guns in One Hand: Kim Jong Un's Revitalization of the Worker-Peasant Red Guards," *NK News*, September 17, 2021, https://www.nknews.org/2021/09/guns-in-one-hand-kim-jong-uns-revitalization-of-the-worker-peasant-red-guards/.

¹⁶ John V. Parachini, "Assessing North Korea's Chemical and Biological Weapons Capabilities and Prioritizing Countermeasures," RAND Corporation, 2018, https://www.rand.org/pubs/testimonies/CT486.html.

¹⁷ Kyle Mizokami, "North Korea's Underground Bunkers and Bases Are a Nightmare for America," *The National Interest*, January 10, 2020, https://nationalinterest.org/blog/buzz/north-koreas-underground-bunkers-and-bases-are-nightmare-america-112586.

¹⁸ See Missile Defense Project, "Missiles of North Korea," *Missile Threat*, Center for Strategic and International Studies, June 14, 2018, last modified June 14, 2021, https://missilethreat.csis.org/country/dprk/.

¹⁹ Defense Intelligence Agency, North Korea Military Power, 50; Markus Garlauskas and Bruce Perry, "What an 'October Surprise' from North Korea Might Actually Look Like," The New Atlanticist, Atlantic Council, October 1, 2020, https://www.atlanticcouncil.org/blogs/new-atlanticist/what-an-october-surprise-from-north-korea-might-actually-look-like/.

²⁰ Markus Garlauskas, *Proactively Countering North Korea's Advancing Nuclear Threat*, Atlantic Council, December 23, 2021, https://www.atlanticcouncil.org/in-depth-research-reports/report/proactively-countering-north-koreas-advancing-nuclear-threat/.

[&]quot;Guidance on the North Korean Cyber Threat," National Cyber Awareness System, Cybersecurity and Infrastructure Security Agency, April 15, 2020, last updated June 23, 2020, https://www.cisa.gov/uscert/ncas/alerts/aa20-106a.



North Korea conducts a test launch of the Hwasong-18, a solid-fueled intercontinental ballistic missile, in July 2023. KCNA via REUTERS

- Increasing quantity and sophistication of unmanned aerial systems, to include various ranges and types for tactical, operational, and strategic-level reconnaissance and targeting, as well as some attack capability²²
- Growing stockpile of fissile material and nuclear warheads (over fifty), including previously tested fission and thermonuclear warheads, and probably including tactical nuclear warheads²³
 - O Includes the Hwasan-31, a new nuclear warhead introduced in March 2023 that could be small enough to fit on missiles capable of striking South Korea and Japan;²⁴ posters depicted in a

North Korean press release²⁵ indicate that the Hwasan-31 could be delivered via autonomous torpedo, close-range ballistic missile, two different types of cruise missile, and five different types of short-range ballistic missile, which can be fired from mobile launchers and trains²⁶

 New mobile surface to air and anti-ship missile systems to boost the defense of North Korea's airspace and coastline

Together, all these capabilities provide Pyongyang with many options to escalate, dissuade, or defeat ROK-US alliance military responses, providing the basis for Pyongyang's potential to challenge strategic deterrence.

²² Defense Intelligence Agency, North Korea Military Power, 39.

Hans M. Kristensen and Matt Korda, "North Korean Nuclear Weapons, 2021," *Bulletin of the Atomic Scientists* 77, no. 4 (July 2021): 222-36, https://www.tandfonline.com/doi/full/10.1080/00963402.2021.1940803.

Pablo Robles and Choe Sang-Hun, "Why North Korea's Latest Nuclear Claims Are Raising Alarms," New York Times, June 2, 2023, https://www.nytimes.com/interactive/2023/06/02/world/asia/north-korea-nuclear.html.

[&]quot;North Korea Unveils New Nuclear Warheads as U.S. Air Carrier Arrives in South Korea," NBC News, March 28, 2023, Source: Reuters, https://www.nbcnews.com/news/world/north-korea-unveils-new-nuclear-warheads-us-air-carrier-arrives-south-rcna76944.

Ankit Panda, email message to Katherine Yusko, October 12, 2023.



Kim Jong Un examines the Hwasan-31, a new, smaller, tactical nuclear warhead design, in front of a poster depicting a variety of compatible delivery systems, March 2023. Korean Central News Agency

There are three overall mindsets in which we judge that North Korea would choose to use one of these capabilities to escalate, which we have termed "exploit opportunity," "retake initiative," or "preempt/prevent" (see Figure 1). Though domestic politics and threat factors figure into these three categories, escalation driven primarily by domestic considerations—a "diversionary war," for example—was considered out of the study's scope.

The first mindset is one in which North Korea perceives itself to be in control and is escalating for limited political or military advantage to "exploit opportunities," as it frequently does. This would be a mindset of relatively low risk acceptance, so escalation driven by this logic would almost certainly fall well short of strategic deterrence failure, barring tremendous overconfidence on Pyongyang's part.

This would typically lead to fairly modest escalation, like a missile test or demonstration. However, it is difficult, if not impossible, to deter escalation under this logic entirely, even if such escalation would be quite limited. This difficulty is still problematic for US interests because it means it would probably not be viable to deter North Korean coercive threats and demonstrations, as well as weapons testing, through military means.

The second mindset is one in which North Korea is escalating to "retake initiative." This would be a less likely, but more dangerous, mentality, wherein Pyongyang senses it is losing control of events that are taking a threatening path and escalates to regain control of the situation before it deteriorates too far. Risk acceptance in this situation is higher, as the risks and costs of doing nothing are also

North Korea's September 2022 law on state policy for nuclear forces lists "taking the initiative in war" as one of the cases in which it may employ nuclear weapons: see "Law on DPRK's Policy on Nuclear Forces Promulgated," Korean Central News Agency, September 9, 2022, http://kcna.kp/en/article/q/5f0e 629e6d35b7e3154b4226597df4b8.kcmsf.

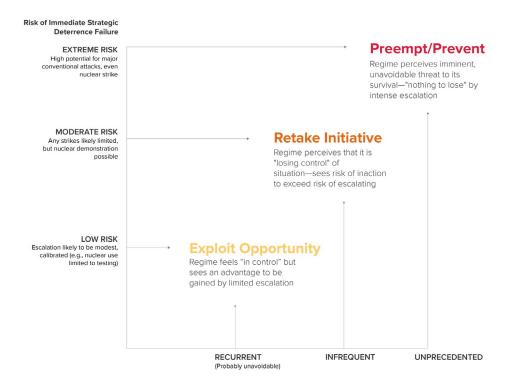


Figure 1. North Korea's Escalation Mindsets

significant. (Pyongyang would be in "the domain of losses" as described by prospect theory.)²⁸ It would be challenging to deter Pyongyang from any escalation at all when such logic applies, but we judge it would be possible to deter extreme options leading immediately to strategic deterrence failure.

The third mindset is one of "preemptive/preventive" escalation, the least likely but most dangerous. If Pyongyang perceives that a war or other outside attempt to end the regime (such as "decapitation strikes" or a foreign-sponsored coup) is unavoidable and imminent, it is likely to escalate steeply. This is logical—North Korea could gain a military advantage by striking first rather than trying to ride out a wave of alliance precision strikes—but it also fits within North Korea's long-standing public narrative and its September 2022 law on state nuclear policy..²⁹ This attack could be designed around the military imperatives of inflicting maximum

damage as quickly as possible. Such an attack could also be relatively limited and calibrated, conducted under the logic of "escalating to de-escalate" in the hope that a robust but limited first strike combined with a credible second-strike threat would allow negotiation of a quick end to hostilities on terms allowing the regime to survive.

This is the most challenging situation for calibrating a military posture for strategic deterrence since once Pyongyang is in this mindset, a diplomatic "off-ramp"—even one guaranteed by Beijing—may not be credible. Unless Pyongyang trusts that such an off-ramp is truly credible, signs of vulnerability or hesitation could encourage Pyongyang to seize a fleeting window of opportunity to strike first, while a strengthening US posture could just trigger quicker or more intense escalation. Therefore, the best way to prevent strategic deterrence failure in such a situation is simply to avoid it in the first place.

For more on prospect theory, see Daniel Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 47, no. 2 (March 1979): 263-292, https://www.jstor.org/stable/1914185; and Kai He and Huiyun Feng, *Prospect Theory and Foreign Policy Analysis in the Asia Pacific* (London: Routledge, 2017), https://www.routledge.com/Prospect-Theory-and-Foreign-Policy-Analysis-in-the-Asia-Pacific-Rational/He-Feng/p/book/9781138107939.

²⁹ For one of many examples of open-source analysis of North Korea's public statements related to preemption, see Léonie Allard, Mathieu Duchâtel, and François Godement, Pre-empting Defeat: In Search of North Korea's Nuclear Doctrine, European Council on Foreign Relations, November 22, 2017, https://ecfr.eu/publication/pre_empting_defeat_in_search_of_north_koreas_nuclear_doctrine/; for more on Pyongyang's September 2022 law expanding the range of conditions under which it could launch a preemptive nuclear strike, see Josh Smith, "New North Korea Law Outlines Nuclear Arms Use, Including Preemptive Strikes," Reuters, September 9, 2022, https://www.reuters.com/world/asia-pacific/nkorea-passes-law-declaring-itself-nuclear-weapons-state-kcna-2022-09-08/.

China's Capabilities and Intentions in the Next Decade

During a future Korean Peninsula crisis, the PRC could indirectly influence Pyongyang's escalation calculus in a way that contributes to strategic deterrence failure, or could itself directly intervene militarily and escalate against US or South Korean forces to the point of a strategic deterrence failure. Yet, despite this potential, in comparison to the many studies of PRC capabilities and intentions in a Taiwan scenario, the PRC's role in a future Korea contingency is under-examined. As a result, the study required new estimates of how the PRC's capabilities and intentions would evolve vis-à-vis Korea, which were developed based on unclassified Defense Intelligence Agency and Department of Defense (DOD) analysis, augmented by academic publications, and refined with the assistance of study participants.

As a foundation for understanding the PRC's role in a Korea crisis, the study first established a forward-looking estimate of China's capabilities in the next ten years, as these capabilities—even if primarily developed for purposes other than a Korea contingency—would open options and leverage for Beijing not previously available. In summary, we judged that PRC capabilities related to a Korea contingency will almost certainly include the following:

- Strategic and tactical nuclear capabilities sufficient to threaten "counter-force" first use (against military targets), and to hold multiple major cities in the US homeland at risk with nuclear weapons in a "counter-value" second strike (against cities)³⁰
- Ballistic and cruise missiles (conventional and nuclear) capable of striking all US and allied bases in South Korea, Japan, and Guam with mass and precision—including overcoming missile defenses to a degree³¹

- Air defense systems capable of tracking (and threatening) air operations over the entire Korean Peninsula and approaches, including systems less than one hundred miles from Korea on the Shandong Peninsula³²
- Air, air defense, coastal defense, surface and subsurface platforms, and sensors sufficient for robust situational awareness and clear operational military superiority in and over the Yellow (West) Sea³³
- Options to quickly move military forces onto the Korean Peninsula, including sealift, limited airborne and airmobile operations into parts of North Korea, and amphibious landings on the west coast of the peninsula³⁴
- Land combat power and logistical support sufficient for large-scale sustained overland intervention across the Yalu River throughout North Korea, supported by airpower, missiles, and a mobile air defense umbrella³⁵
- A fully capable Northern Theater Command able to plan and execute integrated joint operations into and around the Korean Peninsula, supported by national cyber, space, and airborne surveillance assets
- Anti-ship ballistic missile, air, and submarine capability to effectively threaten US and allied ships, including surface action, amphibious, and carrier groups, in the waters surrounding the Korean Peninsula³⁶
- Cyber and informational influence capabilities with extensive access into South Korean and US civilian and commercial unclassified networks, and even a significant ability to disrupt secure military networks³⁷

^{30 &}quot;Nuclear Second-Strike Capability," Asia Power Index 2021 Edition, Lowy Institute, https://power.lowyinstitute.org/data/resilience/nuclear-deterrence/nuclear-second-strike-capability/; China Power Team, "Does China Have an Effective Sea-Based Nuclear Deterrent?" China Power, December 28, 2015, https://chinapower.csis.org/ssbn/.

³¹ Missile Defense Project, "Missiles of China," *Missile Threat*, Center for Strategic and International Studies, June 14, 2018, last modified April 12, 2021, https://missilethreat.csis.org/country/china/; Eric Heginbotham et al., *Chinese Attacks on U.S. Air Bases in Asia: An Assessment of Relative Capabilities*, 1996-2017, RAND Corporation, 2015, https://www.rand.org/pubs/research_briefs/RB9858z2.html.

³² US Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China: Annual Report to Congress*, 2021, https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF, 120; "China Flight-Tests Missile Interceptors," *Arms Control Today*, Arms Control Association, April 2021, https://www.armscontrol.org/act/2021-04/news-briefs/china-flight-tests-missile-interceptors.

³³ For a map of People's Liberation Army weapons systems and deployments in the Northern Theater, see US Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China*, 112.

³⁴ Ibid 110

For an account of Chinese land combat power, see Anthony H. Cordesman, *Chinese Strategy and Military Forces in 2021*, Center for Strategic and International Studies, https://www.csis.org/analysis/updated-report-chinese-strategy-and-military-forces-2021, 146-50.

³⁶ US Office of the Secretary of Defense, Military and Security Developments Involving the People's Republic of China, 61.

³⁷ Ibid VII

Though there was consensus on the above points, a key area of some debate is whether the PRC would, in the next five years, be able to fully execute command and control and logistical support to simultaneous major joint military operations in multiple theaters—i.e., operations under the Eastern and Southern Theater Commands including Taiwan and the South China Sea, respectively, along with the Northern Theater Command including the Yellow (West) Sea and Korean Peninsula. This has major implications for China's options. For the purposes of this study, we assessed that the PRC would have the capability to fight a "two-front war" but would not seek one.³⁸

"The PRC's economic leverage over North Korea may also be tempered if cooperation between Kim and Russian President Vladimir Putin continues to increase, though this relationship is still far from certain."

We also considered the PRC's economic leverage. We concluded that the PRC would continue to have a high degree of economic leverage over Pyongyang as its primary trading partner. However, we assessed that this would not be decisive in controlling North Korea's behavior, only enough to imbue some caution into Pyongyang's calculus toward extreme actions that might have a major effect on PRC interests—at least without a pretext that would resonate in Beijing. The PRC's economic leverage over North Korea may also be tempered if cooperation between Kim

and Russian President Vladimir Putin continues to increase, though this relationship is still far from certain.³⁹ Additionally, we assessed, based on history and statements from PRC officials, that Beijing would be reluctant to dramatically raise the pressure on Pyongyang due to the risk of destabilizing the regime, damaging the already-fragile relationship, or "backing Kim into a corner."⁴⁰

In contrast, the future of the PRC's significant economic leverage over South Korea is less clear. 41 The South Korean government and some ROK businesses have sought to reduce their reliance on trade with the PRC to decrease their vulnerability to PRC coercion.⁴² This intensified in the aftermath of Beijing's economic punishment of South Korean businesses in retaliation for Seoul's decision to host a US Terminal High Altitude Area Defense (THAAD) battery over Beijing's objections.⁴³ Recent trade data reveal a shift in South Korean exports that suggests the beginning of a gradual economic decoupling from the PRC; from 2021 to 2022, South Korean goods exports to the PRC dropped by nearly 10 percent, while goods exports to the United States rose by more than 20 percent, marking the first year in almost two decades that South Korea had exported more goods to the United States than to the PRC.44 Even so, the PRC is likely to remain a primary trading partner of South Korea, given the size of the PRC market, the PRC's proximity, and many South Korean companies' reliance on lower-cost PRC labor and materials to maintain their profit margins. Therefore, we assessed that the PRC could still exert powerful economic leverage over South Korea in the next ten years, though this might not—as in the case of THAAD—sway Seoul's final decisions on core issues of national security.

Given these assessments, the utility of military options in shaping the evolution of a Korea crisis to serve the PRC's interests would likely equal or surpass that of its economic leverage in the next five to ten years. However, even with both its military and economic power, Beijing is unlikely to

For further analysis on the potential for a two-front war in East Asia, please see Markus Garlauskas, "The United States and Its Allies Must Be Ready to Deter a Two-Front War and Nuclear Attacks in East Asia," Atlantic Council, August 16, 2023, https://www.atlanticcouncil.org/in-depth-research-reports/report/the-united-states-and-its-allies-must-be-ready-to-deter-a-two-front-war-and-nuclear-attacks-in-east-asia/.

³⁹ David Pierson, "Putin and Kim's Embrace May Place Xi in a Bind," New York Times, September 16, 2023, https://www.nytimes.com/2023/09/16/world/asia/china-putin-kim.html.

Kristine Lee, Daniel Kilman, and Joshua Fitt, Crossed Wires: Recalibrating Engagement with North Korea for an Era of Competition with China, Center for a New American Security, December 18, 2019, https://www.cnas.org/publications/reports/crossed-wires; Ben Frohman, Emma Rafaelof, and Alexis Dale-Huang, The China-North Korea Strategic Rift: Background and Implications for the United States, Staff Research Report, U.S.-China Economic and Security Review Commission, January 24, 2022, https://www.uscc.gov/sites/default/files/2022-01/China-North_Korea_Strategic_Rift.pdf.

⁴¹ For analysis of China's economic leverage over the Korean Peninsula, see Lee, Kilman, and Fitt, *Crossed Wires*; Seong Hyeon Choi, "Why Is South Korea Hesitant to Boycott the 2022 Beijing Winter Olympics?" *The Diplomat*, January 20, 2022, https://thediplomat.com/2022/01/why-is-south-korea-hesitant-to-boycott-the-2022-beijing-winter-olympics/.

⁴² Kenichi Yamada, "South Korean Companies Shift Production out of China," *Nikkei Asia*, June 22, 2019, https://asia.nikkei.com/Business/Business-trends/South-Korean-companies-shift-production-out-of-China.

For analysis of the THAAD dispute, see Darren J. Lim, "Chinese Economic Coercion during the THAAD Dispute," *The Asan Forum*, December 28, 2019, https://theasanforum.org/chinese-economic-coercion-during-the-thaad-dispute/; Ji-Young Lee, *The Geopolitics of South Korea-China Relations*, RAND Corporation, 2020, https://www.rand.org/pubs/perspectives/PEA524-1.html.

⁴⁴ Christian Davies, "US Overtakes China as Market for South Korean Goods," *Financial Times*, June 22, 2023, https://www.ft.com/content/8073cd37-bbf1-46f0-ad31-43ef88283393.



The United States conducts a test launch of a THAAD interceptor from the Reagan Test Site in the Marshall Islands, August 2019. Missile Defense Agency

be able to simply dictate the outcome rather than influence it. Therefore, we assessed that, in the absence of a direct US-PRC military conflict, the PRC's initial overall goals in a Korea crisis would likely remain conservative—to avoid instability, war, or nuclear weapons use on the Korean Peninsula, consistent with its past stated goals. ⁴⁵ As a result, we concluded that it is unlikely the PRC will intentionally encourage North Korean military escalation, even if it may unintentionally do so. Instead, the PRC would probably seek to restrain such escalation where possible without putting other regional and global interests at risk, destabilizing North Korea, or causing a break with Pyongyang.

However, we also assessed that these considerations are not the only ones that would motivate Beijing in a crisis scenario in the next decade. As PRC capabilities increase and US-PRC rivalry concerns move to the forefront (particularly due to a looming US-PRC confrontation over the future of Taiwan), Beijing will almost certainly pursue a more assertive policy on Korea issues. Over the long term, we judge that the PRC will seek to end or minimize both the US military presence in South Korea and the ROK-US alliance. Beijing could attempt to use a crisis to advance this goal. In addition, as a crisis evolves and the potential rises for the Kim regime

or even the North Korean state itself to fall, other considerations will probably come to the forefront for Beijing. We assessed that the PRC would seek to prevent the establishment of ROK-US military control over North Korea, and of a unified Korean state that would host US forces or be more inclined to choose Washington over Beijing as a security partner. This leads to important judgments:

- The PRC will be increasingly inclined and able to posture forces in response to US and/or allied military actions, particularly in/near the Yellow (West) Sea where it has a clear advantage, possibly escalation dominance.
- The PRC will be willing and able to credibly threaten military intervention, beyond exerting diplomatic and economic pressure, in a Korea crisis if Beijing perceives that its interests are not being sufficiently addressed.
- The PRC is willing to risk war to prevent or block a South Korean-US counter-offensive into North Korea taking place without its consent—such consent is very unlikely to be given for a major ground

^{45 &}quot;Xi Says China Ready to Work with DPRK to Preserve Peace on Korean Peninsula," Xinhua News, March 22, 2021, http://www.xinhuanet.com/english/2021-03/22/c_139827776.htm.



South Korean President Yoon Suk Yeol and United States President Joe Biden meet in Washington, D.C., and announce the establishment of a US-ROK Nuclear Consultative Group, April 2023. Official White House Photo by Cameron Smith

counter-offensive into North Korea or another operation that appears to move toward regime change or Korean unification.

These judgments, taken together, mean that a major military crisis with North Korea holds a significant risk of either strategic deterrence failure or of a major strategic setback for the ROK-US alliance. A PRC military intervention could result in large-scale combat between PRC forces and US and/or ROK forces if South Korea and the United States move forward with robust military responses to North Korean aggression. Alternately, if Seoul and Washington were to hesitate in the face of threatened intervention or tolerate it, this could reinforce the impunity of the Kim regime and leave Beijing in a stronger position of influence over the future of the peninsula. A cooperative intervention among the PRC, South Korea, and United States (possibly with others under a UN flag) instead is favored by some experts, but these three states appear unlikely to be able to achieve the level of trilateral trust necessary for such a cooperative intervention in the next five to ten years. Ultimately, this more optimistic scenario would require a diplomatic success outside the scope of this analysis.

"The deterrence postures of the United States and South Korea must be considered simultaneously and holistically."

US and Allied Strategic Deterrence Posture In Korea

Given the intertwining of US and South Korean military postures in Korea, along with the established processes and norms of alliance coordination that typically prevail when Pyongyang escalates, the deterrence postures of the United States and South Korea must be considered simultaneously and holistically. Analysis of deterrence in Korea must also recognize that US leaders no longer have the dominant role in determining a South Korean-US response to North Korean escalation, nor are there even many US unilateral military options, short of strategic strikes, that are truly independent of South Korea.



A U.S. B-52 bomber and C-17 fly with South Korean Air Force F-35 fighter jets during a US-ROK joint air exercise in South Korea, December 2022. South Korean Defense Ministry via AP.

Unlike in decades past, South Korea possesses the vast majority of the alliance's conventional military capability available to respond to North Korean escalation in a timely manner—including the capability to unilaterally escalate to attempt massive conventional missile strikes against North Korea's strategic deterrence forces and leadership. Most of these capabilities will advance further in the coming decade, particularly with further development of a new ROK Strategic Command slated for initial establishment in 2024.46 South Korea also has the lead for dealing with limited North Korean military escalation on or around the peninsula, at least until strategic deterrence is failing. As a result, several experts we consulted with posited that the United States is more likely to mitigate many of the risks to strategic deterrence indirectly rather than directly, by helping shape South Korea's future policies, plans, capabilities, or crisis responses.

This means that military preparation for or a response to North Korean escalation could be at the mercy of the perceptions (or misperceptions) and priorities of ROK political officials, or even South Korean domestic political sentiment. South Korean unwillingness to align with the US assessment, or to concur with US proposals, could stymie even the best-considered approaches. Innovations such as the US-ROK Nuclear Consultative Group are a step in the right direction in terms of strengthening mechanisms for cooperative analysis and policy coordination on deterrence. However, given how little "skin in the game," continuity, and expertise the United States has on some of the key issues, ROK officials may be far better positioned to calibrate some key deterrence efforts than their well-meaning US counterparts.

Our research also found that domestic and organizational political inertia prevailing in South Korea, the United States, and bilateral ROK-US alliance institutions themselves can override realistic appraisals of risks posed by North Korean escalation, particularly years from now. This inertia generally engenders cautious, incremental changes, focused on reassuring South Koreans rather than deterring Pyongyang, which could cause the alliance to fall behind the developing situation over the next decade. In some cases, inertia

⁴⁶ Clint Work, "Navigating South Korea's Plan for Preemption," War on the Rocks, June 9, 2023, https://warontherocks.com/2023/06/south-koreas-plan-for-preemption/.

instead leads to retention of destabilizing approaches and messaging counterproductive to preventing a strategic deterrence failure—as in the continuing insistence by some ROK officials on preparing to conduct preemptive strikes, despite the practical difficulties of pre-emption and the risk that such threats would induce Pyongyang to strike first.⁴⁷ Similarly, South Korea's continued emphasis on preparing retaliatory responses against North Korean leadership targets could either be taken by Pyongyang as a bluff, or could lead to uncontrolled escalation if carried out.⁴⁸

"The ROK-US alliance's military posture—including authorities, capabilities, command relationships, disposition of forces and bases, training, and logistics—was not designed to deal with the present threat, and is unsuited to face the challenges to strategic deterrence in Korea as they are likely to evolve over the next ten years."

Taking all this into account, the study's initial findings were derived from a baseline that assumed continuation of US and ROK plans, policies, doctrine, acquisition timelines, and strategies currently slated for implementation in the next five to ten years, or those already in place. As the study was designed to develop actionable recommendations to address the risk of strategic deterrence failure, the analysis remained open to the possibility of major changes from the baseline in the years ahead if recommendations are adopted.

With the looming challenges to strategic deterrence the study identified, many of its most important actionable recommendations would require changes substantial enough to incur significant political or economic costs for Seoul or Washington. When vetting and shaping such recommendations, we ensured they would be technologically, financially, legally, politically, and operationally plausible provided the political will existed at the executive level to pursue such a change over several years. However, experience suggests that pushback against even modest recommendations could be formidable, particularly if they are pursued before North Korean escalation forces an issue to the forefront and provides urgent justification for change. Fortunately, South Korean and US decision-makers could justify changes by highlighting limited escalatory actions such as North Korea's record-breaking levels of missile testing throughout 2022 and continuing through 2023.⁴⁹

As detailed in the "Key Findings and Recommendations" section, one of the study's key findings is that the ROK-US alliance's military posture—including authorities, capabilities, command relationships, disposition of forces and bases, training, and logistics—was not designed to deal with the present threat, and is unsuited to face the challenges to strategic deterrence in Korea as they are likely to evolve over the next ten years.

First, and foundationally, the alliance's military command structure is still hamstrung by mechanisms established in another era; founded in 1978 with the establishment of ROK-US Combined Forces Command (CFC), it was modified by the 1994 transition of operational control (OPCON) of all South Korean forces during non-wartime conditions to the ROK Joint Chiefs of Staff (ROK JCS).50 Since 1994, CFC, a combined (binational ROK-US) staff headed by a US four-star general, has had a circumscribed role confined to training exercises and planning, without operational control of forces—its day-to-day role is primarily to prepare to control the alliance's military operations in a full-scale (conventional) war. This bifurcation between CFC and ROK JCS, an arrangement whose shortcomings may have been manageable for decades, is likely to leave the alliance badly served in a range of scenarios. This will even remain the case if the ongoing transition of OPCON is completed as planned and a South Korean officer leads the combined headquarters.⁵¹ Because of this system, there is not a clear mechanism for commanding and controlling joint combined operations of ROK-US forces in a limited conflict, while neither arrangement suits a conflict that

⁴⁷ Jeongmin Kim, "Yoon Suk-yeol Backs 'Preemptive Strike' to Stop North Korean Hypersonic Attacks," NK News, January 11, 2022, https://www.nknews.org/2022/01/yoon-suk-yeol-backs-preemptive-strike-to-stop-north-korean-hypersonic-attacks/.

^{48 &}quot;S. Korea Renames 'Three-Axis' Defense System amid Peace Efforts," Yonhap News Agency, January 10, 2019, https://en.yna.co.kr/view/AEN20190110014000315.

⁴⁹ Chad De Guzman, "North Korea Keeps Launching Missile Tests. How Worried Should We Be?" TIME, September 13, 2023, https://time.com/6266737/north-korea-ballistic-missile-tests-2023/.

⁵⁰ For a brief history of the CFC, see "Combined Forces Command," United States Forces Korea, n.d., https://www.usfk.mil/About/Combined-Forces-Command/, accessed January 2022.

⁵¹ For more information on OPCON transition, see Sean Creamer, "Setting the Record Straight on OPCON Transition in the U.S.-ROK Alliance," National Bureau of Asian Research, July 16, 2021, https://www.nbr.org/publication/setting-the-record-straight-on-opcon-transition-in-the-u-s-rok-alliance/.

goes nuclear. Participants described this phenomenon as a "light switch" with only two settings or "having only a five-dollar or a hundred-dollar bill." 52

This light-switch paradigm of wartime or peacetime is problematic. Study participants argued that US deterrence efforts in and around Korea should not rely on capabilities that are not either already in the area, or able to visibly project power from their normal operational or base areas well away from the peninsula. Any one of three key factors could be sufficient to delay or prevent movement of additional key capabilities to Korea during a crisis in time to make a difference:

- The political imperative to avoid the perception of transitioning to a war footing
- The practical challenges of quickly deploying additional combat power over long distances
- The risk of pushing Pyongyang into a "preemptive" mindset

One study participant noted: "When it comes to a crisis on the [Korean] Peninsula, you've got what you've got. Once the crisis starts, reinforcing USFK (United States Forces Korea) to strengthen strategic deterrence is just not realistic. The reinforcements will come only after it's clear that strategic deterrence has failed and we're going to war!" This suggests that most off-peninsula US military assets could be useful for deterrence by punishment approaches at best. Such use still would require Washington to convince Pyongyang that the United States has the political will to bring in forces to fight a war if North Korea escalates beyond a certain level—and would require Seoul to go along.

The study concluded that USFK's force posture as it exists today is largely a legacy of choices made decades ago and has little to do with today's requirements for strategic deterrence of North Korea—it is not a posture designed "from the ground up." An example of a choice that has complicated strategic deterrence is the decision to enable large numbers of US noncombatant family members to accompany service members to live on and around US military bases. Their presence enables longer overseas tours, thereby signaling sustained US commitment, seemingly reinforcing deterrence of North Korea and reassurance of South Korea. However, these civilians would be a liability in an escalating crisis, putting USFK in a position where military family members could be virtual hostages to the threat of North Korean military action. Meanwhile,

a noncombatant evacuation operation in Korea has come to be seen by both North and South Koreans as a clear signal that the United States plans imminent strikes. Such an evacuation could tip North Korea into a preemptive mindset while triggering economic disruptions and panic in South Korea, straining the alliance in a crisis—even if Seoul could be convinced that the United States would not strike unilaterally.

Similarly, the decision to concentrate the US basing footprint in South Korea from a scattering of bases, many of them in populated areas in or north of Seoul, into new facilities in larger bases well south of Seoul, like Camp Humphreys, was designed to enable efficiencies, longer tours, and a better quality of life.⁵³ However, these large groupings provide North Korea the opportunity to fire missiles at key US bases with minimal risk to civilian structures as collateral damage. Deterrence theory suggests such military concentrations are also tempting targets for preemptive nuclear strikes.

Lastly—and perhaps most problematically from a strategic perspective—the alliance's strategic and operational posture has generally steered away from deterring the PRC militarily or embracing more multilateral approaches to deterrence. Most experts we spoke with believed that this was due primarily to South Korea's overriding domestic concerns about the economic costs of antagonizing Beijing and suspicion of being drawn into an "anti-China" military coalition. Some, however, noted that the "division of labor" between USFK and US Indo-Pacific Command (INDOPACOM), wherein USFK focuses on North Korea and INDOPACOM on the PRC, was a primary factor leading to organizational stove-piping that obstructs a more realistic and holistic approach to countering the future PRC challenge around Korea.

Synthesis and Conclusion: Rising Risks for Strategic Deterrence

Based on this analysis, the risk of strategic deterrence failure stemming from a crisis initiated by North Korean escalation will increase dramatically in the next ten years if North Korean, PRC, South Korean, and US capabilities and intentions continue to develop along their current trajectories. Given expected growth in North Korean capabilities, there are three key trends that that current US and South Korean approaches appear unlikely to counteract:

⁵² The second quote is from a serving US military officer who credits then-Chief of Staff of the Army General Peter Schoomaker as having coined this metaphor in a different but related context.

⁵³ See Hyung-jin Kim and Tong-hyung Kim, "US Ends 70 Years of Military Presence in S. Korean Capital," *AP News*, June 29, 2018, https://apnews.com/article/d85519e00e5042739e0fde2fdb295bc8.



Kim Jong Un and his daughter, Kim Ju Ae, watch a test launch of the Hwasong-18 intercontinental ballistic missile in April 2023. Korean Central News Agency.

- As North Korea develops improved capabilities for precise limited strikes—such as more accurate missiles capable of evading missile defenses to strike military targets with minimal risk of civilian casualties—Pyongyang is more likely to believe limited escalation could succeed without triggering regime-threatening responses.⁵⁴
- The increasing credibility of North Korea's second-strike nuclear deterrent, particularly its growing capability to reach the contiguous United States (CONUS), will raise the level to which Pyongyang believes it can escalate while minimizing retaliation, by forcing the alliance to choose between a small-scale response or risking full-scale nuclear war.
- As North Korea's tactical nuclear capabilities increase and diversify, this raises the probability that

North Korea will see viable options for very limited nuclear use that could help achieve the regime's politico-military objectives in a high-stakes conflict or confrontation—without necessarily triggering regime-ending retaliation.⁵⁵

The increasing risk to strategic deterrence posed by these trends will be heightened by their potential to "stack" upon each other, and the direct and indirect threats that PRC actions could pose for strategic deterrence failure will further exacerbate this risk. In addition to the risks to strategic deterrence presented by direct PRC intervention, as noted previously, the PRC's capabilities and likely behavior could unintentionally encourage Pyongyang to escalate in a crisis. Though we assessed that Beijing would try to restrain North Korean escalation—other than in scenarios outside the scope of this study—the effect of PRC efforts to restrain the escalation of a crisis could have the opposite effect.

Markus Garlauskas, "The Evolving North Korean Threat Requires an Evolving Alliance," in *The Future of the US-ROK Alliance*, Atlantic Council, February 2021, https://www.atlanticcouncil.org/wp-content/uploads/2021/03/Chapter-4.pdf.

For an example of limited military conflict initiated by North Korea, see Markus Garlauskas, "North Korea's Arena of Asymmetric Advantage: Why We Should Prepare for a Crisis in the Yellow Sea," CNA, October 2021, https://www.cna.org/CNA_files/PDF/North-Koreas-Arena-of-Asymmetric-Advantage-Why-We-Should-Prepare-for-a-Crisis-in-the-Yellow-Sea.pdf.

Greater potential for PRC involvement could encourage Pyongyang to believe that Washington and Seoul will hesitate due to fear of a military response from Beijing. As the credibility of PRC nuclear and conventional military capability increases, Pyongyang will probably believe it can escalate further while minimizing the risk of unacceptable US or South Korean retaliation. Generally, the PRC is likely to affect Pyongyang's escalation calculus in the following ways:

- As the US-PRC rivalry becomes the dominant strategic lens in Beijing and Washington, the potential that North Korea will see opportunities to play one off against the other and Seoul will increase. In the event of an escalating PRC-US confrontation or conflict sparked by other issues, this potential is heightened.
- As PRC capability and apparent intent to intervene increases, Pyongyang will judge it increasingly unlikely that Seoul and Washington would take the risk of either a major ground offensive into North Korea, or of strikes intended to destabilize or decapitate the North Korean regime—as either could trigger a PRC intervention.
- In this strategic context, as North Korea develops a wider range of more precise and more effective non-nuclear military options for limited attacks in the next decade, Pyongyang is also more likely to see options to escalate without meaningful PRC punishment as Beijing dissuades a strong reaction from Seoul or Washington.

"Greater potential for PRC involvement could encourage Pyongyang to believe that Washington and Seoul will hesitate due to fear of a military response from Beijing."

These phenomena could also have a mutually reinforcing effect that tilts Pyongyang's calculus toward perceiving that it could escalate further with lower risk of retaliation. All these phenomena, however, are contingent upon Beijing proving unable to meaningfully change Pyongyang's perceptions. Beijing's past difficulties in influencing Pyongyang's calculus suggests this would be challenging, but not necessarily impossible.

Conversely, if Beijing breaks from its past patterns, and dramatically raises the pressure on Pyongyang to the point where it appears that Beijing is willing to see the fall of the Kim regime, this is likely to put North Korea into a "nothing to lose" mindset where the logic of using nuclear weapons first would be compelling. When examined from this perspective, Beijing's past logic in showing restraint toward Pyongyang, though often frustrating from the perspective of Washington, is understandable and may even be desirable for strategic deterrence.

Key Findings and Recommendations

Finding: Of all the potential scenarios for strategic deterrence failure in the next decade, Pyongyang seizing an opportunity to launch a full-scale attack to reunify the Korean Peninsula is one of the least plausible. The path toward strategic deterrence failure is far more likely to begin with limited North Korean coercive escalation. Such coercion could lead to an escalation cycle fueled by limited South Korean or US responses that lead Pyongyang to escalate further to retake the initiative, which would then drive escalation dynamics that trigger North Korea to launch a preemptive or preventive attack and motivate Beijing to intervene.

With this in mind, the study identified three potential mindsets in Pyongyang that could lead to North Korean escalation, each with distinct deterrence implications. To prevent strategic deterrence failure, ROK-US deterrence efforts should deter North Korean escalation without pushing Pyongyang to the third and highest-risk category of mindset. These three levels include the following:

- "Exploit opportunity"—North Korea perceives itself to be in control of the situation, escalating for advantage (relatively low risk acceptance)
- "Retake initiative"—North Korea perceives it is losing control of the situation, feels threatened, and escalates seeking to gain control of the situation (increasing risk acceptance, "sense of urgency")
- "Preempt/prevent"—North Korea perceives that an external threat of potential regime-ending scope is unavoidable and/or imminent, so escalates intensely and preemptively or preventively (high risk tolerance, "nothing to lose")

Recommendation: The US government, working closely with ROK counterparts, should change the alliance's public messaging and guidance to relevant military commands to strongly favor deterrence by denial approaches and reduce reliance on deterrence by punishment approaches. The goal of this change should be to undermine North Korea's confidence in escalatory options without further threatening the regime. To enable this, the US and South Korean militaries should place a renewed emphasis on showing capability and confidence to absorb a North Korean attack, respond proportionally, and win. This would include improving

and demonstrating active and passive missile defenses, as well as visibly training for resilience in the face of a missile attack. US leaders should strictly avoid messaging or actions even suggesting that preemption or "decapitation strikes" are part of alliance thinking and ask South Korea to follow suit.

Recommendation: The United States should develop and propose new offers of defense crisis management and transparency systems to North Korea—although these are typically rebuffed—in an effort to reduce the risks of miscalculation leading to a preventive or preemptive attack by North Korea. To enable this approach, the US government should grant greater authorities to United Nations Command (UNC) and USFK to pursue military-to-military engagement with North Korea. These mechanisms should build upon, rather than attempt to replace, the armistice maintenance mechanisms with new military-to-military channels. Absent new authorities, UNC should work to preserve and enhance crisis management mechanisms between the UNC Military Armistice Commission (UNCMAC) and North Korean counterparts. UNC should also work closely with US and ROK officials to maximize US and ROK governments' understanding and use of existing crisis management mechanisms, including the military hotline, the "General Officer Talks" forum, and UNCMAC investigations of armistice violations.

Recommendation: The US defense community and military commands with responsibilities relating to Korea should pursue the study, development, and execution of approaches to achieve subnational deterrence effects on North Korea, including targeted influence of mid-level actors, to delay or prevent escalatory moves or overreactions by subordinates to Kim Jong Un that may fuel escalation dynamics. The US government should sponsor additional analytic work on the concept of subnational deterrence, which is summarized in Appendix A.

Recommendation: The US government should sponsor and conduct studies, analysis, and gaming on the effects of North Korean domestic instability dynamics on escalatory decision-making since this issue is potentially key for strategic deterrence but was outside the study's scope.

Finding: A combination of more precise and capable conventional options for North Korea with a more robust second-strike nuclear deterrent will challenge the credibility of US deterrence by punishment over the next five to ten years, increasing the level to which North Korea believes it can escalate without triggering a regime-ending response. As Pyongyang grows more confident in its own nuclear deterrent and in the likelihood of assertive PRC involvement in Korea to counter its strategic rival, the United States, Pyongyang's perceived viable escalatory options to either press its advantage or retake the initiative will increase in intensity and diversity.

Recommendation: The ROK-US Security Consultative Meeting (Ministerial-level) and Military Committee (4star level) alliance coordination mechanisms should work together to provide guidance and structures that will enhance the alliance's ability to conduct a "quick, combined, and calibrated" ROK-US response to limited North Korean aggression to enhance deterrence by denial. This should include the publicly announced development of a combined (ROK-US) and joint task force with the mission of preparing to command and control a short-notice ROK-US alliance military operation to respond to North Korean aggression in scenarios short of war but beyond a small-scale ROK self-defense response. Such a response probably holds the best chance of convincing Pyongyang that further escalation will not shake the ROK-US alliance's resolve or unity and will not achieve any military advantage, while being sufficiently restrained to send a clear assurance that a regime-ending ROK or US attack will not be forthcoming if Pyongyang shows restraint. The study's research suggests that it would be very difficult to achieve this balance with military responses that are slow, unilateral, and/or not calibrated carefully to fall within a relatively narrow range on the escalatory "ladder."

Recommendation: The US government should allocate resources and provide guidance to help USFK enhance its force posture, capabilities, and training to stay ahead of growing North Korean capabilities and improve deterrence by denial. This should include deployment, and then permanent stationing of reinforced missile defenses, anti-rocket systems, and anti-unmanned aerial vehicle (anti-UAV) systems for all US bases in Korea, including the deployment of an existing US Iron Dome battery and a follow-on system produced under the Indirect Fires Protection Capability (IFPC) Program, currently in development . USFK, CFC, and South Korean

military training should emphasize resiliency, hardening, and dispersion against North Korean missiles, and emphasize such training in public messaging.

Recommendation: The United States government should seek an agreement with South Korea for standing integration of USFK missile defense assets and sensors into a combined air and missile defense architecture to reinforce deterrence by denial of North Korean missile attacks. To respect political sensitivities, this could be designed as integrating USFK assets into an on-peninsula-only structure, with a South Korean commander in the overall lead, rather than integrating ROK systems into a US-led regional architecture. In implementing this recommendation, preference should be given to using ROK systems to engage incoming missiles in situations short of war where US bases are not firing in self-defense.

Recommendation: The US government should ensure that continued investment in national missile defense denies Pyongyang the capability to reliably and credibly threaten the US homeland with second-strike nuclear capability despite expansion in numbers of North Korea's ICBM force and enhancements to its missile defense evasion capability.

Finding: The likelihood of PRC intervention and interference in a Korea crisis will increase in the coming decade, as PRC military capabilities grow and the PRC-US strategic rivalry heightens. The ROK-US alliance is not yet politically or militarily postured to deter or defeat a PRC intervention, and both partners seem unwilling to pay the political costs to confront this growing challenge more directly. This is likely to encourage North Korean adventurism and complicate ROK-US deterrent responses, particularly in the Yellow (West) Sea near China.

Recommendation: CFC and USFK, with the full support of the US government, should shift from an explicit focus only on North Korea to a broader focus on protecting South Korea from aggression. This should encompass deterrence of the PRC and preparations to defeat a PRC intervention without necessarily explicitly stating the PRC in the commands' mission statements. This should be maintained by any new combined ROK-US headquarters, if one replaces CFC. US officials should work closely with ROK counterparts to ensure that South Korea supports this shift, and to avoid any perception that this is an effort to pull the Seoul into a confrontation with Beijing.

Recommendation: The DOD and the US Joint Chiefs of Staff should undertake a comprehensive re-look at US command and control relationships in Northeast Asia to address potential PRC threats in and around Korea, particularly in the Yellow (West) Sea. At a minimum, the study should consider the pros and cons of reviving a separate Far East Command, expanding USFK's role and area of responsibility within INDOPACOM, and establishing or adjusting subordinate commands or task forces within INDOPACOM.

Recommendation: INDOPACOM, in close coordination with UNC, CFC, and USFK, should seek more multilateral (such as Australian, United Kingdom, or Canadian) rotational contributions of aircraft and maritime patrols or exercises around or near South Korea to reinforce the international commitment to defense and deterrence against threats to South Korea. This should be part of a comprehensive approach directed by the White House and Pentagon and led by INDOPACOM, to "internationalize" responses to and deterrence of escalation against the ROK in a way that transcends US-PRC strategic competition. This should build upon multilateral efforts to monitor North Korean maritime sanctions evasion with military assets already being coordinated by the US 7th Fleet; due to political obstacles and sensitivities, it should not simply be an expansion of the UNC mission.

Recommendation: CFC and USFK, in coordination with INDOPACOM, the Pentagon, and South Korean counterparts, should develop and practice scalable military options to expand US military presence and operations in the Yellow (West) Sea and Northwest Islands area in support of the ROK Northwest Islands Defense Command or of an alternative ROK, US, or ROK-US military command. These options would be designed to both increase deterrence and limited response options against a North Korean attack there, as well as discourage PRC intervention in this area. Such options should include a standing rotational presence of US special operations or other appropriate personnel on the Northwest Islands, capable of calling for standoff precision fires against North Korean—and PRC, if necessary-forces threatening ROK-US forces and personnel in this area. UNC should also explore options to establish and maintain a rotation of non-ROK and non-US observers on the Northwest Islands from UN Sending States.

Recommendation: US and South Korean organizations should sponsor and conduct additional studies and wargaming on the potential for the PRC to intentionally seek a confrontation around Korea as part of a larger conflict, such as one over Taiwan. The US government

should direct additional research and gaming resources to support such an effort.

Finding: The ROK-US alliance military posture (including authorities, capabilities, command structure, readiness, and training) has not been designed for the full spectrum of conflict from limited provocations to nuclear war, and is not on a path to change in the next ten years. This posture is designed almost exclusively for two possibilities: ROK self-defense against small-scale "provocation" by North Korea or a deliberate transition to combined ROK-US war operations in a large conventional war with North Korea. This posture is unsuited for a rapid, but limited, response to an attack short of full-scale war. It is also unsuited for deterring or defeating PRC intervention, or for fighting a war that includes nuclear strikes—all possibilities that the United States and its allies should prepare for.

Recommendation: The US government should work with ROK counterparts and CFC to finally complete the long-delayed transition to a new ROK-US "wartime" OPCON structure to avoid a continued focus on preparing for OPCON transition, distracting from the requirements of reinforcing deterrence. As part of completing this transition, a new post-transition combined ROK-US headquarters should be empowered with the authorities and capabilities to command and control a limited ROK-US combined operational military response by a subset of ROK-US forces in conditions short of a "full wartime" situation. This would help "deter by denial" limited North Korean aggression beyond a localized incident by making it clear that South Korea and the United States could respond together to a limited attack and would not be forced into choosing a unilateral ROK response or taking the risk of transitioning to a war footing. This would also support aforementioned recommendations by enabling a "quick, combined, and calibrated" military response to limited North Korean aggression.

Recommendation: The US government should ensure that sufficient numbers of new Precision Strike Missiles and similar weapons are delivered to USFK as soon as they are available to replace the aging Army Tactical Missile System. These missiles would help enable rapid and effective conventional precision strikes by USFK elements within a combined response to North Korean aggression, without requiring escalation to destruction of North Korean air defenses or deployment of additional assets from off-peninsula. They would also provide a US capability parallel to the land-based missiles with similar ranges that South Korea already has. Given

the political sensitivities of deploying new missiles to South Korea, and likely objections from Beijing, political preparations for such deployments should start now.

Recommendation: DOD organizations with nuclear warfighting and consequence management roles should expand their forward presence in South Korea and their partnerships with CFC and the ROK military to ensure that ROK forces and CFC are intellectually and operationally better prepared for a conflict with North Korea that involves nuclear use. A central premise of this effort should be helping to ensure that ROK forces have the confidence to fight and win even if North Korea engages in limited nuclear weapons employment to help reinforce deterrence by denial and reduce reliance on US deterrence by punishment with nuclear weapons.

Recommendation: The United States should expand its comprehensive engagement with South Korea on force development, modernization, and defense technology cooperation. This would be designed to help inform a more holistic ROK-US approach to capability development and fielding for after OPCON transition, well beyond the scope and time frame of the existing Conditions-based Operational Control Transition Plan. This would help enable the development of ROK-US capabilities and approaches that would better position the alliance to deal with deterrence challenges from North Korea and the PRC in the coming decades.

Finding: Pyongyang's regime almost certainly knows it cannot survive if it triggers an all-out nuclear exchange, but it will probably see greater viability for limited nuclear use in the next five to ten years. If North Korea were to employ a nuclear weapon, it would most likely be in a limited manner intended to pose a dilemma for and constrain the ROK-US (and PRC) response. North Korea's increasing capability to conduct a limited nuclear "demonstration" or tactical strike will give North Korea options that could undermine US extended deterrence globally, even if the immediate US response to such use prevents a catastrophic nearterm strategic deterrence failure.

Recommendation: The United States government, including Congress, should work with ROK counterparts

to refine, clarify, and amplify existing declaratory policy toward North Korea, particularly on "employment" of a nuclear weapon, referencing the 2018 *Nuclear Posture Review* language repeated by President Biden and other officials: "A nuclear attack by North Korea against the United States or its allies or partners is unacceptable and will result in the end of whatever regime, were it to take such an action." ⁵⁶

Recommendation: The US government should undertake a cross-DOD and interagency effort to explore and prepare strategic and operational options to respond to, mitigate the risks of, and deter a very limited or entirely demonstrative employment of a nuclear weapon by North Korea, and include ROK perspectives in this analysis through the Nuclear Consultative Group. The US government should conduct and sponsor studies and wargames to this end and help enable operational planning led by US Strategic Command (USSTRATCOM) in coordination with other relevant military commands and South Korea.

Recommendation: CFC and USFK, enabled by support from the DOD—in coordination with ROK counterparts—should expand efforts to ensure that the ROK-US alliance is operationally prepared to defeat North Korea even if it attacks with its expanding nonstrategic nuclear capabilities and ensure that this preparedness is clearly communicated to Pyongyang, Beijing, and the South Korean public. The ROK-US Nuclear Consultative Group should be leveraged to enable this effort.

Recommendation: The US government should ensure that US nonstrategic nuclear deterrent capabilities are fully resourced, trained, staffed, equipped, and supported with enabling messaging to ensure clear US will and capability to quickly and decisively respond to a limited-scale nuclear attack, including robust nonstrategic nuclear options for such a response.

Recommendation: USSTRATCOM, with the full support of the US government's senior leaders, should consistently signal the ability to quickly employ nonstrategic nuclear capabilities, including supporting messaging to ensure clear US will and capability to swiftly respond to a North Korean nuclear strike, including the option of using US nuclear weapons of varying yields based off-peninsula. The associated messaging must underscore that these capabilities are not intended for regime decapitation or preemption.

[&]quot;Remarks by President Biden and President Yoon Suk Yeol of the Republic of Korea in Joint Press Conference," The White House, April 26, 2023, https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/26/remarks-by-president-biden-and-president-yoon-suk-yeol-of-the-republic-of-korea-in-joint-press-conference-2/.

Appendix A: Subnational Deterrence... What It Is & Why It Matters

By Fredrick "Skip" Vincenzo (Commander, US Navy, retired), Nonresident Senior Fellow, Indo-Pacific Security Initiative, Scowcroft Center for Strategy and Security, Atlantic Council

Traditional deterrence is increasingly failing to protect the United States' interests

Merriam-Webster defines deterrence as "the maintenance of military power for the purpose of discouraging attack."57 This traditional form of deterrence maintained stability and prevented a major conflict with the Soviet Union during the Cold War, but it is not sufficient to meet the demands of today's security environment. It is increasingly clear that in the twenty-first century, Russia, the People's Republic of China (PRC), and North Korea seek to prevail by undermining, not fighting, the United States-led world order—substituting "gray zone" escalation and aggressive coercion for open warfare. They rely on their military capabilities to deter a meaningful response and employ provocative yet carefully calibrated acts of violence, disruption, and coercion to force the United States and its allies into compromising on critical interests. This is an emerging tactic against which the West has yet to find an effective response and the risk of major conflict appears higher than it has been in decades. A determined adversary intent on achieving its objectives and convinced that credibly threatening US cities will deter a meaningful response—could easily miscalculate US red lines and blunder the world into a crisis that rapidly escalates into a conflict likely to go nuclear.

Subnational deterrence: What is it and how could it make a difference?

Aggressive coercion backed by the threat of nuclear escalation is becoming an increasingly untenable threat for the United States and one for which Washington has yet to identify an effective strategy. One possible answer might be an emerging concept that the author has termed "subnational deterrence." A subnational deterrence approach recognizes that a determined, nuclear-armed adversary could accidentally force a situation where conflict becomes unavoidable. While still maintaining a strong deterrent, this

approach actively works to set conditions for a less-costly conflict by undermining the reliability of the cadre of elites who support these authoritarian regimes, lowering the level of violence and destruction.

Authoritarian regimes like the PRC, Russia, and North Korea are run by central strongmen whose personal interests define the interests of the state. They maintain internal control through political systems that provide privilege and perks to elites who are personally loyal to them and harshly punish any detractors. For instance, Reuters reported that in 2017 North Korea purchased at least US \$640 million in luxury goods from China—a steep price for an impoverished regime, much of which was used as gifts for loyal elites. However, while fear of punishment is used to maintain loyalty, these systems also tend to develop high levels of elite corruption. To navigate these systems, elites develop strong survival instincts and seek self-serving opportunities while subtly concealing minor corruption.

Under normal conditions, these regimes seem stable but are likely more fragile than they appear. North Korea provides a prime example of this phenomenon. Day-to-day, fear of being accused of disloyalty—something likely to result in punishment, loss of privilege, or even death—keeps North Korean elites in line. In 2013, for instance, Kim Jong Un ordered the public execution of two officials in front of hundreds of their former colleagues for their association with his uncle, Jang Song-thaek. ⁵⁹ Nonetheless, if the end of the regime suddenly appears imminent, these elites are likely to prioritize personal survival over loyalty to the regime.

Subnational deterrence recognizes the opportunity for a properly focused influence campaign to convince enough regime elites, military commanders, and other second-tier leaders to act according to these survival interests in ways that coincide with the interests of the United States. This is not the same as advocating for regime change or encouraging revolt, which is almost certainly impossible in highly

^{57 &}quot;Deterrence," *Merriam-Webster's Collegiate Dictionary*, Merriam-Webster, n.d., https://unabridged.merriam-webster.com/collegiate/deterrence, accessed February 27, 2023.

Hyonhee Shin, "North Korea Bought at Least \$640 Million in Luxury Goods from China in 2017, South Korean Lawmaker Says," Reuters, October 22, 2018, https://www.reuters.com/article/us-northkorea-nuclear-china/north-korea-bought-at-least-640-million-in-luxury-goods-from-china-in-2017-south-korea-lawmaker-says-idUSKCN1MW15M.

⁵⁹ Choe Sang-Hun, "In Hail of Bullets and Fire, North Korea Killed Official Who Wanted Reform," New York Times, March 12, 2016, https://www.nytimes.com/2016/03/13/world/asia/north-korea-executions-jang-song-thaek.html.

consolidated authoritarian regimes save for extraordinary circumstances. Rather, subnational deterrence maximizes the advantage that can be derived from the moment in a conflict when the people responsible for carrying out the leader's orders suddenly fear punishment less than the ramifications of conflict—or regime collapse—and the resulting aftermath. If, in their moment of desperation, regime elites believe that cooperation with the United States and its allies offers themselves and their families the greatest chance for survival, or even future prosperity, then it is likely that they can be deterred from rapidly and vigorously following their leader's orders or even convinced to otherwise act in ways that reduce risk of violence and prevent unnecessary suffering.

North Korea as a case study for subnational deterrence

The trajectory of events on the Korean Peninsula is much less stable than appearances suggest. Given vast differences in political systems, it is difficult to imagine how peaceful reunification between North and South Korea could ever occur. At best, a continued standoff between increasingly well-armed adversaries will most likely endure for the near term. Contrary to the wishes of many, Pyongyang has never given up on achieving reunification on its own terms—an objective that the presence of US forces has deterred thus far.60 For it to achieve reunification, either through force of arms or by exerting enough coercive pressure on Seoul to force South Korea to accept some sort of favorable political arrangement, the Kim regime needs, but has not yet had the means to, remove the threat of US intervention. Possessing a truly credible nuclear threat and the missiles to deliver them against American cities could change this dynamic, and over the past few years, North Korea has demonstrated significant improvements in both of these programs. The combination of accurate short-range missiles and an increasingly credible long-range nuclear threat is therefore a significant problem for the ROK-US alliance.61

Despite these emerging capabilities, the twin challenges of overall conventional military inferiority and the threat of an overwhelming US military response will likely continue to deter North Korea from invading South Korea or launching a surprise attack on the United States with nuclear weapons. However, what if Pyongyang has no intention of fighting the United States in a traditional, clearly defined war?

Pyongyang's credible nuclear and missile threat gives the Kim regime an exponentially greater amount of coercive leverage to act in ways that make it much more difficult for the United States to respond militarily but nonetheless could create a crisis serious enough to cause a political rupture within the alliance and/or otherwise compel Washington and Seoul into meeting its demands. This is an under-examined problem for the US-South Korean alliance and one that could rapidly undermine the security dynamic on the peninsula, especially given US-China strategic competition.

"Subnational deterrence maximizes the advantage that can be derived from the moment in a conflict when the people responsible for carrying out the leader's orders suddenly fear punishment less than the ramifications of conflict—or regime collapse—and the resulting aftermath."

What is to stop Kim from attempting far more dangerous courses of action if he believes that, by holding US cities at risk, he can keep the United States from escalating militarily? It is not hard to imagine that Kim Jong Un, if he felt his nuclear threat was credible enough, would believe that Washington could be deterred from intervening as he used his newly acquired precision short-range missiles to launch a devastating but limited precision strike against ROK military bases. This is where traditional deterrence fails to protect American interests. A decade ago-before North Korea could hold New York, Washington, or even London at risk—international outrage would almost certainly have resulted in a regime-ending military response. However, under these circumstances, and in the absence of large civilian collateral damage or direct damage to US interests, it is hard to believe that the United States would be eager for a full-scale conflict regardless of how existential a crisis South Korea might perceive the situation to be.

⁶⁰ Benjamin Young, "North Korea's Push for Reunification Is Not Just Empty Rhetoric," *World Politics Review*, November 18, 2021, https://www.worldpoliticsreview.com/articles/30130/pyongyang-s-push-for-korean-reunification-isn-t-empty-rhetoric.

⁶¹ Markus Garlauskas, "The Evolving North Korean Threat Requires an Evolving Alliance," in *The Future of the US-ROK Alliance*, Atlantic Council, February 2021, https://www.atlanticcouncil.org/wp-content/uploads/2021/03/Chapter-4.pdf, 44.

A limited but violent precision strike against South Korean military facilities accompanied by external messaging that makes it abundantly clear these actions are not part of a larger invasion could create a fatal rupture in the alliance—if the US hesitates on supporting meaningful retaliation that Seoul would almost certainly demand. As egregious as Pyongyang's actions might be, would Washington risk its cities by escalating unless it was clear that North Korea was invading South Korea or directly threatening core US interests? Pyongyang has never had the leverage to force this kind of conundrum on the Unites States, but the rapid pace at which it is developing advanced weaponry means it soon might. Pyongyang has seldom hesitated to use its leverage when it felt it had a clear upper hand.

Subnational deterrence could make the difference

Although the United States should not abandon efforts to deter North Korea, it is increasingly likely that there may soon come a time when it might not be possible to prevent it from attempting some sort of dangerously aggressive coercion. Whereas the main priority of the United States during a crisis on the Korean Peninsula has always been to force a return to the status quo, it is important to recognize that doing so may no longer be possible in this situation. It may be prudent to set conditions that can reduce the level of violence should a conflict be forced on the United States and its allies.

A subnational deterrence campaign could potentially accomplish this through an information-based approach designed to deter the first and second-tier elites whom Kim Jong Un must rely upon from following his orders and influence them to act in own interests at the moment of crisis. While Kim can use inducements and fear to ensure their absolute loyalty in most situations, their fear of punishment is likely to be rapidly replaced by survival instinct should the situation be perceived as a regime-ending crisis. A

subnational deterrence effort preconditions these elites into recognizing opportunities and acting in ways favorable to alliance objectives to secure a future for them and their families.

Prior analysis by this author demonstrates how an influence campaign could help reduce the potential costs of conflict.⁶² For example, given that missiles carrying weapons of mass destruction will almost certainly present a major problem in any conflict, particular effort should be made to ensure that North Korean soldiers, commanders, and elites who will actually pull the trigger on these systems fully understand the personal consequences they could face by firing these weapons as well as the personal benefits of not firing them. Although many may still simply follow orders, it is likely that many others would act in ways that align with the interests of the United States because these actions would help ensure with their own survival. If only forty percent of Kim's political and military elites come to believe that delaying and/or avoiding combat with United States and allied forces, firing artillery or missiles, and otherwise avoiding acts of violence is in their own best interest, this could save at least thousands—if not millions—of lives in South Korea, and possibly the United States and Japan.

As much as the United States and its allies may wish otherwise, Pyongyang has no interest in denuclearization. On its current trajectory, North Korea may soon be able to demonstrate a credible nuclear threat to cities across the continental United States—a situation that is likely to severely undermine the credibility of Washington's own threat of an overwhelming military response. North Korea may yet again surprise many Americans with its audacity, and the United States could find itself having to make very difficult choices under extremely intense pressure. Investing in subnational deterrence now, by setting the conditions to deter individual North Korean elites from carrying out Kim's orders in a moment of crisis, could significantly simplify this decision by reducing the costs and risks of standing firm.

Fredrick Vincenzo, An Information Based Strategy to Reduce North Korea's Increasing Threat: Recommendations for ROK & U.S. Policy Makers, CNAS, Georgetown Press, National Defense University, and US-Korea Institute at SAIS, October 2016, https://www.cnas.org/publications/reports/an-information-based-strategy-to-reduce-north-koreas-increasing-threat.

Appendix B: Tabletop Exercise Summary

By Lauren Gilbert, Deputy Director, Indo-Pacific Security Initiative, Scowcroft Center for Strategy and Security, Atlantic Council

The study team conducted this tabletop exercise (TTX) with the goal of synthesizing and developing new insights on how improved North Korean and PRC capabilities, combined with growing US-PRC strategic competition, affect the risk of strategic deterrence failure on the Korean Peninsula.

- Primary objective: Develop recommendations, particularly with regard to US and allied options and future capabilities plausible in the coming five to ten years, that could help mitigate identified risks
- Secondary objective: Develop insights from allied perspectives analyzed during the study, particularly to gauge variables affecting the future risk of strategic deterrence failure in Korea

The TTX took place virtually through Zoom with forty-nine participants and was designed as a two-turn facilitated discussion. The TTX featured participants of diverse backgrounds from the US military, government, and academia. All participants met during plenary sessions and were divided into five groups for breakout sessions: the Control Group (nine), the Blue Team with players representing the United States (seventeen), the Green Cell focused on alliance considerations and with players primarily representing South Korea (six), the North Korea Cell (seven), and the PRC Cell (ten).

During breakout discussions for each turn, players on the Blue Team and in the various cells developed assessments of the situation and proposed courses of action for the country they represented, in response to guiding questions posed by the Control Group. The study team requested that players work together to provide insights and suggest actions based on their realms of expertise through open discussion, rather than attempt to role-play particular positions. The groups designated a leader to present the results of the discussions at a plenary session at the end of each turn, and members of the Control Group helped guide and record the conversations. This setup allowed the TTX to provide more useful insights for the technical report and ideas for further study beyond the overall outcomes of the TTX scenario itself.

TURN ONE

Scenario and Scene-Setter

In Turn One, the TTX focused on the potential US/allied military responses to a North Korean challenge to strategic deterrence. In the hypothetical scenario five years into the future, North Korea has remained internationally isolated with continued difficult economic conditions while confronting expanded South Korean military capabilities. United Nations sanctions remain in place, but North Korean evasion and weak enforcement on the part of the PRC and Russia offer a lifeline to North Korea. Kim Jong Un's health continues to be a matter of concern, and frequent leadership shake-ups raise questions on succession. The Kim regime's apparent sense of threat has become elevated due to deteriorating control over foreign information and frustration with Seoul's unwillingness to break with the United States or offer major sanctions relief. In this scenario, North Korea has significantly increased its conventional military strike capabilities, while also expanding the size and capabilities of its nuclear force.

In the context of Northeast Asia, the PRC government continues to support North Korea while seeking to minimize or end the US military presence and avoid instability or outright war on the peninsula. However, the PRC military continues to focus on bolstering military capabilities to coerce or invade Taiwan and dissuading Taiwanese moves toward independence.

Bilateral ties and coordination among the United States and its allies remain robust, but trilateral US-ROK-Japan coordination remains limited due to political and historical disputes between South Korea and Japan. There are also concerns in South Korea about the credibility of the US extended deterrent and the potential for "decoupling." A South Korean four-star general has assumed command of a combined ROK-US headquarters staff with wartime operational control, with the USFK commander serving as their deputy. Inter-Korean relations have also fluctuated, with the relationship now at a low point with limited communication.

Turn One begins with North Korea releasing a statement warning South Korea that it will face consequences if it continues its actions on islands in the Yellow (West) Sea, which North Korea considers a violation of the 2018

Panmunjom Declaration. This leads to a modest increase in US-ROK alert levels, but the allies hesitate to authorize a major change in posture in response to what could be another empty threat. Shortly after, North Korea initiates skirmishes in the disputed area around the Northern Limit Line, but due to South Korea's superior equipment and capabilities, North Korea retreats. The ROK government proceeds to attempt to engage with North Korea through the Inter-Korean hotline, but Pyongyang does not answer.

Within hours, North Korean forces attack ROK marine bases on Baengnyeong-do, an island in the Yellow Sea, with a barrage of guided rockets, short-range ballistic missiles, and cruise missiles fired from mobile launchers. Unlike in the 2010 shelling of Yeonpyeong-do, improved accuracy with North Korea's newer weapons means that most missiles hit their targets, causing dozens of ROK military causalities but no civilian or US casualties. ROK garrisons on surrounding islands return fire and the ROK counterattacks with its own land- and sea-based missiles, striking North Korean targets, but finds it difficult to track and destroy many of the mobile launchers. Pyongyang's state media releases a statement claiming that Kim Jong Un is ready to authorize the use of strategic weaponry if the United States uses North Korea's "self-defense moves" as a pretext to threaten the nation. North Korean surface to air missiles and anti-ship cruise missiles isolate Baengnyeong-do from reinforcements; in response—and in consultation with the United States—South Korea shifts more naval and air assets to the area to begin neutralizing North Korea's air and coastal defenses.

Blue Team

The Blue Team began its discussion by questioning whether Seoul could have convinced Pyongyang that South Korea had the wherewithal to deliver a punishing counterblow and increase the potential for deterrence by denial in such a scenario. There was no clear answer. Regarding a potential US response to the North Korean strikes, one participant suggested striking a fixed target in North Korea as punishment. The team then posed the question: Rather than trying to target hidden mobile launchers, is there a better option? Multiple participants suggested that a highly effective and escalatory method of punishment is in the information domain, which entails lower risk than a direct conventional or nuclear strike. Separate participants suggested sinking North Korean submarines, adding additional air missile defense capabilities in the Northwest Islands, or increasing US/allied visibility in intelligence, surveillance, and reconnaissance (ISR) capabilities in the Yellow Sea. Most participants agreed that having improved the capability for deterrence by denial prior to this crisis would have made it more difficult for North Korea to employ missiles and would have increased the perception that such an attack would fail.

Returning to the possibility of a retaliatory strike, members of the Blue Team suggested that any strike should be directed at an equivalent target to reduce the potential for escalation. The team agreed that North Korea's island of Cho-do, also in the Yellow Sea, would be a reasonable choice. To avoid potential PRC intervention, the team agreed that air operations should be geographically limited to avoid antagonizing the PRC. Furthermore, Blue Team participants decided that the United States should conduct ISR and naval operations in the Yellow Sea to monitor potential PRC involvement. One participant suggested that South Korea should lead this response without major US reinforcement due to the potential for further escalation, but the team ultimately did not pursue this suggestion.

The Blue Team concluded its breakout discussion with suggestions for the plenary. On procedure, it decided that South Korea and the United States should have a cooperative response with close coordination among South Korean and US military leaders. Furthermore, the team agreed that South Korea should lead the kinetic military responses with directly involved US forces acting as back-up. It was not clear, however, what command and control arrangements would be practical for US forces' direct involvement in such operations on short notice. The Blue Team chose North Korea's military bases on the Yellow Sea island of Cho-do as the target of ROK-US retaliation strikes with missiles and airpower for strategic signaling purposes, while the United States directed aircraft and naval assets to keep an eye on the PRC's military movements. The Blue Team also planned to conduct cyberattacks against North Korea's power grid and information operations against the North Korean regime, but team discussions acknowledged that better informational and cyber options would require a great deal of advance preparation.

Green Cell

The Green Cell began the break-out session by assuming a progressive administration was in office in Seoul and that South Korea would insist on its right to self-defense against North Korea. However, participants sought to keep the military response localized and avoid escalation caused by an aggressive or excessive US response. They suggested initiating information control, building a case for increased UN sanctions against North Korea, and signaling US-ROK solidarity. The participants strongly opposed significant US force flow or noncombatant evacuation as being too escalatory and considered a significant mobilization of ROK military reservists to also pose an unacceptable risk of escalation.

PRC Cell

The PRC Cell worried that the United States would use the situation to its advantage by strengthening its alliances. The PRC Cell's main goal was to avoid a major US force intervention that could potentially lead to regional conflict or instability. The team posited that the PRC would increase military surveillance, air defense coverage, and fighter patrols. It also discussed significantly increasing the PRC naval force posture in the Yellow Sea to protect PRC interests and encourage the United States to back away. The participants saw this as an opportunity to weaken US international standing by pushing the narrative that the United States, a dangerous hegemon, was attempting to escalate the situation. Participants further suggested disseminating rumors that the United States was planning to deploy Japanese forces into the crisis, hoping to drive a wedge in the US-ROK relationship.

North Korea Cell

The North Korea Cell discussed using the situation to manipulate the United States into encouraging Seoul to negotiate on Pyongyang's terms. Participants believed that there would be only a limited retaliatory response from the ROK-US alliance and that both Seoul and Washington would seek to avoid further escalation—but they agreed that North Korea needed to be careful to keep the situation from escalating further. Participants also agreed that they should "show off" nuclear capabilities to threaten the deployment of nuclear-capable ICBMs in the case of escalation. The cell did not anticipate an ROK-US combined counterattack of the scale, intensity, and location proposed by the Blue Team during its break-out session.

Plenary Out-Brief

Green Cell participants were pleasantly surprised by the similarities between their thinking and most of the Blue Team's discussions but were concerned that sinking North Korean submarines would lead to escalation and made clear that they would not support this approach. The Green Cell agreed that South Korea would accept the Blue Team's proposed actions, centering on the alliance attack on Cho-do, though the details of the attack were not discussed. The North Korea Cell was not expecting such a strong ROK-US military response and was concerned about rapid escalation.

TURN TWO

Scenario and Scene-Setter

Turn Two focused on potential US/allied military options to react to and influence PRC actions that could either

exacerbate or reduce the risk of strategic deterrence failure in a crisis. The context of US-PRC strategic rivalry and increasing PRC military capability was central to this turn.

In the adjudication of Turn One actions, Kim Jong Un is furious about the attack on Cho-do and publicly executes several advisors for failing to anticipate and defend against this possibility. He is also concerned about the cyberattacks and informational attacks. This leads him to perceive that he has lost control of the situation, increasing his willingness to risk escalation by demonstrating North Korea's will and nuclear capability to regain the initiative. At his order, North Korea launches a nuclear-armed ICBM into the western Pacific on a lofted trajectory, detonating its warhead in the upper atmosphere fifty miles west of Guam. North Korea then proceeds to transition its forces to a wartime footing and mobilizes reserves across the country. Internationally, reports emerge that North Korea is dispersing nuclear weapons to wartime locations. North Korea conducts conventional counterstrikes against US and ROK airbases (i.e., Osan) used to launch attacks on Cho-do, resulting in a multitude of casualties and destruction of key targets. North Korea also conducts a counter-information campaign targeting South Korean telecommunications and government websites.

The PRC orders a show of force and resolve, deploying destroyers and carriers in the Yellow Sea. Beijing declares that Asia is dealing with a dangerous hegemon and asserts that this crisis is a result of Washington's stubbornness and failed policies. At the UN, the PRC joins Russia in a call for a return to stability and a halt to hostilities. The PRC condemns the US attacks and declares that there should be an end to the UNC and signing of a peace treaty. The PRC then offers to mediate talks between the ROK general commanding CFC and their North Korean counterpart, with the intent of cutting out the United States. South Korean news outlets begin reporting on the sudden spread of internet-based rumors that Japan plans to be involved militarily and that the United States was considering the deployment of Japanese Self-Defense Force naval and land assets. The PRC then ramps up Northern Theater Command drills and activates civil-military command structures.

Blue Team

The Blue Team theorized that China had not expected such a strong response from ROK-US forces. Participants debated whether China would bolster its global image by cooperating with the United Nations against North Korea or continue to provide a lifeline to Pyongyang to avoid potential domestic instability in North Korea.

Separately, the team agreed that the United States must gain control of the information space and shut down North

Korea's communications as much as possible, without resorting to kinetic strikes on communications infrastructure. Furthermore, due to concerns of escalation by South Korea, one participant suggested focusing on a combined military posture and utilizing a combined structure to control the next level of military engagement or escalation. Another participant suggested that this was an opportunity to allow the PRC to take the lead in diplomacy to moderate North Korea's actions, and that the United States must give them that opportunity. Other participants asserted that the United States, however, should maintain a firm position on North Korea's role as an aggressor through a strong influence campaign combined with military capabilities to deter escalation.

Regarding cooperation with South Korea, one participant emphasized the importance of coordinated action, as independent action would cause a return to a "bankrupt" policy that would place the alliance at risk. Another suggested that actions should be combined ROK-US bilateral movements with limited involvement of US forces. The participants then debated the merits of a combined ROK-US command or both an ROK-US and US unilateral command. They questioned whether, after wartime OPCON transition was complete, US forces must operate under the combined warfighting command or if US forces could conduct operations under a separate USonly headquarters. This led to a debate on what the situation meant for the multinational, but US-led, UNC. The Blue Team controller then asked what military structure would be optimal for this situation. One participant suggested that the Far East Command should be re-created to counterbalance the PRC's Northern Theater Command and provide the United States with unilateral joint operational options.

One additional suggestion was to escalate diplomatically but give a "stiff" response through a combination of denial and punishment. The team compromised on a hybrid approach involving extensive ROK and US counterstrikes against North Korean military targets short of threatening the regime, the deployment of various air-, naval-, and ground-based systems to reinforce its response, diplomatic efforts to deescalate the situation, and signaling of US strategic nuclear capabilities.

The Blue Team participants also discussed the airburst near Guam, admitting that they perceived it as the least alarming action taken by North Korea since it did not result in any casualties. Ultimately, the Blue Team found it difficult to identify any discrete military response to the North Korean nuclear demonstrations without risking uncontrolled escalation, as the US and ROK forces were already counterstriking dozens of North Korean targets as part of the previously planned operations.

Green Cell

The Green Cell was surprised at North Korea's actions and assumed that the United States was already flowing military forces to the area sufficient to execute a war plan against North Korea whether or not South Korea concurred, but emphasized that Seoul would continue to prioritize defense and de-escalation. Regarding the United States' actions, the cell's primary goals were to avoid noncombatant evacuation operations and the deployment of Japanese troops to the peninsula. The participants also completely disregarded the idea of a peace treaty due to the level of aggression in North Korea's actions thus far. The participants concluded that South Korea should initiate counterstrikes on North Korean launch sites and command and control locations, as well as conduct cyberattacks and intrusive ISR. (This fell closely in line with the Blue Team's plans, though the Green Cell did not necessarily know that.)

PRC Cell

The PRC Cell began with a discussion of how to prevent US forces from crossing the demilitarized zone or deploying Japanese forces to the area. (With regard to the potential for Japanese force deployment, the PRC Cell may have come to believe the misinformation it had planted.) The participants suggested improving the PRC's position by blaming the United States and framing Pyongyang's aggressive response as driven by Washington's lack of restraint. The participants saw the situation as a tremendous opportunity to reach out to South Korea and marginalize the United States. To show strength, the participants suggested deploying air and naval forces to the Yellow Sea, backed by anti-ship missiles to signal displeasure and readiness at the US naval presence, and ordering DF-41 launchers to leave their garrisons. The ultimate goal was to prevent nuclear war, force the United States to back down, and create the narrative that the PRC rescued Asia from a crisis.

North Korea Cell

At the outset, the North Korea Cell emphasized the need for de-escalation, but there were significant disagreements on the current outlook and state of mind of the regime leadership. The participants concluded that they would need to request support from the PRC to de-escalate, even if they were required to make private concessions. They also determined that Pyongyang should portray the strikes on Osan as "proportional" rather than escalatory. However, they decided that they must make clear that North Korea had both the willingness and ability to retaliate with nuclear weapons should the United States further escalate the situation. Finally, they suggested that Pyongyang attempt to

immediately restore communications with Seoul and request high-level talks.

Plenary Out-Brief and Hotwash

After the Blue Team's out-brief, several participants expressed shock and concern at the lack of response from the United States in relation to the nuclear airburst near Guam. The Blue Team explained that it treated the airburst as a nuclear demonstration due to the lack of casualties, but would consider further responses, such as conventional strikes against North Korean nuclear systems, should there be more escalation from North Korea. A Blue Team participant suggested that the restrained response was fairly realistic due to the need to avoid a possible nuclear war and recommended creating declaratory and response options for such situations.

As the TTX discussion concluded, the principal investigator noted that, based on the discussion, reinforcing the Northwest Islands with US military forces could be made a more realistic and timely option only if the necessary groundwork and bilateral agreements were in place prior to the outbreak of a crisis. Another participant suggested that increased retaliatory capability on the islands could improve deterrence by denial against North Korea, or at least provide more options for the alliance.

Regarding capabilities to reinforce deterrence, participants suggested that the United States and South Korea should focus on being able to credibly impose costs on North Korea and to improve both operational military resilience and the resilience of power grids and other infrastructure in South Korea and the United States. Another participant emphasized the importance of improved non-kinetic capabilities that are integrated in a coherent way with kinetic plans, particularly since military action seems to have generated a much greater perception that the Pyongyang regime was under threat. Finally, participants suggested that the United States and South Korea increase training on related scenarios short of full-scale conflict and include nuclear aspects in the scenario, particularly via tabletop exercises and war games for senior officials and military officers.

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About the Authors



Markus Garlauskas is the director of the Indo-Pacific Security Initiative of the Scowcroft Center for Strategy and Security. He leads this initiative's efforts focused on conflict and nuclear deterrence, United States strategy, and building cooperation with partners and allies in the Indo-Pacific region. He led projects focused on deterrence and defense issues in East Asia as a nonresident senior fellow from August 2020 until assuming his duties as director in January 2023.

Garlauskas served in the US government for nearly twenty years. He was appointed to the Senior National Intelligence Service as the National Intelligence Officer (NIO) for North Korea on the National Intelligence Council from July 2014 to June 2020. As NIO, he led the US intelligence community's strategic analysis on North Korea issues and expanded analytic outreach to non-government experts. He also provided direct analytic support to top-level policy deliberations, including the presidential transition, as well as the Singapore and Hanoi summits with North Korea.

Garlauskas served for nearly twelve years overseas at the headquarters of United Nations Command, Combined Forces Command and US Forces Korea in Seoul. His staff assignments there included chief of the Intelligence Estimates Branch and director of the Strategy Division. For his service in Korea, he received the Joint Civilian Distinguished Service Award, the highest civilian award from the Chairman of the Joint Chiefs of Staff.

Garlauskas holds a BA in History from Kent State University. He earned a master's degree from Georgetown University's Security Studies graduate program, where he is now an adjunct professor.



Lauren D. Gilbert is a deputy director with the Atlantic Council's Indo-Pacific Security Initiative (IPSI) housed within the Scowcroft Center for Strategy and Security. In this role, she oversees research and programming focused on engaging with US, allied, and partner governments and other key stakeholders to shape strategies and policies to mitigate the most important rising security challenges facing the region. In particular, her work focuses on US-ROK-Japan trilateral cooperation, Korea-Japan relations, integrated deterrence, and trans-Atlantic-Pacific coordination in the aim of defending the rules-based international system.

Originally from Texas, Gilbert holds an MIS in International Cooperation from Seoul National University's Graduate School of International Studies. Her thesis focused on an analysis of US-ROK-Japan trilateral security cooperation within the lenses of the balance of threat theory and the concept of national strategic identities. She also attained her BA with high honors in International Relations and Global Studies, with a concentration in International Security and a minor in Asian Studies, from the University of Texas at Austin. She also spent a year abroad studying in Korea University's Division of International Studies.



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1030 15th Street, NW, 12th Floor, Washington, DC 20005

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