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Korea Net Assessment: Politicized Security and Unchanging Strategic Realities

Chung Min Lee and Kathryn Botto, editors

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LIST OF ABBREVIATIONS

ADIZ	Air defense identification zone	OPCON	Operational control
C3	Command, control, and communications	PLA	People’s Liberation Army
C4I	Computers, and intelligence	PSI	Proliferation Security Initiative
CBM	Confidence-building measure	RIMPAC	Rim of the Pacific exercise
CFC	Combined Forces Command	ROK	Republic of Korea
DMZ	The Demilitarized Zone	RSOI	Reception, staging, onward movement, and integration
DPRK	Democratic People’s Republic of Korea	SCM	Security Consultative Meeting
EEZ	Exclusive economic zone	SLBM	Submarine-launched ballistic missile
GSOMIA	General Security of Military Information Agreement	SOFA	Status of forces agreement
ICBM	Intercontinental ballistic missile	THAAD	Terminal High Altitude Area Defense
IISS	International Institute for Security Studies	TISA	Trilateral Information Sharing Agreement
INF TREATY	Intermediate Nuclear Forces Treaty	UNC	United Nations Command
KADIZ	Korean Air Defense Identification Zone	UNC-REAR	United Nations Command–Rear
KPA	Korean People’s Army	UN-GOJ SOFA	Agreement Regarding the Status of United Nations Forces in Japan
MDL	Military Demarcation Line	USFJ	United States Forces Japan
MRL	Multiple rocket launcher	USFK	United States Forces Korea
NATO	North Atlantic Treaty Organization		

INTRODUCTION

CHUNG MIN LEE

The most striking feature of the security environment on the Korean Peninsula is the gap between assessments made by political leaders and the growing array of asymmetrical threats emanating from North Korea. The “Korea Net Assessment 2020” was prepared to provide nongovernmental analysis on the current and evolving military situation on the Korean Peninsula. Various official assessments such as South Korea’s defense white papers and numerous reports published by the U.S. Department of Defense provide critical overviews of the evolving military balance between the two Koreas. It is hoped that this study will be seen as a more nuanced assessment of significant military developments on the peninsula.

All of the study’s contributors based their findings and analysis solely on their individual and personal capacities, and these findings do not represent directly or indirectly the positions or views of the institutions and organizations they belong to. Moreover, this study was based entirely on publicly available sources. It is hoped that the “Korea Net Assessment 2020” will complement existing studies on the military situation on the Korean Peninsula.

Understanding the confluence of forces on the Korean Peninsula is arguably more difficult now than at any other time since the end of the Cold War. Republic of Korea (ROK) President Moon Jae-in continues to believe that North Korean Supreme Leader Kim Jong Un is sincere about denuclearization, while U.S. President Donald Trump argues that U.S.-ROK combined exercises are far too expensive and are threatening to North Korea. Never has an occupant of the White House enacted such an erratic North Korea policy, especially while decrying one of the United States’ most trusted allies—South Korea—as a defense free rider. In fact, the ROK remains a valuable U.S. ally who pays far more toward shared defense costs than the Trump administration gives it credit for.

Trump’s new approach to North Korea policy has had an extremely mixed impact. In some respects, Seoul has inwardly welcomed his personalized diplomacy—as evidenced by his unilateral cancellation of military exercises, which caught even the Pentagon off guard—because the South Korean government is keen on providing Kim with political incentives to denuclearize. Trump’s denigration of alliance cohesion

There is a significant gap between Trump's and Moon's rosy appraisals of the chances of a nuclear deal and lasting peace and the unchanged security landscape on the peninsula.

and his constant demands that major allies like Germany, Japan, and South Korea dole out billions of dollars toward shared defense costs have already had debilitating consequences.

If Trump wins a second term in November 2020 and if ongoing negotiations between the United States and South Korea do not quite meet his requirements for cost sharing, it is not totally impossible to imagine that Trump would seriously consider a partial and symbolic withdrawal of U.S. forces from the peninsula. To be sure, the U.S. secretary of defense would have to certify any significant withdrawal of U.S. forces, and the Congress will also have a say. But if Trump feels strongly that South Korea has not paid its fair share of common defense costs, and if he thinks he needs to provide an additional political incentive for Kim to reach a nuclear agreement, the U.S. president may seriously contemplate downsizing the U.S. forces on the peninsula.

For his part, Moon continues to believe that a peace regime can be built if the United States reaches a major nuclear deal with North Korea, agrees to officially end the Korean War by signing a peace treaty, and establishes a series of structures and mechanisms designed to terminate the last vestiges of the Cold War on the Korean Peninsula. His administration asserts that its attempt at rapprochement with North Korea is premised on a strong defense posture. And the South Korean defense budget has increased significantly. For example, this increase is enabling the ROK Air Force to

order additional F-35s as part of efforts to modernize its combat aircraft. This is a positive development, but heavy defense investments are also driven by South Korea's rapidly declining birthrate and negative demographic outlook as well as the government's desire to revert wartime operational control (OPCON) as soon as conditions permit.

There is a significant gap between Trump's and Moon's rosy appraisals of the chances of a nuclear deal and lasting peace and the unchanged security landscape on the peninsula. By all indications, the military situation on the Korean Peninsula has not improved since the advent of the Trump and Moon administrations. Contrary to Trump's statement soon after the June 2018 Singapore summit that North Korea's nuclear weapons no longer pose a threat, the exact opposite is true: North Korea's nuclear arsenal has continued to grow on Trump's and Moon's watch.¹ And the Korean People's Army (KPA) has not stopped amassing ballistic missiles, including submarine-launched ballistic missiles (SLBMs). Moreover, the KPA's order of battle, exercise regimes, modernization of conventional forces, and political-military directives have remained unchanged. Indeed, even with the conclusion of the September 2018 military agreement on confidence-building measures (CBMs) between the two Koreas, the KPA has not shifted its military posture or deployments.

The novel but capricious U.S. policy toward North Korea, Trump's highly personalized negotiating strategy coupled with his limited understanding of the relevant geopolitical and security issues, Moon's insistence on sustaining his push for inter-Korean peace, Kim's simultaneous efforts to modernize his nuclear weapons and other asymmetrical assets, and China's growing cooperation with North Korea all have resulted in a fundamental dichotomy: while political leaders in Seoul and Washington maintain that peace is around the corner, the strategic realities on the ground indicate otherwise.

At least five major issues have received the lion's share of attention in ROK-U.S. relations since 2017, when both Trump and Moon took office. These issues include how the allies should: (1) cope with North Korea's increasingly advanced nuclear arsenal and array of ballistic missiles including SLBMs; (2) compensate for the degradation of South Korea's independent military capabilities and combined ROK-U.S. combat capabilities in the aftermath of canceled, postponed, or significantly reduced combined exercises and training; (3) deal with Trump's unprecedented demand that South Korea pay far more in shared defense costs and the various negative ramifications of that demand, including the weakening of political support in South Korea for the alliance; (4) effectuating conditions-based reversion of wartime OPCON from the United States to South Korea at the earliest possible moment; and (5) the impact of the Moon administration's Defense Reform 2.0 on interoperability. These issues are examined in-depth by the assessment's contributors.

As noted above, all of the contributors to this volume provided their own independent and personal views on key aspects of the military situation on the peninsula. The overriding insight of this study is how little has changed militarily in North Korea since the advent of new administrations in Seoul and Washington in 2017. There are inherent limitations to using open sources, such as the inability to track official discussions and negotiations and ongoing bilateral and multilateral security and defense coordination. Yet, at the same time, significant freedom flows from using open sources and not being necessarily constrained by official perspectives and standard operating procedures. Many of the contributors have had direct government experience that has enriched their understanding of critical security and military issues.

In chapter one, Chung Min Lee outlines how political calculations have repeatedly led Moon and Trump to downplay the risks of North Korea's nuclear weapons

program despite the lack of any credible evidence that Kim is taking serious steps to dismantle his arsenal. In chapter two, Kim Min-seok evaluates the changing military balance between the two Korea's respective conventional forces, noting how Pyongyang's quantitative advantage is matched by Seoul's growing qualitative edge. In chapter three, Shin Beomchul offers a view from South Korea on how the military readiness of the ROK-U.S. alliance is being affected by CBMs with North Korea and cost-sharing negotiations between Washington and Seoul.

Next, Bryan Port examines the strategic versus operational readiness of combined U.S.-ROK forces. In chapter five, Jina Kim analyzes how South Korea is contending with neighboring China's more assertive military posture and power projection capabilities. In the final chapter, Kathryn Botto delineates what hurdles South Korea and Japan must overcome to rely less on the United States as an intermediary when it comes to bolstering trilateral security cooperation in Northeast Asia.

Between North Korea's still advancing capabilities and China's growing clout in Northeast Asia, the allies must navigate a host of threats that are becoming more lethal and complex. Of the many outstanding military challenges in the world today, the accelerated tempo at which North Korea's weapons of mass destruction programs are advancing and the still formidable nature of its conventional forces stand out as some of the most dangerous. Despite unprecedented political changes in Seoul and Washington since 2017, the steady pace at which North Korea's nuclear weapons and ballistic missiles programs continue to advance is a sobering reality. This does not mean that the ROK military has stood still. It is amid a concerted military modernization program of its own that will pay key dividends by the late 2020s. And despite the unparalleled disruptions created by Trump, the U.S.-ROK military alliance remains, for the time being, on solid ground. Indeed,

alliance management institutions on both sides of the Pacific Ocean have never worked as hard to keep the alliance on an even keel.

Nonetheless, it is also undeniable that the penchant for engagement and the desire not to anger North Korea despite Pyongyang's calculated provocations and probes have never been more pronounced in South Korea. Such political stances have affected the ROK's military readiness to the extent that the Ministry of National Defense, for example, has to tread very carefully when assessing the full range of North Korean threats. If the ministry or the ROK armed services continue to see North Korea through politically acceptable prisms, there is little doubt that objective intelligence assessments on all key dimensions of the North Korean threat will falter. The consequences of intelligence failure in a country such as South Korea are immense. And while the search for and the making of lasting peace between the two Koreas is necessary, such efforts can never come at the cost of the ROK's core national security interests.

All military environments are dynamic and subject to various political forces. But given the enormous stakes on the Korean Peninsula, it is absolutely essential for security experts, intelligence officers, members of the defense community, and, most of all, critical policymakers to have access to depoliticized net assessments. In democracies, armed forces must follow directives from their respective political superiors. However, it is equally critical for the countries' political leaders to base their decisions on unbiased intelligence and provide their militaries, to the greatest extent possible, with depoliticized security choices. The struggle for ensuring a free, democratic, and a prosperous ROK with requisite defense capabilities and strategies is an ongoing mission that is shared with its most important ally, the United States.

CHAPTER 1

THE CHIMERA OF PEACE ON THE KOREAN PENINSULA

CHUNG MIN LEE

THE PRIMACY OF POLITICS ON THE KOREAN PENINSULA

The security environment on the Korean Peninsula is more uncertain than at any other time since the end of the Cold War. Despite two decades of diplomatic efforts, international sanctions, and even military pressure, neither the United States nor South Korea could prevent North Korea from acquiring nuclear weapons. Under Supreme Leader Kim Jong Un, who has been in power since December 2011, North Korea has become a de facto nuclear-weapon state. Pyongyang detonated its first hydrogen bomb in September 2017 and tested an upgraded submarine-launched ballistic missile (SLBM) in October 2019.²

Going into the 2020s, South Korea faces unparalleled military challenges. Beyond the expanding threats emanating from North Korea, China's increasingly aggressive military posture poses new quandaries. Unlike Japan, South Korea is much more reticent about calling out Beijing on a range of security concerns due to its geographic proximity, the sheer magnitude of China's geopolitical weight in and around the Korean Peninsula, and Beijing's influence over North Korea.

Nevertheless, just because Seoul does not publicize its discomfort with China, that does not mean that South Korea ignores China's growing military footprint. Indeed, throughout history, arguably no Asian country has been on the receiving end of Chinese aggression more than Korea has.

On top of coping with growing North Korean and Chinese military capabilities (not to mention Russia, a formidable military power that remains closely aligned with China), South Korea also has to undertake massive military reforms throughout the 2020s, which include paring down its armed forces from 599,000 to 500,000 troops due to the country's rapidly declining birthrates and the limited available pool of conscripts.³ Moreover, alliance cohesion has suffered due to U.S. President Donald Trump's mercurial Korea policies, including his constant pressure on South Korea to drastically increase its common defense contributions. Last but not least, President Moon Jae-in's engagement with North Korea has not resulted in key security dividends or slowed the pace of North Korea's accelerating nuclear weapons program.

Numerous factors come into play when determining a country's threat perceptions. The range of military threats emanating from an adversary or adversaries, the political and strategic calculus of the top political and military leadership, demonstrable combat capabilities, and the degree of external military assistance are all relevant considerations. But equally trenchant is how a host nation's leadership perceives the core threats it faces.

Moon and Trump have elevated personal outreach with the Kim regime to a level far beyond that of their predecessors. The years 2018 and early 2019 marked a period of whirlwind diplomacy, with three inter-Korean summits. Most significantly, Trump met with Kim in June 2018 in Singapore for the first-ever U.S.–North Korea summit. A second U.S.–North Korea summit was held in Hanoi in February 2019. In addition to these meetings, Kim held key summits with Chinese President Xi Jinping and his first meeting with Russian President Vladimir Putin. Moon wanted to achieve a breakthrough in inter-Korean relations and was convinced that Kim would be willing to accommodate him. Absent any major foreign policy victory during his first term, Trump wanted to show the world that, unlike previous U.S. presidents, he had the ability to make an unparalleled nuclear deal with Kim.

Throughout the fall of 2017 when North Korea escalated tensions, Trump pushed back by stating that he would obliterate North Korea if he had to. By early 2018 when North Korea decided to join the Winter Olympic Games in Pyeongchang, South Korea, Trump also shifted gears. Moon was very eager to foster U.S.–North Korea dialogue since he believed that a major breakthrough in ties between Washington and Pyongyang would result in critical payoffs for Seoul. From the moment Trump shook hands with Kim in Singapore in June 2018, Trump highlighted his personal rapport with the North Korean leader. Subsequently, Trump played down North Korean provocations by arguing that Kim was ultimately

going to conclude a major nuclear deal with him. For instance, when North Korea fired a short-range missile in July 2019, Trump remarked that “they’re short-range missiles. And my relationship is very good with Chairman Kim. And we’ll see what happens. But they are short-range missiles, and many people have those missiles.”⁴ Nuclear expert Vipin Narang highlighted the naiveté of this statement when he wrote that “these [missiles] are mobile-launched, they move fast, they fly very low and they are maneuverable. That’s a nightmare for missile defense.”⁵ He went on to note that “Kim is exploiting loopholes in his agreements with President Trump brilliantly.”

Despite the unprecedented meetings of 2018 and 2019, neither Moon nor Trump were able to achieve breakthroughs with North Korea. While Trump deserves credit for being the first sitting U.S. president to hold direct meetings with Kim, he has been instrumental in weakening alliance cohesion more than any other U.S. president. Trump’s wild rhetoric, penchant for the limelight, and cavalier treatment of alliance management issues have created unease in South Korea, but for the most part, the Moon administration has chosen to live with Trump’s antics. This is because Seoul does not want to curtail Washington’s potential rapprochement with Pyongyang or dampen Trump’s outreach to Kim. Given that Moon’s highest priority lies in creating an irreversible peace regime on the Korean Peninsula, he has been willing, for the time being, to push aside Trump’s incessant calls for an exponential increase in South Korea’s contributions for the common defense.

This is not to suggest that the Republic of Korea (ROK) military, the Pentagon, and the U.S. forces stationed on the peninsula are not prepared for worst-case scenarios. But Trump’s constant pressure on South Korea to pay more for stationing U.S. troops on the peninsula, incessant denigration of U.S.–ROK joint military exercises as too expensive *and* threatening, constant berating and second-guessing of the U.S.

intelligence community, and amateurish foreign policy decisionmaking have contributed to a fundamental unease in the U.S.-ROK alliance. In some respects, the state of the U.S.-ROK alliance today is reminiscent of the alliance in the late 1970s when Seoul adamantly opposed then U.S. president Jimmy Carter's initial promise to gradually withdraw U.S. ground forces from South Korea. But Carter ultimately listened to new intelligence estimates that led him to roll back his withdrawal plans; most importantly, while Carter came into office with very different views on South Korea and developments on the Korean Peninsula, he never disrespected the intelligence community or the military services.

The year 2019 is likely to be remembered as a tipping point on the Korean Peninsula, when the combined efforts of Trump and Moon softened deterrence and defense against North Korea. If Trump is re-elected in November 2020, he may be emboldened to conduct a partial withdrawal of U.S. forces from South Korea, particularly if Seoul does not meet his cost-sharing demands.

Fortunately, the U.S. Senate passed a resolution in December 2019 that stipulated that the president cannot reduce the number of the United States Forces Korea (USFK) troops on the peninsula below 28,500, the current number.⁶ The bill noted, in part, that “while the conferees support diplomatic efforts to achieve the complete and fully verified denuclearization of the Democratic People’s Republic of Korea, the conferees believe the removal of United States military forces from the Korean Peninsula is a non-negotiable item in such negotiations.” (The bill stipulates that the U.S. secretary of defense must certify that a reduction would not significantly “undermine the security of United States allies in the region” and that the Department of Defense has “appropriately consulted allies of the United States, including South Korea and Japan, regarding such a reduction.”)⁷

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HOPES OF PEACE, SIGNS OF TROUBLE

Eye-catching diplomatic overtures took center stage throughout 2018 and into early 2019, though Trump and Moon's bids for a nuclear breakthrough came up empty. For his part, Kim ushered in 2019 with a noteworthy New Year's address that seemed conciliatory on the surface but also hinted at continued North Korean intransigence. He praised the socialist path his country is taking and stressed the importance of normalizing ties with the United States to the extent that Washington was willing to alter its hostile policy toward North Korea. “I am ready to meet the U.S. president again anytime, and will make efforts to obtain without fail results which can be welcomed by the international community,” Kim stated.⁸ Yet despite this diplomatic language, Kim's address also contained a harder edge. While holding out his hand to Trump, Kim also warned that if the United States did not keep what he construed to be its promise, North Korea “may be compelled to find a new way for defending the sovereignty of the country and the supreme interests of the state and for achieving peace and stability.”

As expected, the Moon government welcomed Kim's speech and remained hopeful that 2019 would be a pivotal year for inter-Korean relations. In his own New Year's press conference, Moon was upbeat about Kim's pledge, despite delays, to visit Seoul if circumstances permitted, and the South Korean president explained that the two leaders would continue to meet throughout

2019. Moon also reiterated the importance of signing an end of war declaration in 2019: “The signing of a peace agreement was part of the plan under the armistice agreement so that within six months, all aspects of the war would come to a conclusion with the signing of a peace agreement.” He went on to say, “If adversarial relations between the two sides can be reduced with a parallel political statement, denuclearization efforts will pick up momentum and as a result, peace negotiations can also bear fruit.”⁹

Seoul continued to stress inter-Korean détente as ties between the United States and North Korea dominated the headlines going into the February 2019 Hanoi summit. For instance, the first ROK defense white paper published under the Moon administration in 2018 differed markedly from those published under the previous administration of conservative president Park Geun-hye. Unlike the 2016 edition, the country’s 2018 defense white paper took out references to North Korea being an “enemy.”¹⁰ Instead, the Moon administration white paper noted:

The ROK Armed Forces considers any force that threatens and violates the sovereignty, territory, people, and properties of the Republic of Korea as an enemy. The relationship between South and North Korea has alternated between military confrontation, reconciliation, and cooperation. However, an unprecedented security environment has been set in 2018 to realize complete denuclearization and peace establishment on the Korean Peninsula through three successful inter-Korean summits as well as the first-ever U.S.-DPRK [Democratic People’s Republic of Korea] summit.¹¹

This mood of diplomatic optimism persisted through the rest of 2018 and into the following year. In September 2018, Moon and Kim signed an agreement on implementing military aspects of the historic

April 2018 Panmunjeom Declaration referred to as the Comprehensive Military Agreement. Moon’s 2018 defense white paper stated that the Ministry of National Defense would pursue arms control measures and confidence-building measures (CBMs) as progress was achieved on denuclearization and peace talks. As the white paper put it, “The denuclearization of the Korean Peninsula and the establishment of a peace regime will put an end to the long-standing division and confrontation, laying the stepping stones toward co-existence and mutual prosperity.”¹²

There has been a significant mismatch between these optimistic sentiments and Korea’s unchanged security landscape. If South Korea did not face one of the world’s most dangerous and complex threat spectrums, the Ministry of National Defense could be excused for publishing an assessment replete with references to building peace, fostering diplomacy, preparing for a transformed U.S. alliance, and laying the foundation for inter-Korean military CBMs and arms control. There is nothing inherently wrong with such aims. Rather, the problem lies in equating peace-seeking measures with tangible changes in North Korea’s overarching war aims, military capabilities, grand strategy toward South Korea, and prospects for North Korea’s denuclearization. After all, North Korea has taken no appreciable steps to meaningfully reduce its military forces or revise its military doctrine.

Despite the euphoria of 2018 and early 2019, the failure of the U.S.–North Korea Hanoi summit in February 2019 reinforced existing strategic realities; namely, North Korea’s military posture toward South Korea had not changed for the better nor had the North Korean military’s training regimen shifted considerably. There was no indication that North Korea’s nuclear weapons and ballistic missile programs were curtailed. Even so, the Moon government continued to maintain that Kim was fully committed to denuclearization and that the two Koreas had turned over a new leaf.

Predictably, North Korea simultaneously tried to sell hopes of a breakthrough in U.S.–North Korea talks while continuing to upgrade its arsenal. On November 15, 2018, while Pyongyang continued to maintain a self-imposed moratorium on testing nuclear warheads and intercontinental ballistic missiles (ICBMs), it announced the successful testing of a “a new tactical weapon.” North Korea’s state-affiliated newscasters reported that “after seeing the power of the tactical weapon, Supreme Leader Kim Jong-un was so excited to say that another great work was done by defense scientists and munitions industrial workers to increase the defense capability of the country.”¹³ Similarly, mere months after the collapse of the February 2019 Hanoi summit, North Korea resumed conducting projectile and short-range missile tests (for a total of twenty-one tests in 2019).¹⁴

Pyongyang continued to demonstrate new military capabilities in 2019. On October 3, 2019, North Korea announced that it had tested a new SLBM with a range of about 450 kilometers and an altitude of 910 kilometers. The Pukguksong-3 missile was not actually launched from a submarine and, according to the BBC, “North Korea’s engineers may have deemed it too risky to stake their one operational ballistic missile submarine in a test.” Still, the broadcaster concluded that the missile passed the flight test on the technical merits “with flying colors.”¹⁵ An October 2019 *Foreign Policy* article called the test “a major technical achievement” even if the missile is not deployed for several years.¹⁶

The Pukguksong-3 test illustrated North Korea’s ability to field an SLBM with an estimated range of 1,900 kilometers, according to the CSIS Missile Defense Project, a missile that would be highly challenging for U.S. and South Korean missile defense systems to detect early or destroy.¹⁷ More fundamentally, as the aforementioned *Foreign Policy* article reported, “in the absence of any concrete nuclear deal with the United States, North Korean leader Kim Jong Un continues

to assemble, piece by piece, a sophisticated nuclear weapons arsenal and the capacity to deliver those weapons on neighboring countries.”¹⁸ Despite Moon’s and Trump’s downplaying of the North Korean threat and the hopes they have pinned on a nuclear deal, North Korea demonstrated in the latter half of 2019 that it has little desire to pursue genuine denuclearization talks with the United States.

Pyongyang did not stop with the Pukguksong-3 test. On November 29, 2019, North Korea tested two projectiles that analysts believe were fired from a super-large multiple rocket launcher (MRL). Given that South Korea’s capital is located only about 50 kilometers from the Demilitarized Zone (DMZ), Seoul has long been under the threat of North Korea’s long-range artillery, short-range ballistic missiles, and upgraded MRLs. This latest test came nearly two years after North Korea’s Hwasong-15 ICBM test on December 1, 2017, nearly at the end of Trump’s first year in office and six months into Moon’s presidential term.

After one of North Korea’s MRL tests, the South Korean National Security Council released a statement on September 10, 2019, that said “we express our deep concern that North Korea continues to test short range projectiles since last May and we are reviewing the Korean Peninsula’s comprehensive military security situation.”¹⁹ For the first time in two years, the Ministry of National Defense acknowledged that “North Korea’s actions don’t help tension reduction on the Korean Peninsula” and “our military expresses deep regrets and call again on North Korea to cede all provocative actions.”²⁰ While the Ministry of National Defense’s words were amply justified, the fact that the South Korean military waited so long to protest North Korea’s deliberate military provocations demonstrated the Moon government’s penultimate priority: fostering South-North engagement virtually regardless of North Korean actions.

A small but not insignificant domestic dustup captured the prevailing mood in Seoul. In August 2015, ROK Army Staff Sergeant Ha Jae-hyun lost both his legs to a North Korean mine while on patrol along the DMZ. Initially, when he was honorably discharged, Ha was designated as a “wounded warrior” for injuries stemming from war or combat-like duties. In September 2019, however, the South Korean Veterans Administration ruled that Ha was not a wounded warrior after all. It soon came out that the Veterans Administration’s Moon-appointed director believed that Ha should not receive such a designation because doing so would somehow, unbelievably, damage inter-Korean ties. In the end, Moon corrected the mistake with a presidential directive but only after massive public pushback.

Ha’s case illustrates just how politicized South Korea’s national security space is today. That an on-duty ROK military hero should have to ask the Veterans Administration to reinstate his status as a wounded warrior after he lost his legs to a North Korean land mine speaks volumes about the extent to which Moon administration officials are willing to forsake South Korea’s national security interests in the name of preserving a Sisyphean peace with the North. Such a development has been amplified by Trump’s egregious attempts to whitewash North Korea’s increasing nuclear and missile threats while arguing that U.S.-ROK combined military exercises are a waste of money and threatening to North Korea.

How much time Trump actually spends reading critical intelligence assessments and, more importantly, the insights he gains from looking at various situation reports remains unknown. But based on his cavalier

The Trump and Moon administrations have weakened alliance cohesion and deemphasized threat perceptions vis-à-vis North Korea.

remarks on a range of national security issues, denigration of his senior military and intelligence personnel, and impatience with policy experts, it remains highly unlikely that Trump has devoted any meaningful attention to why ROK and U.S. forces need to maintain very high interoperability standards through constant exercises. Since the 2016 presidential campaign and well into his first term, Trump has stated more contradictory positions on the Korean Peninsula than any of his predecessors. From talking loosely about why Japan and South Korea could have their own nuclear weapons, constantly attacking the strategic rationale for maintaining U.S. forces in South Korea and Japan, and his bromance with Kim, Trump has been instrumental in diluting the case for preserving and strengthening alliances with key allies such as Seoul and Tokyo.

THE DANGERS OF A HOLLOWED-OUT ALLIANCE

Although Seoul and Washington continue to stress the rock-solid nature of the alliance, the Trump and Moon administrations have weakened alliance cohesion and deemphasized threat perceptions vis-à-vis North Korea. Whereas the readouts of previous top-level U.S.-ROK meetings on North Korea’s nuclear program clearly acknowledged the scale of the threat, more recent statements under Trump and Moon’s tenure have implausibly downplayed the risks.

Early on, joint diplomatic statements released by the two administrations largely adopted language like that in previous documents. Other than ad-hoc meetings between ROK and U.S. presidents, one notable occasion for such pronouncements is the annual Security Consultative Meeting (SCM), the highest-level defense dialogue between Seoul and Washington. When the Trump and Moon administrations held their first SCM in Seoul in October 2017, the joint communique reaffirmed the United States’ commitment to South Korea’s defense following an unparalleled spike in

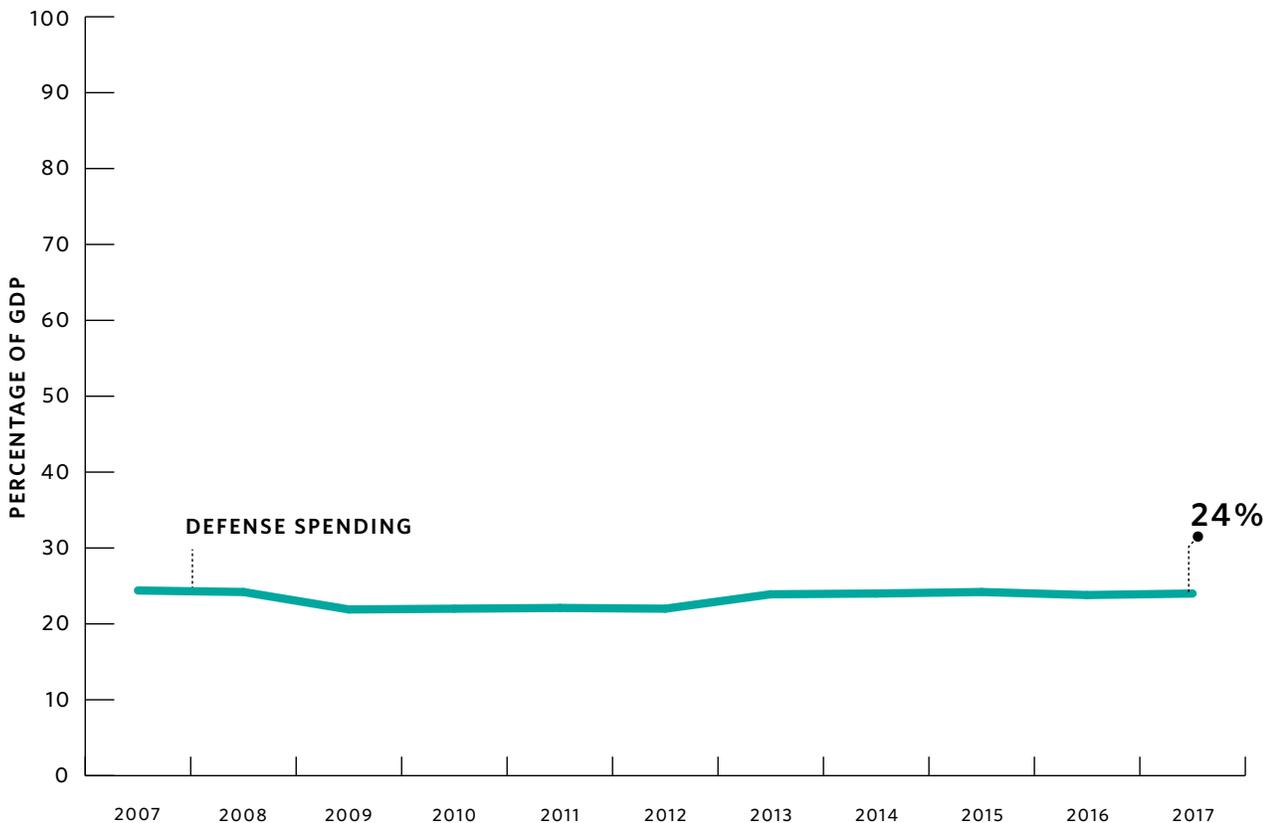
North Korean provocations, including the country's first hydrogen bomb test in September 2017. One of the 2017 document's most poignant sections read:

The Secretary reiterated the longstanding U.S. policy that any attack on the United States or its allies will be defeated, and any use of nuclear weapons will be met with a response that is both effective and overwhelming. . . . The Minister and the Secretary committed to ensuring that extended deterrence for the ROK remains credible, capable, and enduring

by continuing to enhance Alliance deterrence measures and capabilities in response to the increasing North Korean nuclear, weapons of mass destruction . . . , and ballistic missile threat, and continuing to promote information-sharing and interoperability.²¹

Exactly a year later, when the fiftieth SCM was held in Washington, DC, the 2018 joint communique highlighted the importance of inter-Korean détente. In the spirit of inter-Korean reconciliation that Moon was spearheading and Trump was cheering on, the 2018

FIGURE 1
North Korea's Defense Spending as a Percentage of GDP



SOURCE: U.S. Department of State, *World Military Expenditures and Arms Transfers*, 2019

document highlighted “various confidence building measures the ROK is undertaking with DPRK military authorities” and judged “that such efforts have had a positive influence on easing tensions on the Korean Peninsula.”²² To be sure, the South Korean defense minister also stressed that Seoul would continue to develop robust capabilities for repelling a possible North Korean invasion including key military cooperation with the United States.²³ Nevertheless, the Ministry of National Defense has also been extremely cautious in assessing an array of threats from the North given the importance it currently attaches to inter-Korean CBMs despite the absence of any structural change in North Korea’s force deployments or military spending (see figure 1).

In June 2019, during the eighteenth Shangri-La Dialogue in Singapore sponsored by the International Institute for Strategic Studies, South Korean Minister of Defense Jeong Kyong-doo remarked, “With the three inter-Korean summits and two US-North Korean summits serving as a turning point, the security situation of the Korean Peninsula is undergoing dynamic changes towards solving the North Korean nuclear threat, boosting confidence and easing tensions between the two Koreas.”²⁴ He went on to say:

Since the Moon administration set sail, however, the Republic of Korea has been able to find a ray of hope within the seemingly insurmountable clouds of war by improving inter-Korean relations and pursuing diplomatic solutions aimed at solving the nuclear threat. Now the Republic of Korea is facing a watershed point that will echo throughout our 5,000-year-long history. Our grand journey, while laden with difficulties for the establishment of permanent peace on the Korean Peninsula, has begun. . . . The Republic of Korea government has named a new order of peace and coexistence and also of cooperation and prosperity, to be generated through the complete denuclearisation and establishment

of the permanent peace in the peninsula. . . .

The new Korean Peninsula regime seeks to be a peace-cooperating community, moving from war and conflict to peace and coexistence, and an economic cooperation community moving away from ideological camps to economic prosperity.²⁵

Although the minister’s bullishness on forging a permanent peace on the Korean Peninsula is understandable, given the inordinate amount of attention the government is paying to making peace with North Korea, it was remarkable that virtually nothing was said about North Korea’s ongoing work on nuclear weapons and other weapons of mass destruction.

For the Moon administration, the most ambitious and important item on the security agenda is imposing a peace regime on the Korean Peninsula that would supersede all other security and defense mechanisms. Such a strategy needs to be pursued carefully given the pushback from conservative South Korean politicians and voters on any significant diminution of the ROK-U.S. alliance. Still, the Moon government is betting that, because it was building on three inter-Korean summits in 2018 and emphasizing a significant reduction in inter-Korean tensions, the public would support sustained rapprochement, including the incremental restructuring of USFK and ROK-U.S. military cooperation.

Seoul wants to sign a permanent peace treaty to formally end the Korean War as soon as possible, while the United States, up until now, has said that related issues such as the future status of U.S. forces have to be ironed out in advance. Of course, Trump’s constant tirades that South Korea and other wealthy U.S. allies are taking the United States for a ride and Trump’s threats to pull U.S. forces out suggest that he would be supportive of an early signing of a peace treaty to replace the armistice. However, all the key U.S. national security departments including the

Department of Defense and the Department of State, the U.S. Congress, and the U.S. military are against any hasty reduction of the USFK troop presence that could lead to a security vacuum.

For the Moon government, one of the most urgent national security issues is ensuring the full transfer of wartime operational control (OPCON) back to the ROK. As a sovereign state, South Korea has every right to maintain full OPCON over its forces. Washington and Seoul have agreed to expedite the transfer of conditions-based OPCON, which is seen by South Korean progressives as a major milestone in achieving greater defense autonomy. One of the main rationales for an accelerated OPCON transfer is the belief that doing so could improve inter-Korean military ties owing to a reduced role of USFK. But it remains highly unlikely that North Korea's overarching military posture toward the South will soften when OPCON is transferred.

To counter criticisms from the right that the Moon administration has neglected South Korea's defense modernization for inter-Korean détente, the Moon government has increased real defense spending in conjunction with its peace initiatives toward North Korea. Despite growing skepticism over the possibility of a groundbreaking U.S.–North Korea nuclear deal, the Moon administration continues to hope that as long as Trump remains focused on becoming the U.S. president who will bring lasting peace to the Korean Peninsula and as long as Seoul maintains its commitment to détente, Kim will eventually change course and make concessions in a bid for peace.

Whether that happens or not, the budget increase has been considerable. Regardless of how South-North ties evolve in the remaining two years of the Moon administration, defense officials point out that South Korea's defense spending stood at \$43 billion in 2018, a 7 percent increase over 2017 and the largest single-year increase since 2009.²⁶ The South Korean Ministry of National Defense also announced that it was going

to build a light aircraft carrier and that, overall, it plans to spend \$239 billion more on defense from 2020 to 2024.

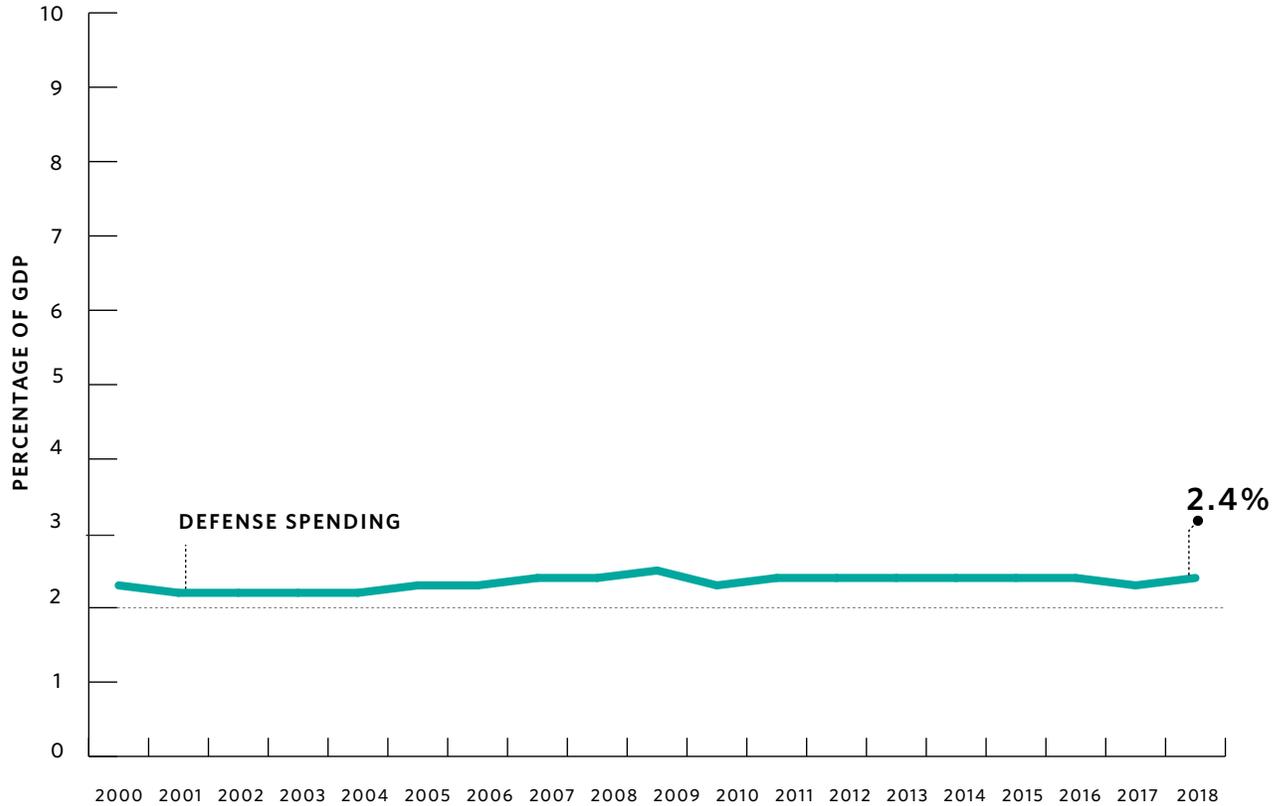
Military analysts in Seoul assert that while Moon's defense budget increase is a positive development, it is also being spurred by other factors. As Reuters correctly reported, "While the surge in military spending may seem to contradict Moon's push to engage North Korea, analysts say it is largely driven by other issues, including South Korea's changing demographics and the country's relationship with longtime ally the United States."²⁷ Other than demographic drivers, the array of South Korean platforms and weapons systems that need to be upgraded or replaced has increased significantly as the ROK military transitions to a more technology-based force. By increasing the defense budget, the government has also been able to increasingly satisfy the service's procurement wish lists.

A Costly Debate on Cost-Sharing

Cost-sharing has become a major point of tension for the alliance under the Trump administration. In November 2019, negotiations between Seoul and Washington over a new Special Measures Agreement to cover the costs of U.S. troops based in South Korea broke down. James DeHart, the chief U.S. negotiator, said that South Korea "was not responsive to our request for fair and equitable burden sharing."²⁸ In 2019, South Korea paid roughly \$920 million in direct costs toward stationing U.S. forces in South Korea. Multiple media outlets have reported that the Trump administration demanded that Seoul pony up \$5 billion next year, a more than 400 percent increase.²⁹ But Seoul also covers other costs, including by providing rent-free land for U.S. bases and by shouldering more than 90 percent of the nearly \$11 billion cost of relocating most U.S. military personnel in South Korea to Camp Humphreys in Pyeongtaek.³⁰ Additionally, South Korea already allocates around 2.5 percent of its gross domestic product for defense spending and is one of the largest buyers of U.S. weapons (see figure 2). According to a

FIGURE 2

South Korea's Defense Spending as a Percentage of GDP



SOURCE: ROK Ministry of National Defense, *2018 Defense White Paper*, Appendix 3

2019 South Korean government report, from 2014 to 2018, South Korea imported \$6.2 billion in arms from the United States, the fourth largest total worldwide.³¹ It goes without saying that South Korea still faces a nuclear-armed North Korea.

Nevertheless, since the 2016 campaign, Trump has operated under the mistaken belief that the United States pays an enormous amount to defend South Korea but receives virtually nothing in return. From a purely transactional point of view, South Korea's direct contributions to U.S. defense is limited, but this is natural given that the United States is a superpower

with global interests. Nearly twenty years into the War on Terror, the United States has spent hundreds of billions of dollars and has endured significant combat casualties, so it is understandable that Washington wants its key allies to assume a bigger share of the common defense burden. Unlike most European members of the North Atlantic Treaty Organization (NATO), South Korea has not receded from its core defense responsibilities. During the Vietnam War, the largest contingent of allied forces in South Vietnam other than U.S. forces were South Korean troops who fought alongside their American counterparts.³² South Korea contributes to U.S. interests by being a key

political, economic, and military ally and by helping to maintain a strategic balance in Northeast Asia favorable to the United States.

Trump has taken a similar tact with other key U.S. partners. Throughout the 2016 U.S. presidential campaign, he focused his ire on South Korea (and to lesser extent other important U.S. allies and partners like Germany, Japan, and Saudi Arabia) for supposedly being “free riders” on defense. According to a November 2019 *Foreign Policy* article, then national security adviser John Bolton told his Japanese counterpart that Trump wanted a 300 percent increase in common defense costs from \$2 billion to \$8 billion, a hike comparable to the one Washington demanded of Seoul.³³

By all indications, Trump’s stance on cost-sharing is deeply held. In a book based on discussions with former secretary of defense James Mattis who resigned in early 2018, Trump “wasn’t just grumbling publicly” about the high expenses of maintaining alliances but also “challenge[d] their value in private . . . asking [advisers] whether we could withdraw forces from . . . Japan, South Korea, and Germany.”³⁴ According to conversations with former administration insiders, officials like Mattis and secretary of state Rex Tillerson tried unsuccessfully to convince Trump to tone down his jabs at key allies. Trump reportedly has his own idiosyncratic method of calculation that has convinced him that South Korea was ripping off the United States even more so than other U.S. partners.³⁵ This may, in part, explain why Trump is fixated on teaching Seoul a lesson since, in his mind, such a rich and capable country should pay far more for stationing U.S. forces. Trump told Mattis that “it’s a losing deal! If [South Korea] paid us \$60 billion a year to keep our troops overseas, then it’s an okay deal.”³⁶

For the past several years, the United States has implemented a rotational force concept whereby U.S. forces are sent on short-term deployments. The Pentagon plans to implement division-strength rotations including the “South China Sea and

surrounding areas, all in an effort to expand the Army’s presence in containing a resurging China and multiply forces in a hard-to-reach area.”³⁷ According to press reports, Washington wants South Korea to shoulder the costs for relocating U.S. forces to and from South Korea in addition to sharing the cost for deploying strategic assets such as aircraft carriers and strategic bombers to the ROK. One of the reasons why Seoul has balked at assuming the cost of rotating U.S. forces is that it would mean paying for out-of-area deployment expenses. It would also weaken the argument that USFK is deployed in South Korea to deter North Korea rather than assuming more regional missions such as deterring Chinese forces. Moreover, such a move would also significantly decrease any support in the National Assembly for increasing South Korea’s share of common defense costs.

The Moon administration has largely stuck to a diplomatic script on cost-sharing negotiations since Seoul does not want to antagonize Trump at a delicate time for U.S.–North Korea relations. Neither Moon nor any of his senior officials have overtly criticized Trump’s outrageous demands given that Seoul still wants Trump to conclude a pathbreaking nuclear deal with Kim. When negotiations continued to stall, the South Korean foreign ministry said that “the two sides broadened their mutual understanding and consensus but confirmed that there are still differences between them.”³⁸

Notwithstanding strong bipartisan support in the U.S. Congress in favor of the ROK-U.S. alliance and solid opposition to any sudden reduction of U.S. forces, if Trump does not get his way on defense costs, he may threaten to partially reduce USFK. That said, there are limits to how far Trump could go, given that Congress mandated that the secretary of defense certify that any significant reduction of U.S. troops in South Korea is necessary for U.S. national defense.³⁹ As mentioned above, in December 2019, Congress reaffirmed its pledge to maintain the current level of 28,500 U.S. troops in South Korea.

Trump's constant remarks about rich allies exploiting the United States may serve to embolden his "America First" message to his political base, but it certainly does not apply to Japan or South Korea. In an era of rapidly expanding Chinese military power and fluctuating U.S. influence in the Indo-Pacific, it makes even more sense for the United States to strengthen its ties with key allies. Indeed, one of the biggest strategic assets the United States has, unlike China, is treaty allies throughout the Indo-Pacific that complement the U.S. political, economic, and military presence in the region. At the same time, it is incumbent on Washington's allies to shoulder a fairer share of common defense costs in addition to increasing their respective defense budgets. Ironically, this is precisely what Japan and South Korea have done over the past several years.

Calculations about the worthiness of allies cannot be made primarily on the basis of dollar-for-dollar considerations. But even if one did consider the value of allies in more transactional terms, it is important to bear in mind that major U.S. allies such as South Korea and Japan are also two of the largest importers of U.S. arms—a major boost for the Pentagon and the U.S. defense industry. Contrary to Trump's criticisms, rich U.S. allies in Asia are not defense free riders but key partners in a common defense grid that enhances U.S. influence.

SOUL-SEARCHING FOR STABLE, LONG-TERM SECURITY

For more than seventy years, the U.S.-ROK alliance has stood out as one of the most successful alliances forged after World War II. All alliances are affected by

Trump has compelled South Korea to think hard about its long-term defense choices and strategy.

changing political and military circumstances, a reality evinced by the NATO enlargement that occurred with the end of the Cold War. The U.S.-ROK alliance has not remained immune to change and modernization. Yet the alliance faces unprecedented challenges going into the 2020s including the potent combination of unchanging military and political realities in North Korea; political leaders in Seoul and Washington with contrasting political goals vis-à-vis Pyongyang; bifurcated threat perceptions on North Korea; and a loss of readiness owing to canceled, truncated, or postponed U.S.-ROK exercises.

Trump has compelled South Korea to think hard about its long-term defense choices and strategy. There is no denying that the United States remains South Korea's most important ally. Seoul continues to rely heavily on Washington for strategic intelligence and advanced combat aircraft such as the F-35. But Trump's antics are prompting Seoul to do more to hedge its bets, including by expanding its own domestic arms industry. As one journalist has put it, "For now South Korea is still shopping American . . . [but] the frustration with needing to pay up in order to catch up has helped push forward the idea of South Korea's military becoming more self-reliant."⁴⁰ And, admittedly, there are sound strategic and political reasons for South Korea to become more self-sufficient on the defense front. South Korea's advanced industrial base and desire to lessen its technological dependence on the United States resulted in the KF-X or indigenous fighter jet development program in addition to next-generation cruise missiles and long-range ballistic missiles.

As one of Asia's largest economies and a major military player, South Korea is rightly seeking greater defense autonomy provided that such steps enhance and strengthen the country's core defense posture and national security interests. But as Seoul calibrates its long-term defense needs and security paradigm, it is fitting for the ROK to remind itself of the opportunity costs associated with intensified nationalistic considerations

versus more realistic security assessments. Should Seoul feel that it is time to assume a more independent defense posture, then it follows that South Korea must be absolutely willing and able to bear significantly higher defense costs. Meanwhile, South Korea should assume wartime OPCON as soon as conditions permit it to do so. However, it is critical to understand that enhanced autonomy means that South Korea has to make immense investments in strategic intelligence, modernized command and control infrastructure, more secure supply chains, and robust defense R&D. Absent such real efforts, South Korea's defense posture cannot but inexorably weaken.

The major tasks for South Korea are balancing the understandable desire for greater security autonomy, maximizing its defense capabilities vis-à-vis a nuclearized North Korea in conjunction with the United States, minimizing growing political and military pressures from China, and managing its brittle but critical relationship with Japan. Even under the best of circumstances, such undertakings will require immense strategic foresight and political acumen. It is also crucial for South Korea to understand that Chinese

military might and political power is higher than at any point in recent decades and is continuing to grow with each passing year. Absent a fundamentally strong alliance with the United States and shared security perceptions between Seoul, Tokyo, and Washington, South Korea has to ponder what leverage it has in relation to an increasingly powerful and assertive China.

At a time when China is flexing its military muscle as never before, it behooves the United States to nurture and sustain the closest of ties with core allies and partners in the Indo-Pacific. Treaty allies like Australia, Japan, South Korea, Thailand, and the Philippines are a comparative advantage that a rising China or an irredentist Russia simply do not have. South Korea is an important and valuable ally not because it provides equal protection for the United States but because it plays an indispensable role in helping to maintain a regional balance that coincides with U.S. interests and strengthens U.S. regional standing. As a superpower, the United States can opt to go it alone while extricating itself from both Asia and Europe. The moment it does so, however, would also signal the beginning of the end of U.S. supremacy.

CHAPTER 2

THE STATE OF THE NORTH KOREAN MILITARY

KIM MIN-SEOK

Long gone are the days of the late 1950s and 1960s, when North Korea held an economic and technological edge over its neighbor to the south, an edge that was also reflected in the military balance between the two sides.⁴¹ Since then, economic mismanagement, the 1991 collapse of Pyongyang's Soviet benefactor, and decades of accelerated South Korean economic growth have gradually closed and then reversed this gap. Today, the Republic of Korea (ROK) is far wealthier than the Democratic People's Republic of Korea (DPRK), and this prosperity divide also has a number of military implications.⁴²

Nevertheless, it is important to keep in mind that, since 2006, North Korea has developed nuclear warheads and increasingly sophisticated ballistic missiles. This has been a game changer in the South-North military balance. Indeed, one of the reasons why Pyongyang is accelerating its nuclear weapons program is because of the country's very large but outdated conventional forces. North Korea is unlikely to reduce its conventional forces and will continue to upgrade and strengthen its weapons of mass destruction.

The North Korean military's numerical advantage but quality shortfall vis-à-vis the South Korean military holds true for core elements of its ground, naval, and air forces.

The conventional military power of the Korean People's Army (KPA) has stagnated since the 1990s, although North Korea still overwhelms South Korea in terms of the size of its armed forces. The KPA's troops total nearly 1.3 million active duty personnel, or more than two times the 599,000 troops that the ROK Armed Forces field.⁴³ Nevertheless, many of the KPA's conventional armaments are decades old, having been manufactured between the 1950s and the 1970s or designed from Chinese and Russian equipment dating back to that era.⁴⁴ While the ROK military has retained a limited number of vintage systems, most of its military equipment has been updated and modernized. Such qualitative considerations must be

TABLE 1
The Military Balance on the Korean Peninsula

	CLASSIFICATION	SOUTH KOREA		NORTH KOREA (ESTIMATES)	
		IISS	ROK Ministry of National Defense	IISS	ROK Ministry of National Defense
TROOPS	ARMY	490,000	464,000	1,100,000	1,100,000
	NAVY	70,000 (including 29,000 Marine Corps)	70,000 (including 29,000 Marine Corps)	60,000	60,000
	AIR FORCE	65,000	65,000	110,000	110,000
	STRATEGIC FORCES (nuclear and ballistic missiles)	X	X	10,000	10,000
	TOTAL TROOPS (excluding reserves)	625,000	599,000	1,280,000	1,280,000
	RESERVES	3,100,000	3,100,000	6,300,000	6,300,000
ARMY	EQUIPMENT				
	Armored fighting vehicles	2,614	2,300	4,060	4,300
	Armored vehicles	2,956	2,800	2,532	2,500
	Artillery	4,853	5,800	6,000	8,600
	Multiple rocket launchers	214	200	5,100	5,500
	Surface-to-surface missile launchers	30	60	100	100
NAVY	EQUIPMENT				
	Combat-capable surface vessels	144	100	385	430
	Amphibious vessels	9	10	267	250
	Mine warfare vessels	10	10	24	20
	Logistics and support vessels	7	20	23	40
	Submarines	22	10	73	70
AIR FORCE	EQUIPMENT				
	Combat-capable aircraft	590	410	545	810
	Transport aircraft	38	50	217	340
	Intelligence and surveillance aircraft	38	70	30	30
	Surface-to-air missile launchers	206	206	350	350
	HELICOPTERS (Army/Navy/Air Force)	693	680	286	290

SOURCES: IISS, *The Military Balance 2019*; and ROK Ministry of National Defense, *2018 Defense White Paper*

NOTE: ROK fighting vehicles and armored vehicles include Marine Corps equipment.

factored into any assessment of the military balance on the peninsula. North Korea's numerical advantage but quality shortfall holds true for core elements of its ground, naval, and air forces (see table 1).

Despite its technological shortcomings, North Korean conventional forces are still a subject worthy of analysis because these troops would be instrumental in any large-scale conflict on the Korean Peninsula. Given the limitations it faces, the KPA would be expected to conduct a campaign of surprise attacks with combined operations involving land, sea, and air power designed to end a war as swiftly as possible before off-peninsula U.S. reinforcements could arrive.⁴⁵ The campaign would likely entail a barrage of North Korean long-range artillery and ballistic missile attacks on Seoul meant to deal both a kinetic and psychological blow. Meanwhile, North Korean special forces and cyber operatives would seek to sow discord and confusion to augment the operational effectiveness of these conventional forces.

Theater-level wargames conducted by the ROK-U.S. Combined Forces Command shed light on key war scenarios, but their results are not public. What is fairly certain, however, is that unless the KPA won decisive battles early in a conflict, North Korean forces will almost assuredly be overwhelmed by ROK and U.S. forces due to the superiority of their capabilities. Despite its lightning warfare strategy, the KPA lacks war sustainment capabilities, which would make any advantage it would have early in a conflict short-lived. Even then, given the high costs that such a war would impose, it is prudent to assess what capabilities North Korea would field in a conflict and how it would likely deploy them.

NORTH KOREA'S GROUND FORCES

The North Korean military boasts an enormous ground force that would form the backbone of any invasion. The KPA Ground Force, which refers to the army

branch of the military, numbers 1.1 million, which is more than two times the size of the ROK Army (approximately 464,000).⁴⁶ North Korea's ground forces fall under the authority of the Supreme Leader and the General Staff Operations Department, which directs operational planning and general management of the KPA Ground Force, Navy, Air Force, and reserves.⁴⁷ They oversee a number of the KPA's core corps, divisions, and independent brigades, including four forward-deployed ground corps, four infantry corps, two armored corps, and four mechanized corps, among them the Pyongyang Defense Command (the Ninety-First Metropolitan).⁴⁸ It also controls operations and planning for the KPA Air Force and Anti-Air Force—which include the majority of the country's anti-aircraft artillery units—and the Eleventh Corps, which is home to the country's special forces.⁴⁹

The ROK Armed Forces are concerned that, in a conflict, the KPA would use its 200,000-strong special forces to infiltrate the forward and rear positions of South Korean forces using underground tunnels and various aircraft.⁵⁰ According to South Korea's 2018 defense white paper, the KPA's special operations forces are concentrated in the Eleventh Corps and organized into various units including light infantry divisions and brigades, as well as forward-deployed sniper brigades under the Navy, the Air Force, and the Anti-Air Force.

The KPA also has more main battle tanks than the ROK military, but they are older and less capable than their ROK counterparts. Given that the KPA cannot put all its battle tanks on the front lines at once to capitalize on this numerical advantage, their overall combat power is inferior to those in the ROK military. The 2018 South Korean defense white paper notes that Pyongyang has 4,300 main battle tanks that are old Soviet T-class tanks, while another assessment by the International Institute for Security Studies (IISS) puts the figure at 3,500.⁵¹ Assuming the South Korean military's count is accurate, the number of KPA battle tanks is about 1.5 times greater than the 2,300 tanks the ROK military possesses.⁵² Composing a core

element of the KPA Ground Force, these tank models include the T-34, T-54, T-55, T-62, Chinese Type-59, Chonma-ho, Songun-ho, and Pokpung-ho.⁵³

Despite their numerical superiority, North Korea's tanks are far more outdated than their South Korean peers. First-generation battle tanks—such as the T-34, T-54, and T-55—were introduced immediately after the Korean War in 1953. Given their age, their actual combat value is likely to be significantly lacking. North Korea's T-62, a second-generation version of the T-55, is similar in power to the ROK military's M48A5 model.⁵⁴ The M48A5, the oldest battle tank in the ROK military, is typically deployed in the rear reserves. Meanwhile, the third-generation Pokpung-ho battle tanks the KPA possesses are comparable to the 1,584 total K1, K1A1, and K2 battle tanks the ROK military fields.⁵⁵ But the Pokpung-ho has far less armored protection and shooting accuracy than its third-generation ROK peers.

Moreover, this capability gap is likely to grow when the ROK military acquires additional K2 battle tanks, which are equipped with 1,500 horsepower maneuverability, reactive armor, an active protection system, an automatic loading device for quick shooting, and targeting accuracy within 2 kilometers even while maneuvering.⁵⁶ The induction of these tanks has been delayed for a number of years but could occur in 2020.⁵⁷ The addition of 100 new tanks will put South Korea's total number of K2s at 200.⁵⁸

Unlike its more numerous ground troops and tanks, North Korea has fewer *and* less powerful armored combat vehicles than South Korea does. The KPA has around 2,500 maneuverable armored vehicles, whereas the ROK has 2,800.⁵⁹ The same is true of North Korea's helicopters. The KPA Air Force has only 286 multirole, attack, and transport helicopters, while the ROK military has 693 of them across all branches. Lacking mobility and protective power, the KPA's helicopters include the Mil Mi-2, Mil Mi-4, the Mil Mi-8, and the U.S. Hughes 500/MD, the last of which was

smuggled into the country in the 1980s.⁶⁰ By contrast, the ROK mainly fields the UH-60, which has better maneuverability and protective power. In addition, the KPA Ground Force's most powerful aerial combat vehicle is its fleet of approximately twenty Mil Mi-24 Hind attack helicopters, which were produced in 1970.⁶¹ The ROK military employs a superior caliber of attack helicopters, including thirty-six of Boeing's latest AH-64E Apache, sixty of the slightly older AH-1S, and many of the 500MD model.⁶²

North Korea still uses many aging weapons systems, though it has unveiled some new ones at military parades in recent years. Many of the KPA Ground Force's armaments—such as battle tanks, armored combat vehicles, and artillery systems—were secured between the late 1950s and the 1980s, so most of them have aged considerably. North Korea showed off some new weapons at the September 2018 military parade in downtown Pyongyang for the Day of the Foundation of the Republic.⁶³ The Bulsae-3 (modeled on the Soviet AT-4 Spigot), a short-range antitank missile, was mounted on the improved BTR-80 armored combat vehicle. The Bulsae-3 would be effective against the ROK Army's rear division M48A5 battle tanks, but it likely could not penetrate the thicker armor of the K1A1 or K2 battle tanks placed in the frontline units.

In terms of its conventional munitions, the KPA also beats the ROK Armed Forces in quantity but not quality. The KPA Ground Force has about 14,100 artillery systems, or more than two times as many as the ROK military, which boasts approximately 6,000.⁶⁴ Among these artillery systems, North Korea has 5,500 multiple rocket launchers (MRLs), or more than twenty times as many as the 200 the ROK military possesses.⁶⁵ The KPA's main artillery is the 170-millimeter caliber M-1989 self-propelled artillery and the 240-millimeter MRL. The M-1989 has a maximum range of 54 kilometers, but it is limited to twelve rounds and is not very accurate.⁶⁶ The M-1989 also has an unusually long barrel that makes it difficult to maneuver, so it is mainly operated in mines. In addition, the frontline

division of the KPA has a 122-millimeter self-propelled artillery, which has a less advanced, automated weapon fire system.

In terms of performance, the KPA artillery cannot compete with the ROK military's more advanced models.⁶⁷ Most of the KPA's artillery systems were acquired before 1990, whereas the large majority of the ROK military's artillery systems were procured after 2000. The South Korean military wields 155-millimeter K-55 self-propelled artillery and 1,200 155-millimeter K-9 self-propelled artillery. The highly accurate K-9 has a maximum range of 40 kilometers; the forty-eight shells it carries are loaded into and fired from armored vehicles.⁶⁸ South Korea also uses K-10 armored ammunition cars to automatically replenish ammunition stocks.⁶⁹ The ROK military's artillery batteries can respond much more quickly and accurately than its KPA peers because they are equipped with a weapon fire control system that automatically inputs the coordinates of the KPA artillery captured by counter-artillery radar systems.

In past cases, like the December 2010 shelling of Yeonpyeong Island, the accuracy and firepower of North Korean artillery was limited. The 2010 KPA's shelling of the island, located along the western coast of the Korean Peninsula, made it possible to evaluate some of the combat power of the KPA's artillery. At that time, the KPA shot more than 170 shells using 122-millimeter MRLs, half of which fell into the sea; what is more, 25 percent of the eighty rounds that landed on the island failed to detonate.⁷⁰ Nevertheless, in a more extensive military campaign, heavy, larger-scale targeting of KPA artillery on Seoul and the possible use of chemical weapons would still undoubtedly pose grave risks.

In addition to these other conventional munitions, the KPA has been developing a 300-millimeter MRL, the KN-09, in recent years.⁷¹ This model mimics China's A-100 MRL and the Russian BM-30 Smerch. First

detected in May 2013, the KN-09 has an estimated range of 190 kilometers, so it could be fired from the Military Demarcation Line (MDL) as far as Daejeon, South Korea, far south of the demarcation line.⁷² At least some experts believe that this new MRL model will be equipped with a satellite navigation guidance system.⁷³ The Center for Strategic and International Studies Missile Defense Project judges that these MRLs are still in development as of September 2019.

Overall, the KPA has many more MRLs than South Korea. Moreover, North Korea's new MRLs comprise only a small part of its arsenal, and the majority of its MRLs are aging. The combat effectiveness of these weapons has not been closely evaluated. That said, North Korea has significantly improved its MRL systems compared to previous generations like the M1985 with more limited ranges. This increased range heightens North Korea's ability to strike areas far from the MDL but, according to the Missile Defense Advocacy Alliance, the "limited deployment" of the KN-09 likely does not newly threaten U.S. "assets that were not all ready [sic] in range of different DPRK systems."⁷⁴

Beyond the aforementioned artillery batteries, the North Korean strategic forces have an estimated 900 short-range ballistic missiles and intermediate-range ballistic missiles that can reach anywhere on the Korean Peninsula.⁷⁵ The country's short-range missiles include the SCUD-B (Hwasong-5), SCUD-C (Hwasong-6), SCUD-ER (Hwasong-9), KN-18, and KN-02 (a solid-propellant missile also known as the Viper), and its main intermediate-range missile is the Nodong (Hwasong-7).⁷⁶ The KN-02 missile has a range of 120–170 kilometers and could, if stationed near the MDL, quickly strike Camp Humphreys, the main U.S. military base in South Korea located close to Pyeongtaek.⁷⁷ Meanwhile, in May 2019, North Korea also tested a new short-range missile modeled after the Russian-made Iskander-E and Iskander-M models.⁷⁸

In the event of war, the KPA would support ground operations by attacking major South Korean targets with an array of ballistic missiles. The missiles that the country would use for early ground operations are not very precise, although more advanced navigation systems such as the U.S. Global Positioning System and Russia's Global Navigation Satellite System have improved their accuracy to some degree since the mid-2010s.⁷⁹ Most KPA ballistic missiles use liquid-propellant rockets that take more than an hour to prepare for launch, but Pyongyang has recently been developing solid-propellant models that would be ready for launch more quickly.⁸⁰

In addition to these short- and intermediate-range ballistic missiles, the KPA has at least 700 long-range artillery aimed at the Seoul metropolitan area and northern parts of South Korea; the North Korean military would presumably target civilian facilities in the densely populated metropolitan area to induce widespread public panic.⁸¹ In practice, however, continuously shooting long-range artillery in civilian areas unrelated to combat zones is not very strategically effective. Therefore, North Korean long-range artillery shells would probably be fired temporarily into civilian-populated metropolitan areas at the beginning of a war and then would be redirected at military targets.

On balance, although the North Korean military has a greater quantity of some kinds of conventional military assets like armored combat vehicles and ground troops, the ROK Army's superior capabilities give it the advantage. That said, the KPA's superior quantities of artillery batteries, tanks, troops, and other assets would enable it to inflict significant damage on the ROK military and South Korean infrastructure in the type of lightning warfare strategy North Korea would be expected to employ.

NORTH KOREA'S NAVY

As for North Korea's naval forces, estimates of the size of the country's fleet vary somewhat. South Korea's 2018 defense white paper judges the country to have about 740 naval surface vessels, whereas the IISS military balance assessment put the figure at around 700.⁸² The KPA Navy's fleet is mainly composed of small vessels, with only two larger frigate-size vessels, a fact that limits the country's ocean-faring operational capabilities. North Korea's underwater forces consist of about seventy submarines, according to the IISS, including Romeo-class submarines and various other models. The country's naval forces and its 60,000 troops are organized into the East Sea and the West Sea fleet commands under the Korean People's Navy. The two fleet commands are comprised of thirteen naval squadrons and two maritime sniper brigades.

Only two vessels in North Korea's fleet can be classified as large, namely its Najin-class frigates. Initially deployed in the early 1970s, these ships are equipped with two SS-N-2 Styx anti-ship missiles (80-kilometer range) and two Soviet-produced 100-millimeter guns made in 1960.⁸³ This frigate model cannot compare to destroyers such as the Aegis-class and the Chungmugong Yi Sun-sin-class destroyer equipped with the ROK Navy's latest combat system. Five other KPA Navy ships, including the Sariwon-class corvette, are not equipped with anti-ship-to-ship missiles. In addition, the North Korean navy has about 383 small, high-speed coastal vessels including the Osa-class missile boat and the Komar-class missile boat.⁸⁴

South Korean naval vessels are well-equipped to take advantage of the vulnerabilities of North Korean vessels. Sejong the Great-class destroyers, of which the ROK Navy has three, are equipped with 128-cell vertical missile launch systems, while North Korea's two Najin-

class frigates have just two launchers each. That indicates that North Korea's naval vessels could be destroyed by South Korean naval forces before they even began full-scale operations.⁸⁵ Moreover, the Gumdoksuri, also called Golden Eagle, the ROK Navy's latest high-speed vessel, can travel at a speed of 74 kilometers per hour.⁸⁶ South Korea's eighteen Gumdoksuri ships are each equipped with a 130-millimeter guided multiple-launch rocket, a 76-millimeter gun, and an automated weapon fire control system.⁸⁷

Given their various limitations, in a naval battle, North Korean small naval vessels would presumably strike from afar with Styx missiles and flee, rather than engage in close combat. After all, the quality of North Korea's surface vessels has deteriorated for more than thirty years, and the small hulls of most of their ships force them to operate only in coastal waters off the Korean Peninsula. One potential challenge is that the North Korean Navy can deploy a relatively large swarm of small vessels to battle at once. Yet North Korean vessels generally would be at a disadvantage compared to their South Korean peers, since the ROK Navy's ships are equipped with relatively powerful radar that can detect small enemy vessels quickly.

That said, the KPA Navy has more than just surface vessels, and its underwater forces supply its most lethal offensive firepower. Yet KPA submarines perform significantly worse on an individual basis compared to the ROK Navy's twenty-two vessels, including the Sohn Wonyil-class submarine and the Chang Bogo-class submarine.⁸⁸ Pyongyang is estimated to have a fleet of about seventy submarines, according to a 2017 U.S. Department of Defense report, a fact that lends itself to the country's swarming strategy of striking from a distance.⁸⁹ Moreover, if North Korea is able to operationalize nuclear-armed submarine-launched ballistic missiles (SLBMs), it would be a game changer.

In July 2019, North Korean state media released a number of pictures of Kim visiting a submarine yard believed to house a "new sub [that] will carry nuclear-tipped missiles that could be used to threaten U.S. military bases in Japan and throughout the Asia-Pacific region."⁹⁰ In a conflict, the North Korean navy would probably launch submarines at major South Korean ports just before such a war began. The KPA Navy's submarines also would likely disrupt maritime traffic, lay mines, attack surface vessels, and support infiltration operations by special forces. In March 2010, the KPA demonstrated its ability to covertly disrupt ROK naval operations when a Salmon-class submarine sank an ROK Navy patrol boat at night in the southern part of the Yellow Sea. And in 1996, a North Korean Shark-class submarine was found stranded in the East Sea, revealing that it was attempting to infiltrate waters off of South Korea.⁹¹

North Korea's submarines are relatively small and old, but they are still a formidable challenge for the ROK military largely because they can conduct secret raids and infiltration missions. Environmental considerations compound these difficulties: the East Sea, in particular, has cold and hot sea currents flowing simultaneously, making it very hard to detect submerged submarines. North Korea has recently strengthened its underwater forces, including the construction of a Sinpo-class (or Whale-class) submarine capable of carrying and launching two to four ballistic missiles.⁹² As noted above, if North Korea is able to master SLBM technology with nuclear warheads, that cannot but be seen as a major threat to the ROK, Japan, and the United States.

North Korea also possesses 136 Kong Bang-class hovercrafts, which pose a major threat to the ROK Armed Forces.⁹³ These hovercrafts can sail at a brisk pace of 40–50 knots and are located on the North Korean coast near the Northern Limit Line by the Yellow Sea.⁹⁴

North Korea likely could use them to reach South Korea's Baeknyeong Island and Yeonpyeong Island, where it could launch surprise attacks and amphibious operations. If the ROK Armed Forces fail to defend these islands, the KPA hovercrafts could land special forces at Incheon Airport and along the coast of the Yellow Sea. To guard against this possibility, the ROK Armed Forces are preparing to deploy Apache attack helicopters on Baeknyeong Island.

On the whole, the KPA Navy has many small and medium-sized vessels capable of fast maneuvering and enough submarine power to be adept at surprise attacks. The ROK Navy, on the other hand, has large ships capable of coastal combat with automated strike systems and superior radar detection. As with the KPA Ground Force, while the KPA Navy could inflict significant damage in an initial surprise attack, its ability to sustain that advantage against the ROK Navy's powerful ships, surveillance, and strike systems would make it difficult for the KPA to retain any advantage for long after the early days of a conflict.

NORTH KOREA'S AIR FORCE

The KPA Air Force and Anti-Air Force consist of four air divisions, one tactical transport brigade, three air force sniper brigades, and air defense forces.⁹⁵ According to South Korea's 2018 defense white paper, North Korea's air force possesses 810 combat aircraft out of 1,630 aircraft.⁹⁶ The remainder are surveillance, transport, and training planes.⁹⁷ A total of 40 percent of North Korean combat aircraft are located south of the Pyongyang–Wonsan Line, where they could quickly attack Seoul, located 40 kilometers south of the MDL.⁹⁸ By comparison, South Korea possesses 410 combat-capable aircraft.⁹⁹

Of the KPA's 810 combat aircraft, only its eighteen MiG-29s are classified as fourth-generation combat aircraft.¹⁰⁰ Produced by the Soviet Union in the 1980s, the MiG-29 was developed in response to the U.S. F-15

and F-14. But, in terms of performance, it is inferior to the F-15K and KF-16 models that the ROK Air Force possesses. The MiG-29 is equipped with R-29 air-to-air missiles that have a maximum range of 73 kilometers.¹⁰¹ By comparison, the ROK Air Force has fifty-nine F-15Ks and 160 KF-16s armed with AIM-120 advanced medium-range air-to-air missiles with a range of 85–120 kilometers and AIM-9X new short-range air-to-air missiles.¹⁰² The navigation and tracking capabilities of the F-15K's radar systems are also far superior to those of the MiG-29, while those of the KF-16 are similar or slightly superior. Moreover, the MiG-29 has no air-to-ground precision strike capability, whereas the F-15K and KF-16 can use day-and-night ground target navigation, air-to-ground missiles, and guided bombs. This capability gap is set to widen, as the ROK Air Force introduced forty F-35s, a fifth-generation stealth combat aircraft, starting in 2019.¹⁰³

Some of Pyongyang's aircraft are even older than the MiG-29. North Korea operates third-generation combat aircraft including fifty-six MiG-23s and 120 MiG-21s, while the ROK Air Force has sixty F-4Es.¹⁰⁴ Some of North Korea's combat aircraft also fall below a second-generation designation, such as the 207 MiG-17s and MiG-19s the country possesses.¹⁰⁵ The MiG-23 and MiG-21 are only capable of short-range engagements, while the F-4E is equipped with AIM-7 medium-range air-to-air missiles and AIM-9L short-range missiles. During the Vietnam War, the F-4E was judged to be superior to the MiG-23 and MiG-21.¹⁰⁶ North Korea's third-generation combat aircraft, like its fourth-generation MiG-29, do not have precision ground attack capabilities. By contrast, almost all of the combat aircraft the ROK Air Force fields wield long-range air-to-ground missiles, including high-speed antiradiation missiles (the AGM-88), long-range air-to-ground missiles (the AGM-84K and the Taurus KEPD 350), and the Maverick (AGM-65). They also operate the Joint Direct Attack Munition (a type of air-to-ground guidance bomb), small diameter bombs, and other munitions.

In addition to their technological disadvantages, North Korean aircraft must also contend with other limitations. The KPA Air Force suffers from fuel shortages due to the country's continued economic woes, so North Korean pilots only train for an estimated 15–25 hours a year,¹⁰⁷ while spending the rest of their time practicing indoors. In comparison, ROK Air Force pilots fly more than 135 hours per year.¹⁰⁸ In addition, North Korea only has stockpiled a three-month supply of oil, and under UN Security Council sanctions, Pyongyang has only been permitted to import 500,000 barrels per year, though it likely imports more, as some exporters, including Chinese ones, are widely suspected of violating sanctions.¹⁰⁹ The KPA Air Force further finds it difficult to maintain aircraft due to a lack of spare parts. At least three North Korean fighter jets crashed in 2014 alone.¹¹⁰ In 2014, the North Korean military tried to smuggle in two MiG-21 fighter aircraft and other air defense systems, missiles, and command and control vehicles from Cuba, but they were caught in Panama.¹¹¹

South Korean aircraft enjoy other technological edges too. KPA Air Force combat aircraft lack an aerial refueling capability, whereas the ROK Air Force has aerial tankers, so its combat aircraft can be refueled in the air without spending valuable time returning to base. In addition, the ROK Air Force can significantly increase operational efficiency with the E-767 aircraft, which provides airborne “early warning detection and tracking of low-level targets at extended ranges over land and water” and allows for airborne command and control functions, making the ROK's surveillance and command and control capabilities more survivable.¹¹² In contrast, if the ROK Armed Forces were to destroy North Korean radar and air force command and control facilities on the ground, with ballistic missiles or combat aircraft, the KPA Air Force would lose its command and operational capabilities and the combat prowess of its aircraft would be greatly weakened.

Nevertheless, if a conflict broke out, the ROK Armed Forces would almost certainly sustain massive damage

from an initial, large-scale, surprise attack by North Korean combat aircraft. The ROK Armed Forces believe that North Korea would seek to drop general-purpose bombs on major military installations, such as South Korean radar sites, air force bases, and military command facilities at the beginning of such a war. The KPA would likely use deteriorated and expendable MiG-15, MiG-17, MiG-19, and MiG-21 aircraft to hit targets using the kamikaze method some Japanese combat aircraft used in the Pacific theater during World War II. However, most of the KPA Air Force planes could be neutralized soon after a war began, because a full-scale North Korean invasion of South Korea would prompt the vastly superior Japanese and U.S. air forces to join the conflict.

NORTH KOREA IN CYBERSPACE

Given the disparities between the quality and sophistication of North Korea's and South Korea's armed forces, it is not surprising that Pyongyang has found asymmetrical cyber capabilities an attractive option. The KPA has about 6,000 cyber operatives who have hacked governments, military forces, financial institutions, energy firms, defense contractors, and media companies in South Korea and the United States to steal information and money.¹¹³ According to the Federation of American Scientists, the KPA has cyber-focused departments in the General Staff Department and the Reconnaissance General Bureau, North Korea's foreign intelligence service “responsible for collection and clandestine operations.”¹¹⁴ The country's hacking and cyber attack units themselves are overseen by the Reconnaissance General Bureau, and the General Staff Department is responsible for carrying out cyberwarfare.¹¹⁵

The KPA's cyber units have engaged in numerous illegal activities including the major distributed denial-of-service attack in July 2009 against several government and corporate websites in South Korea and the United States, the hacking of Sony Pictures in 2014, the major

While the KPA's surprise-based tactics could do significant damage in the early days of a conflict, because the KPA's capabilities do not surpass those of the ROK Armed Forces, any early advantage would quickly be lost.

cyber attack on Bangladesh's central bank in 2016, and the hacking of the South Korean Ministry of National Defense's intranet in 2017.¹¹⁶ Presumably, North Korea's cyber operatives would play a significant role in the event of war with South Korea and the United States. In particular, the Electronic Reconnaissance Bureau (Bureau 121) under the Reconnaissance General Bureau would likely seek to hack and paralyze a wide range of South Korean infrastructure and military command and control systems just before such a war began.¹¹⁷

Critically, South Korea's defenses against North Korean cyber attacks leave a lot to be desired. Seoul's prowess in cyberspace is inferior to that of Pyongyang. South Korea suffers a barrage of cyber attacks from North Korea every day, with some experts estimating the number of daily attacks at 1.5 million.¹¹⁸ Between 2014 and 2016, South Korean authorities estimated that North Korea hacked into 140,000 computers at roughly 160 South Korean private companies and government offices. The South Korean government and private sector are unprepared to successfully protect against this onslaught of attacks due to their sheer volume.

The resulting damage has been considerable, including the theft of U.S.-ROK wartime contingency plans, attacks on the financial system (such as the Ten Days of Rain attack in 2011 and the DarkSeoul hack in 2013), losses due to theft reported by financial institutions

(suffered by many countries in 2016 and 2017 including, most notably, Bangladesh), and a number of other disruptive, invasive attacks (like the WannaCry hack in 2017).¹¹⁹ Although North Korea's cyber warfare capabilities have yet to be tested in a conflict, the successful attacks its hackers have mounted in peacetime add one more asymmetric capability (in addition to weapons of mass destruction) to Pyongyang's arsenal that could devastate South Korean critical energy, financial, or industrial structures, increasing the costs of war and making allied operations more cumbersome.

CONCLUSION

In many respects, KPA forces have a powerful numerical advantage, as Pyongyang has more military assets than the ROK armed forces across all three services. Since a significant portion of the KPA is deployed along or close to the Demilitarized Zone and Seoul only lies 50 kilometers from the MDL, the KPA's conventional forces with numerous long-range artilleries remains a major source of concern.

Nevertheless, the quality of a nation's military assets is more important than sheer numbers. Combat troops must be well-trained and well-provisioned, but this is not always a given in the case of North Korea. The country's deteriorating economic conditions have hindered its ability to maximize the quality of its military assets, while South Korea has continuously improved its capabilities. One of the reasons why North Korea has emphasized nuclear weapons and long-range ballistic missiles is precisely because of the growing qualitative edge of the ROK's conventional forces.

The KPA forces are concentrated near the MDL so that if and when war breaks out, they would be deployed immediately. While the KPA's surprise-based tactics could do significant damage in the early days of a conflict, because the KPA's capabilities do not surpass those of the ROK Armed Forces, any early advantage would quickly be lost.

When factoring in U.S. support of the ROK response, South Korea's advantage becomes even more decisive. That said, the military balance on the peninsula would become murky if China, or even Russia, were to intervene in such a conflict on North Korea's behalf. China prioritizes stability on the peninsula, though exactly how and when that would motivate it to intervene is unclear. On the one hand, Beijing, Seoul, and Washington would all share the common goal of preventing Pyongyang from using its nuclear weapons, and China would also seek to deescalate conflict to prevent a flow of refugees over its border and wider regional instability.

On the other hand, China has broader geostrategic interests at play too. If the outcome of a conflict could conceivably shift the balance of power on the peninsula in favor of the United States, Beijing's calculations would change accordingly. If, for instance, allied forces were to cross the thirty-eighth parallel or if it appeared that the Kim regime were about to collapse, China would be incentivized to intervene to ensure the DPRK survives, like when Beijing stepped in during the

Korean War. At the end of the day, while the disparity between North and South Korea's armies is readily apparent, the intervention of their allies and added incentives to maintain the status quo on the peninsula in the context of U.S.-China strategic competition may ultimately determine the outcome of a conflict.

South Korea faces significant military threats going into the 2020s. On a positive note, its forces continue to be modernized, but the ROK military also must contend with a North Korea that is armed with nuclear weapons and numerically superior conventional forces. Pyongyang is also making progress on SLBMs and other asymmetrical capabilities. Despite shifting political priorities and perceptions, it is imperative for Seoul to maintain a very strong defense posture geared toward meeting not only a widening array of North Korean threats but also challenges to regional stability. It is therefore critical for South Korea to maintain the closest of security and military ties with the United States even as it assumes greater confidence in its own military capabilities.

CHAPTER 3

SOUTH KOREA'S MILITARY READINESS UNDER MOON

SHIN BEOMCHUL

South Korea faces a precarious security environment with an imposing nuclear-armed rival on its doorstep. The conditions of preserving the country's security have only grown more demanding as North Korea's arsenal and other military capabilities have matured. As an added wrinkle, ties between Seoul and Washington are as contentious as they have been in recent memory. The longtime allies are locked in a protracted dispute over cost sharing and beset by the challenges of coordinating diplomacy with interlocutors in Pyongyang who seem less inclined to make concessions than diplomats in Seoul or Washington would wish.

Yet, amid this flurry of priorities, it has become more, not less, necessary for the Republic of Korea (ROK) military to maintain a high state of readiness and interoperability with U.S. forces. A host of factors will decide how successfully Seoul balances these competing imperatives. For starters, the ongoing nuclear talks with North Korea remain the most direct way to curb North Korea's nuclear ambitions, even if hopes of a tangible diplomatic breakthrough seem increasingly bleak. Yet while the concessions that South Korean President

Canceling crucial exercises could detract from Seoul's ability to manage its threatening neighbor . . . by downgrading South Korea's military readiness and compromising its ability to conduct operations with U.S. forces.

Moon Jae-in and U.S. President Donald Trump have made to keep talks on track have resulted in some minor tangible tradeoffs, what has happened is that readiness has been sacrificed to avoid giving North Korean Supreme Leader Kim Jong Un a pretext for walking away from the table.

Canceling crucial exercises could detract from Seoul's very ability to manage the threatening neighbor it is engaging with by downgrading South Korea's military readiness and compromising its ability to conduct

operations with U.S. forces. Meanwhile, the future of the alliance's very foundation is exposed to swirling uncertainties over long-term cost-sharing arrangements and the command structure of combined U.S.-ROK forces that would issue orders if conflict were to resume.

For its part, South Korea is undertaking an ambitious slate of defense reforms to keep its conventional military edge despite various challenges. The degree to which these reforms and a renewed sense of purpose for the U.S.-ROK alliance can make the difficult terrain ahead easier to navigate will help determine how effectively the Moon administration can provide for the national defense through the end of its term in May 2022. The stakes could hardly be higher for South Korea, the United States, or the security of Northeast Asia at large.

HOW NUCLEAR TALKS ARE AFFECTING READINESS AND INTEROPERABILITY

Since Moon took office in May 2017, Seoul has stressed improving ties with North Korea in hopes of promoting peace on the Korean Peninsula and more broadly in Northeast Asia. While this peaceful overture has eased diplomatic strains to some extent, it has produced few if any tangible signs that Pyongyang would relinquish its nuclear arsenal.

In April 2018, Moon and Kim signed the Panmunjeom Declaration. They agreed to work together to reduce sharp military tensions, avoid war, and try to build an enduring peace regime between the two Koreas.¹²⁰ As for the nuclear dimension of the talks, the two sides acknowledged the common goal of completely denuclearizing the Korean Peninsula with support and cooperation from the international community.

From the onset, however, North Korea's definition of denuclearization has differed significantly from U.S. views. Washington insists that the end goal is the complete dismantlement of all aspects of North Korea's

nuclear weapons program. While the U.S. government would consider interim steps that move toward that end, its position leaves no room for Pyongyang to retain even a small nuclear arsenal.

North Korea, meanwhile, has maintained that it will never give up its nuclear weapons unless the United States takes reciprocal steps such as removing the nuclear umbrella over South Korea, stopping the introduction of all strategic assets including bombers that could deliver nuclear warheads to the peninsula, and making assurances that Washington would end all its supposedly hostile policies toward Pyongyang. Any concessions that the North Korean government did express a willingness to make, such as the dismantlement of the Punggye-ri nuclear test site in late May 2018, were not meaningful steps toward genuine denuclearization.¹²¹

Throughout 2018 and into 2019, both Moon and Trump held a flurry of summits that raised hopes of a diplomatic resolution in media circles but produced quite modest results. Trump first met with Kim in June 2018. At the Singapore summit, the two leaders released a joint statement that affirmed general principles of the Panmunjeom Declaration but lacked details on specific commitments or timelines. The two sides agreed to work toward a stable peace regime, with Trump agreeing to "provide security guarantees to North Korea," and Kim reaffirming, at least on paper, his "firm and unwavering commitment to [the] complete denuclearization of the Korean Peninsula."¹²² In the end, the meeting was short on substance, produced no tangible progress on denuclearization, and only highlighted the vast gap between rhetoric and reality.

Nevertheless, within months, Moon held another summit with Kim in September 2018 to outline and formally commit to confidence-building measures (CBMs) based on the Panmunjeom Declaration. This was the second of three inter-Korean summits under Moon and the fifth overall occasion of its kind since the first South-North summit in 2001 between then

president Kim Dae-jung and then North Korean leader Kim Jong Il. At the September 2018 meeting, the two sides formally agreed to keep communication channels between the two Koreas open, to implement the agreement together, and to prevent accidental military clashes through CBMs.¹²³ Yet, once again, North Korea pointedly refused to provide a detailed roadmap on denuclearization.

To try to break this impasse, Trump met Kim again in Hanoi in late February 2019. Despite high expectations, the summit did not result in any substantive progress. Trump later intimated that North Korea had demanded blanket sanctions relief without meaningful forward movement on denuclearization, a clear nonstarter for Trump.¹²⁴ However, then North Korean foreign minister Ri Yong Ho disputed that account and insisted that Pyongyang desired only partial sanctions relief and that it was U.S. negotiators who had overreached on their demands.¹²⁵

Trump and Kim held a third, albeit symbolic, meeting in late June 2019 that proved to be more of a photo op than a hard-nosed negotiating session. Despite iconic photos of Trump crossing the Military Demarcation Line (MDL) at Panmunjeom to shake hands with Kim, progress remained stubbornly absent. The two leaders agreed to begin working-level negotiations on denuclearization but without designating specific timelines. The Hanoi and Panmunjeom meetings between Trump and Kim revealed two leaders that had both overestimated their ability to convince the other to offer concessions. The meetings also showed the limits of highly personalized summitry. Chemistry between individual leaders obviously matters, but it cannot be a substitute for significant progress at the working level. Moreover, North Korean authorities never affirmed Trump's rhetoric and exaggerated accounts of what he had agreed to with Kim.

Overall, it remains doubtful whether North Korea intends to denuclearize. Pyongyang seems to want to retain most of its nuclear capabilities while also

receiving sanctions relief. In contrast, the United States continues to favor final, fully verifiable denuclearization, a watered-down variation of the previously stated goal of complete, verifiable, and irreversible dismantlement. Since the failed Hanoi summit, North Korea has begun ratcheting up the pressure on South Korea again. Pyongyang has fired numerous short-range ballistic missiles and has threatened to restart nuclear tests and to take other actions unless the United States gives up what the Kim regime deems its hostile policy toward North Korea.

It remains to be seen how these on-again, off-again nuclear talks have affected and will continue to affect military readiness, but two points need to be considered. First, as long as the U.S. political leadership argues that a nuclear breakthrough is possible, the assertion that the most serious military threat to South Korea (and the United States) will decline is going to gain greater traction. If that remains the case, then all the ongoing steps that go into maintaining the highest possible degree of readiness could be affected.

Second, to maximize momentum for reaching a nuclear agreement with North Korea, South Korean policymakers or political leaders could argue that Pyongyang must be given more incentives, such as the further cancelation of U.S.-ROK military exercises. Indeed, Seoul Mayor Park Won-soon, an aspiring future presidential candidate in the ruling Democratic Party, gave a speech to that effect at the Council on Foreign Relations in January 2020. He said that the United States and South Korea should halt all military exercises until the end of the 2022 Beijing Winter Olympics to pave the way for North and South Korea to jointly host an Olympic Games in the future.¹²⁶

With the outlook for diplomacy uncertain at best, South Korea has limited options for coping with the nuclear threat posed by North Korea. Seoul cannot help but continue to rely on the U.S. nuclear umbrella and its guarantee of extended deterrence. Even though the Trump administration continues to pressure Seoul to

pay a larger share of the cost of stationing U.S. troops in South Korea by several magnitudes, Seoul has little choice but to continue to depend on a robust ROK-U.S. alliance to effectively deter North Korea.

A complementary step is to seek to counter North Korea's nuclear warheads and other weapons of mass destruction in three ways: preemptive surgical strikes on North Korea's strategic targets, bolstering the South Korean air and missile defense system, and putting into place counterstrike capabilities that would enable South Korea to hit all major targets from where North Korean attacks originate. As North Korea continues to develop and upgrade a wide range of ballistic missiles, there is little doubt that South Korea needs to augment its missile defense and retaliatory capabilities. But under the Moon government, the South Korean Ministry of National Defense has instead prioritized enacting CBMs with North Korea.

HOW CONFIDENCE BUILDING IS AFFECTING MILITARY READINESS AND INTEROPERABILITY

Though diplomacy with North Korea is all but stalled, the ROK has insisted that CBMs between the two Koreas have resulted in notable benefits such as the removal of guard posts inside the Demilitarized Zone. However, North Korea has not changed its order of battle nor the training regimen of the Korean People's Army.

Nevertheless, the Moon administration hailed Seoul and Pyongyang's September 2018 addendum to the Panmunjeom Declaration as a major accomplishment. Seoul argued that the September 2018 CBM agreement fostered a real reduction in military tensions between the two Koreas. Through the accord, the two Koreas agreed to "completely cease all hostile acts against each other," and the two sides agreed to consult each other

on a handful of important topics, including large-scale military exercises, blockades and interdiction, and reconnaissance.¹²⁷

Among other things, Pyongyang and Seoul further committed to ceasing military exercises along the MDL between the two countries starting on November 1, 2018. In practice, this meant a halt to all ground forces' regiment-level "live-fire artillery drills and field training exercises" within five kilometers of the MDL.¹²⁸ The agreement also froze all live-fire naval drills and maritime maneuver exercises within a designated zone, as well as tactical live-fire drills involving fixed-wing aircraft, including the firing of air-to-ground guided weapons along parts of the MDL.¹²⁹

While there is nothing wrong with CBMs in principle, it remains to be seen if North Korea will keep abiding by the September 2018 agreement. After all, Pyongyang has contravened previously agreed-to CBMs including provisions of the 1953 Korean War Armistice Agreement. North Korea temporarily suspended rocket launches and missile tests after the Singapore summit. But Kim resumed launching rockets and missiles around the East Sea from May to October 2019 and began testing new capabilities including a missile similar in build to the Russian Iskandar missile. Pyongyang also criticized combined U.S.-ROK exercises in August 2019 by publicly attributing all the causes of hostility to Washington and Seoul.¹³⁰ To put the current focus on confidence building in perspective, the two Koreas signed a number of military CBMs as part of the 1990 Basic Agreement, but North Korea has not abided by them, as illustrated by Pyongyang's numerous military provocations and limited attacks since then, such as the sinking of a South Korean naval vessel and the bombing of Yeonpyeong Island in 2010.

North Korea's questionable willingness to abide by the CBMs is not the only drawback to the September 2018 agreement. Ceasing military exercises (including

weapons firing), establishing a peace zone around the West Sea, and constructing inter-Korean roadways, for example, all look like promising ways to ease tensions near the MDL. But based on the superficial concessions North Korea has made on its largely unchanged offensive force posture, the CBMs are likely to weaken, rather than strengthen, South Korea's defense posture. This is because most of North Korea's artillery, tanks, and ground forces continue to be deployed along the thirty-eighth parallel close to Seoul and only 50 kilometers from the border. Whatever side benefits might arise from the September 2018 agreement on CBMs, North Korea has not substantively changed its military posture.

The Fate of Combined Military Exercises

It was no surprise that Pyongyang condemned ROK-U.S. combined military exercises as drills designed to invade North Korea. But no one expected a U.S. president to denounce the exercises with a longtime ally—nothing like that had been done before. Yet that is exactly what Trump said throughout the 2016 presidential campaign and has repeated since he was inaugurated, namely that the ROK-U.S. exercises are overly expensive and too hostile.¹³¹ By constantly attacking the combined exercises, Trump has frayed the fabric of deterrence. For its part, the Moon administration has not stepped in to defend the exercises, instead remaining silent on the issue for two key reasons. First, Seoul did not wish to anger Trump given the importance Moon has attached to sustaining inter-Korean and U.S.–North Korea détente. Second, implicitly endorsing Trump's position on canceling exercises added momentum to Moon's own push for inter-Korean engagement.

With few champions in their corner, the exercises were drastically rolled back. In August 2018,¹³² Seoul and Washington agreed to suspend the annual Ulchi Freedom Guardian exercise and to review additional

measures to ease military tensions.¹³³ The decision to halt this exercise came more than forty years after it was initiated in 1976 under the name Ulchi Focus Lens. It had been renamed Ulchi Freedom Guardian in 2008. Less than a year after that drill was suspended, in March 2019, the two countries decided to also downsize the annual, large-scale Key Resolve and Foal Eagle military exercises in the spring, so as to avoid provoking North Korea.¹³⁴ Instead, the allies carried out the Dongmaeng exercise, an alliance command post exercise, in March 2019 as a replacement for the two exercises. But whether this reformatted approach can replace actual exercises is highly debatable.

Furthermore, South Korea announced that it was planning to launch a new civilian-military exercise named Ulchi Taegeuk in late May 2019 to help replace the ROK-U.S. Ulchi Freedom Guardian exercise.¹³⁵ It effectively combined the ROK's independent Taegeuk command post exercise in May and the Ulchi government exercise in August. The new exercise focuses on strengthening South Korea's independent abilities to fend off armed attacks and to respond to terrorist attacks and natural disasters. Though the two governments are planning to launch a downsized exercise instead, all major, large-scale ROK-U.S. combined exercises, for now, have ended.

The Fallout of Canceled Exercises

A crucial facilitator of U.S.–ROK interoperability is the Combined Forces Command (CFC). CFC uses a combined U.S.–ROK command structure that was formed in 1978 to enhance interoperability between the two forces in response to president Jimmy Carter's initial plan to gradually withdraw U.S. ground forces from South Korea, a plan that was never put into practice due to new intelligence assessments on North Korean forces. As for the current exercises for theater-level command and control, they usually take the form of a command post exercise supported by computer-

aided war games.¹³⁶ A red team acting as North Korean forces fights against a ROK-U.S. CFC Forces team on a computer-generated battlefield. At the command post, the CFC commander and relevant staff evaluate the computer-generated battlefield situation based on the report from the ROK-U.S. CFC Forces, make decisions based on standard operating procedures, and issue corresponding operational orders.

The side effects of the recent cancelations and downgrades on readiness and interoperability are noteworthy. Reducing training and exercises predictably degrades military preparedness. The cancelation of exercises is likely to have minimal impact on Korea-wide and theater-level command and control. While U.S. and ROK forces have routinely undertaken command post exercises, previously these exercises were held to complement actual military exercises involving the two forces and not to, in effect, replace them. Even though simulations can be realistic, they can never fully replace actual military training and exercises.

At the tactical level, however, the impact of the changes to combined exercises and training are likely to be quite negative. For all branches of the two countries' militaries, any significant reduction in combined training means that ROK and U.S. forces will have far fewer assurances about their interoperability under actual combat conditions. If combined training and exercises are halted for a prolonged period, it will be difficult to restore the level of interoperability needed to respond effectively to possible North Korean provocations. This is significant because the interplay between readiness and interoperability is critical on the Korean Peninsula, given the combined command structure. In a contingency, U.S. forces and ROK forces at every level would have to be familiar with how to integrate their responses effectively, a function receiving less attention with downsized exercises.

It may be politically desirable to send a positive signal to North Korea by reducing or canceling major U.S.-ROK combined training and exercises, but there is no denying that interoperability and readiness are going to suffer. This is because the Moon government continues to argue that the military situation on the Korean Peninsula is improving, that the North Korean threat is receding and, hence, that there is a reduced need for more robust exercises between the two forces. Moreover, Trump's incessant criticism of exercises coupled with his opposition to sending select strategic assets such as bombers, F-22 fighters, and aircraft carriers to the Korean Peninsula, has already caused significant strategic damage to the alliance and readiness. Trump's posture has weakened the allies' ability to deter North Korea and has sent Pyongyang conflicting signals at a time when Seoul and Washington have to speak more cohesively.

Responding to North Korea's increasingly potent nuclear arsenal also has become more difficult due to the downturn in South Korea-Japan relations. When Japan initially removed South Korea from its white list, Seoul threatened to terminate an important intelligence-sharing mechanism with Tokyo that Washington strongly encouraged and championed. The General Security of Military Information Agreement allowed South Korea and Japan to share important information on North Korea's nuclear program, and ending the mechanism would have dealt a severe blow to efforts to contain the threat posed by Pyongyang and to deepen three-way security cooperation between Seoul, Tokyo, and Washington.

While the Moon government ultimately decided not to terminate the agreement for now, this issue still has key implications for readiness and interoperability. This is because stable intelligence sharing with Japan enhances security cooperation and coordination in the context of trilateral ties between the United States, South Korea, and Japan. Since Japan is critical in the

context of United Nations Command–Rear (UNC–Rear) support, assuring unfettered Korean-Japanese intelligence sharing complements existing security mechanisms.

HOW OPERATIONAL CONTROL AND COST SHARING AFFECT READINESS

The readiness and interoperability of ROK-U.S. forces is not just affected by routine logistical considerations such as when and how to hold exercises; rather, these dimensions of alliance effectiveness are also shaped by factors more foundational to the alliance itself. For example, two critically related issues for the ROK-U.S. alliance are the question of who would issue orders to combined forces in combat situations and how the fiscal burden of defense costs should be shared.

Transferring Operational Control

The ROK and the United States have been discussing the transfer of the wartime operational control (OPCON) of ROK forces from U.S. military commanders back to South Korean military officers for some time. This very complicated process is related closely to readiness, military capabilities, and the future status of U.S. forces on the Korean Peninsula. For the purposes of historical context, it is important to know that OPCON of South Korean forces was transferred to the commander of the United Nations Command, a U.S. general, at the outbreak of the Korean War. While there always has been a dual national command authority, in operational terms, this meant that the head of the U.S. forces in South Korea also exercised OPCON during peace and wartime.

In light of South Korea's rapid economic development and the political importance of OPCON, peacetime OPCON was transferred back to the ROK in the early 1990s. Successive ROK governments then turned their attention to transferring wartime control

back to the ROK, but the main factor with respect to timing was whether the South Korean forces had the requisite strategic and tactical capabilities to retain full OPCON. The Moon government has called for the expedited reversion of wartime OPCON provided that those conditions are met.

In late October 2018, then U.S. secretary of defense Jim Mattis and ROK Minister of National Defense Jeong Kyeong-doo unveiled a joint communique that spurred progress on the transfer of OPCON after the fiftieth ROK-U.S. Security Consultative Meeting held in Washington, DC.¹³⁷ The joint communique reported that both sides acknowledged progress on essential conditions for a successful transfer, as previously agreed to in June 2017, such as heightened ROK military capabilities and the drafting of certain strategic documents. For his part, Jeong attributed the significant progress made toward conditions-based transfer of OPCON to the Moon administration's Defense Reform 2.0.¹³⁸ Meanwhile, Mattis confirmed that the United States would stay committed to providing necessary bridging capabilities until South Korea was fully ready to assume an independent self-defense.¹³⁹

Notably, there are sound operational reasons for transferring OPCON. Most importantly, as the world's twelfth-largest economy and a major Asian power, South Korea understandably sees it as simply a matter of sovereignty for it to have control over its own military forces. Notwithstanding the centrality of the ROK-U.S. alliance to the country's national security, it also makes sense for the ROK to retain full OPCON so as to bolster its overarching warfighting capabilities. South Korea's advanced defense industrial base also means that it is increasingly capable of developing and deploying indigenous platforms.

That said, given South Korea's ongoing dependence on the United States for critical strategic intelligence and other key military assets, there are those who worry

that if wartime OPCON is transferred back to the ROK, the United States will have less of an incentive to help defend South Korea. Moreover, once the ROK receives full OPCON and tangible progress (however unlikely) is made on the North Korean nuclear threat, the rationale for maintaining the 28,500-strong United States Forces Korea (USFK) could be weakened.¹⁴⁰

Purely on the merits of military effectiveness, a transfer of OPCON would likely be manageable if the two militaries coordinate properly. The current CFC command structure could accommodate any four-star general, regardless of nationality, to exercise the command authority. The commander is staffed and supported by professionally educated and highly experienced combined battle staffs and component commanders, who oversee their respective predesignated areas of operations (land, sea, and air). Technically speaking, the nationality of the CFC commander need not be a major issue.

For example, the Ground Component Command, which is responsible for all relevant ground operations, is already under the command of a four-star ROK Army general who also serves as deputy commander of CFC. The Ground Component Command has been organized into the Ground Operations Command in peacetime as well as wartime since 2019. This is significant because it illustrates the ROK's ability to assume a leading role in ground operations. If another war breaks out, the ROK Army is going to assume the lion's share of ground operations, although USFK and augmented U.S. forces would be central to conducting combined ground-air counterattacks.

Nonetheless, transferring OPCON would likely have more negative political and diplomatic consequences. Because the number of service members in USFK units is not equivalent to the unit of a four-star general, the rank of the U.S. commander could be downgraded to a three-star general after the transfer of OPCON. One of the reasons that the USFK commander traditionally has been a four-star general is that the commander

leads CFC. If the USFK commander does not serve as commander of CFC, the rank could be downgraded to a three-star general, who would presumably have less clout in the Pentagon than a four-star general. A three-star U.S. general in a reconfigured CFC would also have less influence with the ROK Ministry of National Defense and armed forces.

Far more important than the operational dimensions of transferring OPCON is the degree of trust that will continue to exist between the two countries' armed forces. The ROK should rightly take the lead on its own defense and transferring OPCON is a necessary step in this direction. But ensuring seamless interoperability at all levels of operation after such a transfer is the central task that the highest political and military leaders in South Korea and the United States need to manage.

Once wartime OPCON reverts to Seoul, both the ROK and the United States will have to ensure that interoperability throughout the chain of command remains unbroken and highly effective. How the two sides perceive North Korean provocations and appropriate military responses could differ under a new command arrangement, although South Korea's perceptions of these issues also depend on the type of government that is in power in Seoul. How the allies maintain unity of effort after a full transfer of OPCON is both a highly political and a definitively military task.

Cost Sharing

Cost sharing has also been a contentious issue between the ROK and the United States. In the past, Seoul and Washington typically signed special measures agreements to define how costs would be split for five years at a time, but the latest agreement (signed in February 2019) was valid for just one year (2019).¹⁴¹ Under the 2019 agreement, South Korea is paying the United States about \$920 million, an increase of 8.2 percent compared to the previous year.¹⁴² Admittedly the size of this increase is not unusually high compared to those in previous years. But the key is whether the

United States will continue to insist, as Trump has, that the ROK should pay exponentially more for the cost of stationing U.S. troops in South Korea.¹⁴³ Tensions remain high as South Korea and the United States negotiate a new agreement on how these costs should be divided in 2020. Trump has insisted that South Korea's annual contribution should rise from roughly \$920 million in 2019 to \$5 billion for 2020 to cover the costs of defending South Korea and the region, pointing out that the ROK benefits from this arrangement. Seoul has balked at this demand that it should pay significantly more. For whatever reason, Trump believes that South Korea (and other U.S. allies like Japan) have been essentially free riders when it comes to cost sharing on defense expenditures.¹⁴⁴

But the sticker price of the 2019 agreement does not fully capture how much Seoul has spent on national defense and the alliance. Aside from South Korea's annual direct contribution of about \$920 million in 2019, Seoul also has foregone an estimated \$1.5 billion to \$4 billion (according to the *Wall Street Journal*) in annual rent payments by providing U.S. troops with

rent-free facilities in the Yongsan district of Seoul.¹⁴⁵ And though the vast majority of U.S. forces vacated those facilities at the end of 2019, South Korea also absorbed most of the costs of building the new U.S. base at Camp Humphreys in Pyeongtaek to which they were relocated, a base that cost about \$10.8 billion. In the grand scheme of things, then, Seoul is hardly free riding. It remains to be seen how the negotiations on cost-sharing will ultimately conclude. Either way, the negotiations on cost-sharing take their toll on the alliance by consuming energy and political will that could otherwise be directed toward bolstering readiness and interoperability.

SOUTH KOREA'S DEFENSE REFORMS

Amid a hostile security environment and a host of other hurdles to maintaining readiness and preserving interoperability, the South Korean government has undertaken extensive military reforms. In late July 2018, a little over a year after the Moon government took office, the Ministry of National Defense announced the

TABLE 2
Moon's Defense Budget

		2017	2018	2019	2020	2021	2022	2023
	Total (in billions)	\$34.3	\$36.7	\$39.7	\$42.8	\$46.0	\$49.1	\$52.5
	Annual growth rate	4.0%	7.0%	8.2%	7.8%	7.5%	6.8%	7.0%
Force operating budget	Percentage of total budget	69.7%	69.3%	67.8%	67%	66.2%	65.3%	64.3%
Force enhancement budget	Percentage of total budget	30.6%	31.9%	33.4%	34.2%	35.0%	35.9%	36.8%

SOURCES: ROK Ministry of National Defense, *2018 Defense White Paper*

NOTE: Some of the budget percentages add up to slightly more than 100 percent, due to rounding. The budget amounts are calculated in U.S. dollars at an exchange rate of \$1 to 1,169 Korean won. The force enhancement budget includes line items such as R&D and acquisitions.

measures billed as Defense Reform 2.0.¹⁴⁶ According to the government's official announcement, the total cost of the reforms will run 270.7 trillion won (about \$230 billion) from 2019 to 2023 (see table 2).¹⁴⁷ In August 2019, the ministry released the midterm defense program plan for 2020–2024, which contains key defense spending programs for the five-year period.¹⁴⁸

One major component of the reforms is a sizable reduction of the South Korean military. Part of the strategy is to shrink the force structure from approximately 599,000 to 500,000 active duty personnel over the next few years.¹⁴⁹ A key concern is that the total length of mandatory military service in the army is also expected to be cut from twenty-one months to eighteen months by 2022.¹⁵⁰ On that front, some observers question whether the ROK military's combat readiness may suffer on account of more rapid turnover in conscripted forces.

The reforms will also alter the command structure and the missions of various military branches in important ways. There is a plan to appoint a new ROK four-star general to the position of the chairman of the Joint Chiefs of Staff, who will serve as commander of CFC after wartime OPCON is eventually transferred.¹⁵¹ Changes are also slated for specific branches. For instance, the newly formed Ground Operations Command is in charge of a wide range of missions, including defending the Seoul metropolitan area from North Korea's long-range artillery located along the MDL.

While Moon's Defense Reform 2.0 aims to improve the ground forces in various ways, much of the emphasis has been placed on upgrading the country's naval and air capabilities. This preoccupation signals the Moon administration's focus on asymmetrical threats from North Korea and newly emerging regional threats. As part of a unit realignment, the ROK Air Force headquarters plans to establish a new reconnaissance

wing for improved long-distance and space operations. The navy will enlarge its maritime task flotilla and aviation wing to further develop capabilities for surface, underwater, and aerial operations.

To support these mission changes, the South Korean government has allocated budget outlays for procuring key weapons systems between 2020 and 2024. To enhance South Korea's intelligence capabilities, compensate for the retirement of the U-2 reconnaissance aircraft, and improve the country's ability to track and target weapons of mass destruction, the South Korean military plans to purchase high-altitude reconnaissance unmanned aerial vehicles. Specifically, it will likely buy Global Hawk surveillance aircraft, which can cover almost all of North Korea without crossing the MDL.¹⁵²

Other procurement upgrades are also on the horizon. The ROK Air Force is going to purchase additional fifth-generation fighters such as the F-35 Joint Strike Fighter.¹⁵³ Due to its stealth capability, F-35 aircraft assume a significant role in countering weapons of mass destruction, and they would be particularly instrumental in executing preemptive attacks in case of a potential nuclear attack by North Korea, although such a move would be heavily influenced by who will sit in the Blue House and other key political considerations. In addition, the ROK Navy will build new Aegis-class destroyers and a large cargo ship that could be modified into a light aircraft carrier. To conduct aerial operations with an aircraft carrier, the navy also deems it necessary to purchase a certain number of F-35 B fighters, which have vertical take-off and landing capabilities.¹⁵⁴

Critics of the Moon government's defense reform plans have argued that while the ROK needs to replace aging platforms such as the nearly defunct F-4 and F-5 fighters, and while the navy has to strengthen its submarine forces, buying more high-tech weapons systems does not necessarily mean that the ROK's overall combat capabilities will also increase. The outcome

Readiness depends on political and psychological factors as much as it does on interoperability, critical military capabilities, and combinedness between ROK and U.S. forces.

of these reforms will ultimately depend on how well the Ministry of National Defense can forge consistent policies in the remaining years of the Moon government. Another relevant consideration is how much of this reform program will be sustained by the succeeding administration that will come to power in May 2022. Moreover, the result of cost-sharing negotiations with the United States, the status of transferring OPCON, and steps the Trump administration could take related to USFK will also affect the outcome of these ambitious defense reform plans.

CONCLUSION

Since Moon took office, his administration has primarily emphasized CBMs with North Korea including three inter-Korean summits and the signing of a major military agreement in September 2018. Nevertheless, North Korea's nuclear arsenal has continued to grow, not to mention the country's stockpile of advanced ballistic missiles including submarine-launched ballistic missiles. Since the failure of the 2019 Hanoi summit, there has been no progress on denuclearization. It is still not impossible that Washington and Pyongyang could reach an agreement in 2020 before the U.S. presidential election, but chances of that happening are quite slim.

Most military experts agree that the process of implementing provisions of the September 2018 agreement on confidence building is moving much faster than denuclearization. Indeed, despite no change in the North Korea military's order of battle or key deployments—not to mention its exercises and force upgrades such as longer-range multiple rocket launchers—the ROK has had to slim down or cancel exercises with the United States to provide incentives for ongoing nuclear talks. Meanwhile, the Moon government wants to expedite a transfer of wartime OPCON in the belief that such a move would strengthen its stance toward North Korea. After several North Korean short-range rocket and missile tests in the fall of 2019, the ROK government basically opted not to respond since Seoul did not want to rock the boat with Pyongyang.

In the end, readiness depends on political and psychological factors as much as it does on interoperability, critical military capabilities, and combinedness between ROK and U.S. forces. If political leaders in Seoul continue to insist that the overarching military threat from North Korea is abating when it is not and that Kim is going to denuclearize when he has no intention of doing so, accurate threat assessments will be even more highly politicized and the ROK's core defense policy stances will be improperly tailored to match political considerations. In the end, such moves cannot help but negatively affect South Korea's defense readiness at a critical moment in inter-Korean relations and a shifting balance of power in Northeast Asia.

CHAPTER 4

DEFENSE READINESS AND THE U.S.-ROK ALLIANCE

BRYAN PORT

The alliance between the United States and the Republic of Korea (ROK) is among the most successful in post–World War II history. It was crucial for defending the ROK during the Korean War and facilitated South Korea’s economic miracle by providing a crucial security umbrella. Over time, one could also assert that the alliance helped to foster democratization.

But the past is not prologue. It takes persistent effort to maintain and enhance the readiness of the alliance to deter a growing range of North Korean threats and to prevail should deterrence fail. Leveraging the alliance to serve a broader array of interests is an important but also an immensely challenging task. Since U.S. President Donald Trump took office in January 2017 and South Korean President Moon Jae-in assumed his post in May 2017, the two key allies have ventured into untested waters that could affect readiness postures.

The readiness of U.S. and ROK forces is being impacted predominantly by diplomacy and strategic alignment, U.S.-ROK alliance management, and the peninsula’s military balance. When the flurry

The real challenge for the alliance lies in maintaining the highest degree of readiness amid rapidly evolving diplomacy in and around the Korean Peninsula and the critical tasks of alliance management.

of diplomacy with North Korea throughout 2018 prompted the cancelation and alteration of exercises and the rollout of various confidence-building measures (CBMs), these developments detrimentally impacted allied military readiness.¹⁵⁵ Similarly important to maintaining readiness is the ability of each side to respond constructively to various challenges to alliance management, including the planned transition of wartime operational control (OPCON) from the United States to the ROK and tense negotiations over defense cost-sharing, among other factors.

Meanwhile, the military balance on the peninsula remains dynamic. While the allies have altered their training exercises and other elements of their defense posture, the North Korean military has neither reduced its training nor stopped testing and fielding new weapons.¹⁵⁶

The real challenge for the alliance lies in maintaining the highest degree of readiness amid rapidly evolving diplomacy in and around the Korean Peninsula and the critical tasks of alliance management. Ensuring that combined military capabilities and postures are not negatively impacted by these developments lies at the heart of preserving the high state of readiness and standards against which the alliance measures itself, a mentality captured by the slogan “Fight Tonight.”

DEFINING READINESS

Although diplomacy has reshaped the alliance’s military posture on the Korean Peninsula in certain respects, readiness remains an important standard for gauging the alliance’s effectiveness. The U.S. Department of Defense defines readiness as “the ability of military forces to fight and meet the demands of assigned missions,” an ability referred to here as “operational readiness.”¹⁵⁷ A detailed and refined set of measures and metrics underpin readiness, centering on mission essential task lists that units at every echelon develop, train for, and use to assess their performance.¹⁵⁸ These task lists are derived from plans, orders, and associated conditions and standards.

Commanders are responsible for evaluating their given unit’s operational readiness. While their overall assessments include a degree of subjectivity, their judgments are supported by many straightforward objective criteria. These factors include the health and fitness of their soldiers, vehicle maintenance, supplies on hand, training, and competencies set forth in service and joint doctrine. For example, soldiers are either able to use their weapons effectively or they are not.

Similarly, units either have a given percentage of their tanks or ships ready or they do not. What all these aspects of operational readiness have in common is that they relate to the tactical and operational demands that military units must fulfill in the military theater to carry out the orders they are given.

But operational considerations are not the only relevant facet of readiness. It can also be assessed in a more expansive, overarching fashion known as “strategic readiness.” This refers to the level of synchronization, or strategic alignment, between allies across a range of considerations. Normally, allies spend tremendous amounts of time developing a shared understanding of the security environment, defining strategic objectives, building threat assessments, designing the methods and initiatives required to achieve agreed-on objectives, and orchestrating actionable plans. It is essential to devote significant time to ensuring a high degree of alignment because if any element of alignment is compromised, strategic readiness is compromised.

The U.S.-ROK alliance is undergirded by a unique command-and-control structure consisting of four commands. The United Nations Command (UNC) was originally chartered to command and control all aspects of a coalition warfight. Upon the activation of the Combined Forces Command (CFC), UNC relinquished primary responsibility for commanding the overall warfight and came to focus on deterrence, maintaining the armistice, and managing the planning and integration of coalition forces for training and in times of conflict. United States Forces Korea (USFK) is responsible for ensuring that U.S. forces are trained and ready to perform their missions under CFC. In recent years, the ROK Chairman of the Joint Chiefs of Staff has moved from a role akin to the chairman in the U.S. system centered on advising the president and orchestrating the current and future direction of the overall joint force to assume a role that also includes command responsibilities over all ROK forces under armistice conditions and all ROK forces not directly subordinated to CFC in the event of conflict.

TABLE 3
Downsized U.S.-ROK Military Exercises

Date	Exercise
January 4, 2018	ROK and U.S. leaders agree to postpone ROK-U.S. combined training during the 2018 Winter Olympic Games.
April 1, 2018	ROK and United States begin Key Resolve (April 23–May 4) and Foal Eagle (April 1–26) combined exercises.
May 14, 2018	ROK and United States begin Max-Thunder training (May 11–25).
June 12, 2018	Trump pledges to halt military exercises at the Singapore summit.
June 19, 2018	ROK and United States announce the postponement of 2018 Ulchi Freedom Guardian exercise.
June 22, 2018	ROK and United States announce the postponement of Korean Marine Exchange Program.
July 10, 2018	ROK and United States announce the temporary suspension of Ulchi Freedom Guardian exercise.
October 19, 2018	ROK and United States announce postponement of Vigilant Ace.
March 2, 2019	ROK and United States announce “termination” of Key Resolve, Foal Eagle, and Korean Marine Exchange Program.
March 3, 2019	ROK and United States announce Ulchi Freedom Guardian will be replaced with smaller-scale command post exercise.
March 4, 2019	ROK and United States begin Dongmaeng command post exercise (March 4–12).
May 27, 2019	ROK holds Ulchi Taegeuk exercise (May 27–30).
August 5, 2019	ROK and United States begin second iteration of Dongmaeng command post exercise (August 5–20).
November 17, 2019	ROK and United States postpone a “combined flying training event,” successor to Vigilant Ace.

SOURCE: Various South Korean and U.S. newspaper articles (see endnote 157)

THE IMPACT OF DIPLOMACY ON READINESS AND ALIGNMENT

Diplomacy can reshape high-level strategic environments, and the Korean Peninsula is no exception. The ongoing diplomatic overtures South Korea and the United States are pursuing with North Korea pose challenges to the alliance’s readiness (see table 3).¹⁵⁹ Even when military personnel can offset the impact of altered exercises or defensive measures in support of confidence-building efforts with the North Koreans, doing so carries near- and long-term opportunity costs.

Impact on Short-Term Operational Readiness

The convergence of several political developments and diplomatic initiatives including inter-Korean negotiations, U.S.–North Korea talks, the impact of U.S.–China relations on Korean security, and South Korea’s own foreign policy initiatives could have significant implications for the alliance’s operational and strategic readiness. Relevant considerations include the possible weakening of interoperability due to fewer exercises, the potential politicization of threat assessments, alliance management frictions stemming

from domestic politics that could be allowed to trump national interests, and a pressing need for the allies to design a new alliance strategy that accounts for a strategic environment and interests extending beyond North Korea. The U.S.-ROK alliance likely can weather and offset these near-term effects on both operational and strategic readiness by drawing on the high state of readiness they have built over time, and because military modernization efforts provide an added buffer.

Due to the security environment on the peninsula and the nature of the threat emanating from North Korea, the plans that undergird operational readiness are necessarily complex. This calls for rigorous training, especially through combined exercises, the most important of which have traditionally been the Key Resolve/Foal Eagle exercise (held late each spring) and the Ulchi Freedom Guardian exercise (held late each summer). Rigorous training, particularly for commanders and their staffs, is critical to the successful execution of operational plans. The high rate of turnover among U.S. forces on the Korean Peninsula further increases the importance of these two major annual theater exercises.

Operational readiness will continue to face hurdles if the compromises necessitated by diplomacy with Pyongyang continue, especially if an agreement on partially denuclearizing North Korea is reached, as that could cause joint exercises and other deterrence-enhancing measures to be reduced even more. It remains unclear if the Trump administration is going to reach some type of a nuclear accord with North Korea, a move the Moon administration clearly supports. But concluding any such denuclearization agreement with North Korea would entail extensive working-level negotiations, efforts to overcome major political hurdles in Washington and Seoul, and close coordination between the United States and the ROK. Another pertinent consideration is how North Korea and China would ultimately respond to a denuclearization agreement.

Impact on Long-Term Operational and Strategic Readiness

The overall impact of negotiations with North Korea on the near-term operational readiness of the U.S.-ROK alliance is not significant, but canceling, postponing, or severely downsizing joint exercises will have long-term operational and strategic consequences. These consequences could include delays in establishing alliance goals in the event of a major crisis. Although difficult to measure, a high degree of strategic alignment remains an essential factor in enabling the alliance to adjust to major political, diplomatic, and military developments. A weakened level of strategic alignment erodes readiness by delaying decisionmaking on strategic and operational issues, which in turn erodes the effectiveness of crisis management, combined responses to conflict below the threshold of major war, and combined warfighting.

For one thing, compensating for adjustments to readiness takes time and effort. Commanders and their staffs face constraints that impair the quality of planning and training, and this diverts time that could otherwise be spent on maintaining and enhancing readiness. Importantly, experienced military planners are in short supply. The inter-Korean Comprehensive Military Agreement could, for example, call on the staff that is planning for the adjustments of defenses in the Demilitarized Zone (DMZ) to shift the timing, duration, and substance of specific training regimens in ways that could have operational impacts.

The current negotiations with North Korea do not mark the first time diplomatic overtures with Pyongyang have had ramifications on readiness. The administration of former South Korean president Roh Moo-hyun (2003–2008) prioritized reconciliation with North Korea more highly and introduced the notion of a more self-reliant ROK defense posture.¹⁶⁰ These policy stances led complex military planning and

preparations to be altered, and it took significant efforts to recover from these changes when ongoing planning later resumed.

Similarly, the breakdown of the Agreed Framework in 2003 and North Korea's first nuclear test in 2006 opened an entirely new frontier in assessing the North Korean threat.¹⁶¹ Sustaining a very high level of readiness became increasingly challenging for U.S. and ROK forces in the wake of these developments. This is because North Korea henceforth, at least theoretically, could use nuclear weapons against ROK and U.S. targets. Moreover, North Korea could conceivably threaten nuclear escalation to deter South Korea from responding militarily or to dissuade the United States from sending in reinforcements if hostilities were to ensue. The nuclear dimension also complicates how U.S. and ROK forces look at the asymmetrical threats North Korea poses.

Today, diplomacy with North Korea once again poses complications for strategic readiness. Maintaining strategic alignment does not happen in a vacuum: it is heavily influenced by political forces. This is particularly so in democracies like the United States and South Korea, where political leaders have to contend with public opinion and a delicate balancing of popular domestic programs against security and strategic imperatives. Election politics and transitions of administrations further complicate maintaining strategic readiness, particularly if there is a mismatch in fundamental political and strategic perspectives between the two administrations.

For Washington, Trump's transactional mentality and ambivalence toward the U.S. alliance with Seoul has had a significant negative impact. Among his many statements on the need for alliances, Trump said that "If the United States believes that it doesn't need an alliance with the Republic of Korea, I would say it's ok. If the United States doesn't want the alliance, we don't have

to beg for it."¹⁶² This perspective is reflected in the U.S. position on burden sharing with the ROK. Even for the healthiest of alliances, burden sharing agreements are a sensitive political matter requiring significant political capital by both parties. While Washington and Seoul will reach a new Special Measures Agreement on how to share defense costs, the negotiations are going to be protracted and difficult.

But statements like those made by Trump undermine trust between alliance managers, lead to hedging behavior, and produce a transactional attitude that ultimately can weaken strategic alignment. The U.S. president has also denigrated the importance of joint exercises while emphasizing his close personal relationship with North Korean Supreme Leader Kim Jong Un. No stranger to juxtaposition, he has simultaneously lauded South Korea for being a major U.S. arms importer and underscored why it is important for the ROK to continue to buy more weapons systems from the United States.

During the first two and a half years of the Moon administration, a number of other important issues have heightened concerns among some U.S. alliance managers, such as South Korea's specific positions on and goals for diplomacy with North Korea, military modernization priorities, seeming equanimity on North Korean provocations such as the testing of projectiles and rockets, and the direction of ROK-China relations.¹⁶³ In certain quarters, there are concerns about Moon's outreach to China and Seoul's reactions to the diplomatic pressure Beijing exerted when South Korea allowed the United States to deploy Terminal High Altitude Area Defense (THAAD) radar arrays on the peninsula against China's wishes. Some concerned parties feared that Moon would adopt the stance of his predecessor Roh that South Korea could act as a balancer between the United States and China, even though no such policy was enacted.¹⁶⁴ While the ROK understandably has to cope with China as an

immediate neighbor that boasts growing military and political capabilities, not to mention Beijing's backing of Pyongyang, it is also important to bear in mind that the U.S. strategy is shifting increasingly in the direction of great power competition with China.

To be sure, the two democratic allies have very different historical trajectories and geopolitical experiences with respect to China, so Washington's views on Beijing do not always align with Seoul's. Nevertheless, there is a view among many observers in Washington that if Seoul veers too closely to Beijing, that would weaken the U.S. posture vis-à-vis China, raising fears that Beijing could exploit potential divergences between the views of South Korea and those of the United States. Moreover, such a move could also affect trilateral security cooperation between the United States, the ROK, and Japan.

READINESS AND ALLIANCE MANAGEMENT

Amid this confluence of pressing diplomatic issues, a common thread is the enduring challenge of durable alliance management. One major ingredient of managing relations between such allies is the series of meetings and other mechanisms that bring leaders from the two countries together. In the case of the U.S.-ROK alliance, major platforms include the annual Security Consultative Meeting led by the two countries' defense ministers, the Military Consultative Meeting held between the two chairmen of the Joint Chiefs of Staff, and the Korean Integrated Defense Dialogue involving various high-level defense officials.¹⁶⁵ These platforms and relationships are indispensable to maintaining alliance unity and coherence of action. Political leaders can enhance readiness by using these platforms to develop positions and approaches in advance of major decisions and summitry, rather than relying on them to implement decisions after the fact.

In 2018, the United States and the ROK used alliance management platforms primarily as implementing bodies and avoided more sensitive issues such as decisions on exercises and adjustments to the ROK's force posture along the DMZ. Decisions were made at the political level, often with only tangential or subsequent consideration of strategic and military factors, forcing the alliance's military leadership to try to limit the negative impact on security and readiness when implementing these political decisions. One high-profile example was Trump's decision to cancel or alter military exercises, a decision that took both militaries and the ROK government by surprise. It is the prerogative of elected officials to choose to use alliance platforms in this manner, but doing so strains the alliance and degrades operational and strategic readiness.

The most visible change to U.S. and ROK military activities over the past year and a half was the alteration of the alliance's major military exercises—namely Key Resolve/Foal Eagle and the Ulchi Freedom Guardian. Historically, the Key Resolve/Foal Eagle exercise included a command post and field exercise.¹⁶⁶ The theater headquarters practiced the execution of operational plans, and units practiced combat maneuvers. In 2018, the allies altered the timing and scale of the exercises to deconflict with the Winter Olympics and to reduce tensions with North Korea. This trend continued in 2019 and the exercises were renamed Dongmaeng (the Korean term for alliance).¹⁶⁷

Washington and Seoul went even further with the Ulchi Freedom Guardian exercise, which had been held annually each August, canceling it outright due to the June 2018 Trump-Kim summit in Singapore.¹⁶⁸ Like Key Resolve, Ulchi Freedom Guardian, which focused on training theater-level headquarters, was crucial for training newly arriving personnel. This exercise also enabled the alliance to adapt and innovate in light of developments in North Korea and to integrate and

optimize military modernization initiatives. Other joint initiatives were scrapped as well. Two Korea Marine Exchange Program exercises were canceled, as was Vigilant Ace, an annual December air exercise involving over 12,000 personnel and upward of 230 aircraft.¹⁶⁹ Importantly, despite Washington and Seoul's cancellation and alteration (reduction) of these major exercises, North Korea continued its own summer and winter training cycles unabated.

Views on the fallout of these cancellations have been mixed. Regarding the Ulchi Freedom Guardian exercise, the current commander of USFK, General Robert Abrams, stated that it was “a key exercise to maintain continuity and to continue to practice our interoperability, and so there was a slight degradation” in readiness.¹⁷⁰ During his annual testimony to the Congress in April 2019, Abrams stated that overall, “we met all our training objectives. The biggest difference is we just don't talk about it publicly.”¹⁷¹ Abrams cited eighty-two combined field training exercises since he took the reins. According to U.S. Army Pacific Commander General Robert Brown, off-peninsula military training also served as an offset to on-peninsula alterations.¹⁷² But other military experts have a different perspective. For example, (retired) Lieutenant General Thomas Spoehr at the Heritage Foundation stated that the “ability for higher level staffs to work and plan together has been impacted, as has the ability of U.S. based forces to flow to Korea.”¹⁷³

In a tactical sense, Abrams is correct. U.S. and Korean forces can continue to draw on a high state of readiness built up through past exercises, provided units maintain a robust unit-level training program. However, the long-term operational and strategic levels have been affected as Spoehr intimated. The situation is likely to worsen. In June 2018, then acting secretary of defense Patrick Shanahan asserted that it is not necessary to resume major joint military exercises with the ROK.¹⁷⁴

Moving forward, the allies reduced the scope, scale, and public profile of exercises.¹⁷⁵ Current guidance to the U.S. military is to refrain from using the word “exercise” at all.¹⁷⁶ Secretary of Defense Mark Esper and former chairman of the Joint Chiefs of Staff General Joseph Dunford view the current exercise program as sufficient, in effect formalizing the reduction in the exercise program.¹⁷⁷

Exercises are important to both combat units and staffs that must build complex command-and-control proficiencies. In the context of the U.S.-ROK alliance, this task takes on the added dimension of building, maintaining, and enhancing relationships at all echelons and forging shared understandings of allied practices and capabilities. With the complex nature of the operational and strategic environment on the Korean Peninsula and high troop turnover, downsizing or skipping even one major exercise could have longer-term consequences, as a missed exercise cannot simply be made up. Those who miss an iteration of training suffer in terms of readiness, and to some extent pass on a decrement in readiness by way of the decreased efficacy of their turnover to those relieving them. Moreover, critical institutional memory is invariably weakened if major exercises are truncated, indefinitely postponed, or canceled.

There will be longer-term and critical consequences for strategic readiness if exercises continue to be curtailed or canceled. These effects will be magnified by the consolidation of USFK at Camp Humphrey's. The move decreases the frequency and depth of interactions between the elements that have relocated and their counterparts on the ROK Joint Staff. Any large-scale relocation or reorganization of a large organization impacts efficiency and efficacy. That being said, assessing the strategic wisdom of relocation, the reorganization of command and control relationships, or the geopolitics of military exercises is beyond the scope of this analysis.

These readiness challenges would be pronounced enough if the alliance's command structures were expected to stay static, but that is not the case. The changes in the chain of command that are planned add another wrinkle to ongoing efforts to maintain a high level of readiness. One of the most important issues for the Moon administration is efforts to hasten a long-planned change: the full reversion of wartime OPCON to the ROK as soon as both Seoul and Washington judge that the ROK has built up the requisite military capabilities. As of January 2020, the two allies are continuing their efforts to determine the timing and circumstances of wartime OPCON transition to the ROK. However, the efforts invested in this process require time, attention, and political capital that could be better invested in other issues.

During the tenures of former South Korean presidents Lee Myung-bak and Park Geun-hye, the allies decided that the reversion of wartime OPCON should be conditions-based rather than driven by an artificial deadline. Both sides gained by refocusing on enhancing capabilities directed at the North Korean threat and recalibrating command and control.¹⁷⁸ The Moon administration, however, has prioritized more highly an expedited timeline for this handoff though it has not fully disengaged from conditions-based reversion. In August 2019, U.S. Secretary of Defense Esper and Minister of Defense Jeong Kyeong-doo held a defense ministerial meeting and affirmed “strides made toward the fulfillment of conditions for the transition of wartime [OPCON].”¹⁷⁹ At the fall 2019 Security Consultative Meeting, they announced they will review the assessment of initial operational capability certification of the future CFC headquarters. To accelerate the handoff of wartime OPCON, the ROK and United States launched the Special Permanent Military Committee. The intended result is for an ROK four-star officer to assume command of CFC.¹⁸⁰

READINESS AND THE PENINSULA'S CHANGING MILITARY BALANCE

The challenges to the readiness of the U.S.-ROK alliance would be significant enough if the North Korean threat was static, but it is not. Indeed, North Korea's training regimens and exercises continue uninterrupted,¹⁸¹ and while it has refrained from testing long-range missiles, it continued to test a variety of short-range weapons systems and “niche capabilities” in the summer and fall of 2019, some of which qualitatively boost North Korean capabilities. Political leaders in Washington and Seoul asserted that these short-range weapons tests were not a significant threat and that they did not violate the September 2018 inter-Korean military agreement on CBMs. However, Pyongyang is essentially contesting alliance interests below the threshold of war since Kim knows that under the Trump and Moon governments, North Korea can continue to push the envelope without provoking a strong response.

If Kim launches a war, the United States and the ROK would be favored to win, although there would be massive destruction and the costs would be high.¹⁸² Such a scenario would be complicated enormously in the event of a major Chinese military intervention, calling into question whether the allies could win, at least in terms of the ability to set the conditions for Korean reunification. It is important to recall that less than a year after the People's Republic of China was founded, the country's leader Mao Zedong opted to send hundreds of thousands of Chinese troops to defend North Korea in the Korean War. Circumstances are very different today, yet an increasingly powerful China is again unlikely to sit on the sidelines in the event of major U.S. and ROK military operations across the thirty-eighth parallel.

That said, the North Korean military faces notable problems in training, logistics, and readiness in the face of the ROK's much more advanced conventional forces.¹⁸³ Yet despite these limitations and economic constraints, Kim has continued with select military modernization efforts such as upgrading the country's submarine-launched ballistic missiles (SLBMs). The fact that North Korea today can strike targets throughout the ROK and Japan with increasing accuracy poses a growing strategic dilemma.¹⁸⁴ For its part, South Korea understands that if North Korea's SLBMs become fully operational, they would pose a key threat that the ROK military is focused on addressing.

Meanwhile, North Korea continues to criticize the ROK for undertaking its own military modernization efforts such as introducing F-35 fighter jets. But it makes eminent sense for South Korea to respond to a nuclearized North Korea in this way while abstaining from pursuing its own nuclear deterrent. Alliance military modernization is also an important endeavor in terms of meeting a spectrum of asymmetrical challenges from North Korea—such as cyberwarfare, chemical and biological weapons, and special operations forces—in addition to recalibrating defense postures to meet certain diplomatic requirements.

The ROK's Military Modernization

Consequently, both allies continue to modernize their militaries. Under its 2020–2024 midterm defense plan, Seoul is investing in potent new military capabilities and bolstering existing operational capabilities. The ROK registered an impressive 8.2 percent year-on-year increase to its defense budget in 2019, and the midterm defense plan calls for sustained increases in defense spending, with important alterations in how funds are allocated. In particular, expenditures on force improvement programs will increase from 32.9

percent of the budget in 2019 to 38.2 percent in 2024.¹⁸⁵ This modernization campaign is also designed to enhance interoperability and satisfy the ROK's goal of expanding defense exports.¹⁸⁶ These efforts have enhanced readiness to some degree.¹⁸⁷

However, there is still room for improvement, as the magnitude of South Korea's budget increases still has not kept pace with the security threats the country faces and its changing strategic environment. Further, ROK defense investments have prioritized weapons platforms, while underinvesting in enabling capabilities, such as communications equipment and munitions. Seoul has placed too little emphasis on systems integration within and between platforms, so the effects of the ROK's military modernization to date have been less than the sum of its parts.

The ROK has not invested as efficiently as it could because Seoul places too much emphasis on reducing its perceived overreliance on U.S. systems and on increasing defense exports. This unbalanced, distorted approach has detracted from interoperability with U.S. forces. For example, while it is understandable that the ROK would prefer to develop its own missile defense systems, the time, capital, and talent allocated for developing such systems could be better applied to other pressing military needs, such as munitions or communications systems. After all, the ROK can purchase high-quality U.S. systems much more rapidly (years or decades faster) and at significantly less expense. The North Korean threat and South Korea's shifting strategic environment do not allow the luxury of trying to make its military modernization serve so many purposes at once. None of this is to say that the ROK military is not making impressive strides because it undoubtedly is: yet these efforts and future ones would significantly benefit from greater focus and efficiency.

Military readiness cannot be satisfied with other options or mechanisms or papered over for political purposes.

Like South Korea as a whole, the ROK military also faces daunting demographic challenges owing to a rapidly aging population and dropping fertility rate. The ROK plans to reduce its armed forces (especially the ground forces) by 100,000 troops by 2022, given the country's rapidly falling birthrate.¹⁸⁸ The ROK must seriously consider how best to allocate its defense resources given the looming specter of an increasingly powerful and aggressive Chinese military on top of the multiple threats that North Korea poses.

Meanwhile, the U.S. military is contending with its own challenges. In 2018, the U.S. military began to address serious readiness shortfalls (across its entire force structure) stemming from the prolonged War on Terror. U.S. Army Chief of Staff General Mark Milley tripled the number of brigade combat teams fully trained and ready to deploy.¹⁸⁹ The Trump administration has undertaken a major military modernization campaign as outlined in the National Security Strategy and the National Defense Strategy.¹⁹⁰ Additionally, the U.S. military continues to bring advanced capabilities to the ROK to address specific elements of the North Korean threat. Examples include THAAD, the Gray Eagle Unmanned Aerial System, and the F-35 joint strike fighter.¹⁹¹ Organizationally, USFK created an Emerging Capabilities and Innovative Effects Division to close remaining capability gaps and generate technological superiority.¹⁹²

The United States has also focused on ensuring it can send additional troops to Korea and that the troops it has stationed there will perform effectively on the ground. Recognizing the inherent logistical challenges, the U.S. military has sought to make certain that it can deliver additional forces with greater lethality from the United States to the peninsula and nearby locations in

a timely fashion. Additionally, these forces are meant to be a combat multiplier to ROK forces by forewarning of North Korean actions, and to elevate the readiness and lethality of ROK forces by providing intelligence, missile defense, strategic capabilities, and sophisticated command and control. U.S. modernization efforts also are designed to enhance force protection and enable the critical second-order effect of preserving combat power, particularly air power. Such combat capabilities can be used to neutralize North Korean artillery installations earlier in a potential conflict than would otherwise be the case.

However, as welcome as these advances in U.S. readiness are to South Korea, the strategic rationale for these efforts in Washington may provoke tensions with Seoul. This U.S. policy shift derives from national defense and national military strategies that address U.S. national interests globally and center on great power competition with China. This should concern the ROK, as it changes the context in which the United States will make military decisions moving forward. The United States and ROK should engage in private, candid consultations on how the alliance will serve both countries' national interests beyond the North Korean threat and how each side understands and prioritizes those interests. At the same time, it is important for Washington to understand that, given China's critical ties with North Korea, Seoul must pay greater attention to Beijing's strategies and policies. Whereas the United States perceives China through a global lens with regional implications, Beijing's shadow looms much larger over South Korea.

U.S. and ROK forces have achieved major milestones in improving interoperability and honing their capabilities especially following South Korea's rapid economic growth over the past four decades. Today, the ROK military is an increasingly advanced and formidable force that can respond fully to a range of North Korean threats. Nevertheless, a nuclearized North Korea and much more complex geopolitical drivers in and around the Korean Peninsula have raised

the bar for maintaining optimal readiness for the U.S. and ROK forces. Readiness is always a work in progress, and the challenges the ROK and the United States face at this particular juncture are without parallel.

CONCLUSION

Unity of purpose, command structures, and attention to strategic alignment are essential to the ability of both nations to maximize the value of the alliance. Although it is up to the political leaderships in South Korea and the United States on how best to engage North Korea while continuing to meet a range of asymmetrical threats, it is also important to bear in mind that any major erosion in strategic and operational readiness could have severe repercussions going forward. Most of all, retaining critical combined-joint capabilities, particularly interoperability, between the U.S. and ROK forces is crucial for ensuring a high level of readiness across the full spectrum of possible contingencies. Readiness cannot be satisfied with other options or mechanisms or papered over for political purposes.

To remedy this state of affairs, the allies should bolster readiness by: conducting theater-level combined training designed to ensure warfighting competencies remain intact, conditioning any transfer of OPCON on ROK command-and-control capabilities, maintaining the CFC with U.S. senior personnel stationed in Seoul, and establishing a secretariat to help oversee the alliance.

- **Resuming large-scale military exercises:** Washington and Seoul should resume at least one large-scale exercise (like Ulchi Freedom Guardian, for instance) on the Korean Peninsula and begin a second exercise series involving significant ROK military participation off-

peninsula. The off-peninsula exercise help enhance the ROK joint force's command, control, and communications (C3) capabilities for conducting complex large-scale combat operations in a multinational environment.

- **Ensure that any transfer of OPCON remains conditional:** The allies should return to a condition-based transition of OPCON to South Korea, with the central requirements for transition focused on the ROK's C3 capabilities and its ability to command and control large formations in joint and multinational maneuvers.
- **Preserve the CFC:** South Korea and the United States should maintain the CFC structure. Even if the U.S. four-star general becomes the deputy commander, he/she and the joint staff should remain in Seoul.
- **Establish a secretariat:** The allies should establish such a body to complement the alliance's already robust military command structure. A strategic alliance warrants a standing body of senior civilian and military leaders that can transcend day-to-day issues to ensure that the long-term foundations of the alliance remain strong and adaptable. There is simply too much at stake for both nations to allow the foundational institutions and relationships that led to the sacrifices and successes of the past seventy years to erode. Both nations have ample cause to invest in the alliance and expect it to provide a strategic return on investment in the decades ahead.

The analysis, opinions, and conclusions in this publication are the author's own views and in no way reflect any views or positions of the United States, the U.S. Department of Defense, or any other offices in the U.S. government.

CHAPTER 5

CHINA AND REGIONAL SECURITY DYNAMICS ON THE KOREAN PENINSULA

JINA KIM

The fraught security implications of tensions between North and South Korea rightfully occupy a great deal of attention. The possibility that these tensions could drive intervention by or even conflict between outside powers cannot be overlooked. Given its long-standing alliance with South Korea, or the Republic of Korea (ROK) and leading role in the diplomatic push to get North Korea to relinquish its nuclear weapons, the United States understandably factors heavily into such calculus. But China deserves special consideration given its substantial interests and influence on the Korean Peninsula and growing military prowess.

China's interests on the Korean Peninsula still carry a lot of weight. North Korea remains an important Chinese partner because it continues to act as a buffer between China and South Korea (and the U.S. troops it hosts). Beijing would naturally go to great lengths to ensure that any diplomatic progress between Pyongyang, Seoul, and Washington does not undermine aspects of this status quo that it finds advantageous. At the same time, Chinese leaders are keen to capitalize on ways that such diplomacy could erode the institutional foundations of

While South Korea's own interests undoubtedly diverge from China's in significant ways, Seoul can hardly write off the prerogatives of its massive neighbor entirely.

the U.S.-led security order on the peninsula. As China's leaders move more deliberately to protect their country's interests, they have an increasingly powerful hand to play. Beijing has undertaken a highly ambitious military modernization campaign to facilitate and complement its growing tendency to act more assertively to advance its equities on the Korean Peninsula.

While South Korea's own interests undoubtedly diverge from China's in significant ways, Seoul can hardly write off the prerogatives of its massive neighbor entirely. Instead President Moon Jae-in and his administration must pursue diplomatic reassurance and hard-nosed security reforms along multiple tracks that will sometimes be in tension with each other. On the

one hand, Seoul must stay in close coordination with Washington to both optimize diplomatic overtures to Pyongyang and ensure that the alliance can prove its mettle if such outreach fails. On the other hand, South Korea must avoid antagonizing China outright even as it contends with the far-reaching implications of China's more active military footprint on its doorstep. Threading this needle will be a long-term enterprise that requires all the diplomatic acumen and strategic foresight that Moon has at his disposal.

CHINA'S INTERESTS ON THE KOREAN PENINSULA

China's views on the Korean Peninsula are refracted through the lens of geopolitics, international law, and history. In geopolitical terms, Beijing sees the situation as a theater of regional competition with the United States. Because China cooperates more closely on economic and security matters with North Korea than any other nation in the region, it can use stable relations with North Korea to maintain and expand its influence on the Korean Peninsula.

When the administration of U.S. President Donald Trump unveiled its Free and Open Indo-Pacific strategy as a pointed rejoinder to Beijing's own regional vision amid escalating U.S.-China tensions, North Korea's value to China rose further as fears in Beijing of U.S.-led encirclement increased. China believes that the Trump administration is further accelerating the establishment of a regional coalition to curb China's growing political, economic, and military influence. Consequently, China has an interest in discouraging neighboring countries from participating in the U.S. strategic vision for the Indo-Pacific. Chinese President Xi Jinping and the government he leads are seeking to establish a system favorable to China's interests instead of adapting to the U.S.-centric international order.

It is with this mentality that China is keeping an eye on South Korea's response to the Free and Open Indo-Pacific strategy. The Moon government proposed linking South Korea's New Northern Policy with the China-led push to fund regional infrastructure through the Belt and Road Initiative. Seoul seems to be seeking to highlight the common ground between the Moon-championed peace process pursued by South Korea and China's regional goals.¹⁹³ However, many Chinese experts believe that South Korea demonstrated that its true loyalties lie with the United States when it agreed to allow the United States to deploy the Terminal High Altitude Area Defense (THAAD) missile defense system on the peninsula.¹⁹⁴ The flexibility of South Korea's position will be constrained as the United States increases the pressure on Seoul to choose between it and China. As these trends play out, China is likely to respond to developments on the Korean Peninsula not in isolation but through the overarching prism of U.S.-China competition.

Given these geopolitical stakes, China unsurprisingly argues that it has a legal right to be involved in inter-Korean relations as a party to the Korean War and as a signatory of the Korean Armistice Agreement that ended open hostilities.¹⁹⁵ In 2016, Chinese Foreign Minister Wang Yi expressed China's interest in hastening negotiations for an end-of-war declaration and a peace treaty to replace the armistice agreement.¹⁹⁶ On some level, China has pursued this stance because it sees the ongoing denuclearization negotiations as the best chance for disarmament on the Korean Peninsula, but there are more realist, hard-nosed interests at play too.

The nature of the institutional foundation undergirding the U.S. military presence in South Korea adds another layer to China's diplomatic position. The temporary but long-standing armistice agreement provides legitimacy for maintaining the United Nations Command (UNC).¹⁹⁷ UNC is a U.S.-led command that was

established by the United Nations (UN) Security Council to defend South Korea against the North Korean invasion in 1950. When the Combined Forces Command (CFC) was founded in 1978 and became the command tasked with defending South Korea in the event that conflict resumed, UNC was relegated to maintaining the armistice rather than fighting a war. Because the command's task is to maintain the armistice, replacing that temporary measure with a permanent treaty would remove UNC's current mandate. Beijing, as a signatory of the armistice treaty, would likely advocate to dissolve UNC rather than adjust its mandate because there would be no armistice to keep.¹⁹⁸

The dissolution of UNC would eliminate one of the three U.S.-led commands, including the United States Forces Korea and CFC, on the peninsula. China has long wanted to see the UNC structure dissolved or at least weakened, including UNC-Rear located in Japan, a critical support mechanism for allied military operations to defend South Korea. In the UN General Assembly Resolution 3390B submitted in 1975, China called for the dismantlement of UNC and the withdrawal of all foreign troops stationed in South Korea.¹⁹⁹ At that time, the UN General Assembly supported negotiations toward a peace treaty to replace the armistice as soon as possible, and South Korea and the United States agreed to keep UNC until an alternative mechanism was formed to achieve a final peace settlement.²⁰⁰ Given this history, China will continue to link the discussions on signing a peace treaty to the issue of dismantling UNC.²⁰¹

Dissolving UNC would not significantly affect the combat capabilities of U.S.–South Korean allied forces on the peninsula itself, but it could significantly hinder U.S. reinforcements from being sent via Japan in the event of a conflict on the Korean Peninsula. In addition to a status of forces agreement (SOFA) for the stationing of U.S. forces in Japan, some of the

UN Sending States (among the nations that provided forces and support to UNC during the Korean War, including the United States) have a separate SOFA for UNC-Rear called the UN-Government of Japan SOFA.²⁰² This SOFA allows a subset of UN members—including Australia, Canada, France, New Zealand, the Philippines, Thailand, Turkey, the United Kingdom, and the United States—to use several UN/U.S. bases to transit through or operate from Japan in the event of a regional contingency. This arrangement is crucial to U.S. force flow and to maintaining a stable center of command in the event of a conflict on the peninsula.

Moreover, the SOFA requires nations to notify the Japanese Ministry of Foreign Affairs of any use of the bases, though its terms do not technically require Japanese approval for such activities. While it is highly unlikely that the United States and partner nations would not request Japanese approval, abolishing UNC would require this SOFA to be renegotiated; if that happened, it is unlikely that any signatory of the current SOFA would be able to negotiate such generous terms again. Additionally, for as long as it remains active, UNC could lend legitimacy to international coalition contributions to support the U.S.–South Korea alliance's efforts to conduct military operations in times of crisis. This is one consideration to bear in mind as China continues to pursue conversations with North Korea parallel to ongoing United States– and South Korea–led negotiations on the denuclearization of the Korean Peninsula and the establishment of a peace regime. China's status as party to agreements concerning UNC through its position as a permanent UN Security Council member gives China legitimacy to influence the discourse on the changing alliance, including the status and role of the U.S. troops based in South Korea, under international law.

This state of affairs influences how Beijing portrays the ongoing dispute over Pyongyang's nuclear program. China argues that North Korea's nuclear ambitions

stem from the country's decades-old isolation and anxiety about the regime's potential collapse.²⁰³ As a suggested remedy, China urges improvement in U.S.–North Korea relations and the reduction of military threats so as to supposedly alter North Korea's strategic outlook and encourage denuclearization. Framing the situation in this way serves China's interests by providing a rationale and incentives for reducing U.S. capabilities and troop levels in Northeast Asia.

On a related note, China recently secured a diplomatic success with regard to U.S.–ROK military exercises. China has long advocated for a freeze-for-freeze deal that would suspend North Korea's nuclear and missile tests in exchange for curbing large-scale joint U.S.–ROK military exercises. In a surprise to the Pentagon and many observers, Trump proposed this very arrangement unilaterally at the Hanoi summit with North Korea in February 2019. Consequently, large-scale joint U.S.–South Korea military exercises have been replaced with smaller drills. This policy change already has caused concerns about a slight degradation in military readiness of CFC, the combined U.S.–South Korean war-fighting command.²⁰⁴

As a next step, Beijing may demand other concessions from the alliance such as a reduction or withdrawal of U.S. military forces stationed on the Korean Peninsula. China has maintained that all U.S. troops should be withdrawn from the Korean Peninsula as Chinese forces were under the armistice agreement.²⁰⁵ Beijing has pointed out that, unlike China, the United States has ignored its treaty obligation while deploying a large number of weapons systems to South Korea, which Chinese officials claim contributes to the regional arms race. China is concerned that the United States is criticizing North Korea's military build-up while strengthening its own military posture in the region, with the goal of pressuring Beijing. Given these considerations, China will keep on opposing U.S. attempts to strengthen its military alliance with South Korea.

CHINA'S MILITARY POSTURE, MODERNIZATION, AND EXERCISES

As they seek to improve their own strategic positioning, Chinese leaders continue to reject any attempt to shift the balance of power on the peninsula in ways that benefit the United States and South Korea. To this end, China is actively adopting a more proactive, far-reaching defense posture and modernizing its military to alter the military balance in Northeast Asia and optimize its influence on the Korean Peninsula. China's response to the situation on the Korean Peninsula should be examined in the context of this revised military posture, its ambitious military modernization, and its more active military presence near the peninsula.

A More Expansive Military Posture

Amid intensified competition with the United States, China has focused on projecting military power overseas especially in the maritime domain. This strategic shift has important implications for nearby neighbors, including South Korea. In general terms, China's military aims to “build . . . a strong national defense and powerful armed forces,” overarching goals laid out in its 2015 white paper.²⁰⁶ This document focuses predominately on China's “maritime rights and interests,” and it specifically cites the U.S. rebalance to Asia strategy and Chinese concerns about Japan as reasons for paying greater attention to this subject. Specifically, Beijing is concerned about rapid Japanese modernization across its ground, maritime, and air forces and the restart of parliamentary debates on revising the country's postwar peace constitution, which put the genie of Japanese militarism back in the bottle.

The white paper explicitly added a new goal of protecting China's overseas interests, marking an expanded scope compared to previous iterations that focused on security threats closer to home from what the Chinese government refers to as “separatists” in Taiwan, Tibet,

and Xinjiang. In a corresponding change, Beijing made it clear that the operational domain of the Chinese armed forces has expanded, extending to cover the East China Sea, the South China Sea, and parts of the Western Pacific. The inclusion of these theaters signals that China is recalibrating its defense posture to be more external-facing, particularly with respect to the Korean Peninsula. Over the coming years, this more outward-looking posture means that China will likely do more to try to influence the status quo in the region, which in many cases may not support South Korea's strategic interests. South Korea has been preparing for challenges caused by third-party intervention, especially by China, in case of a contingency on the Korean Peninsula, but Seoul must prepare for these challenges in the context of U.S.-China competition as well.

A More Modernized Military

To this end, China has undertaken a complete modernization of the People's Liberation Army (PLA) in terms of theory, organizational structure, service personnel, combat readiness, weaponry, and scope of military activities. The overall goal is to make the PLA a world-class military by 2050.²⁰⁷ The Chinese armed forces are tasked with seizing the strategic initiative and actively securing the country's overseas interests. The Chinese government noted considerable progress on this front in a March 2019 report.²⁰⁸ The PLA shoulders a wide range of strategic tasks. In 2015, the Chinese government outlined eight strategic assignments the PLA must be ready to execute, including the charges of resolutely safeguarding the unification of the motherland; protecting China's security interests in new domains; and advancing China's overseas interests.²⁰⁹ The PLA aims to safeguard national security by effectively controlling any crisis that may emerge and its follow-on effects.

Specifically, China seeks to craft a more streamlined military with joint-service capabilities, in which all the services work in tandem. Beijing is pushing to establish an advanced operational apparatus attuned to the

needs of modern warfare, make its military structure more efficient, and better train military personnel to perform joint operations. In accordance with these objectives, the Chinese military has reorganized its departments into functional sections under the Central Military Commission and reduced the number of theater commands to five—the Eastern Theater, the Southern Theater, the Western Theater, the Northern Theater, and the Central Theater Commands.²¹⁰ By the same token, China is striving to shift the PLA from a ground-based force to one in which all the services are highly mobile and coordinate well. To this end, the country has reduced its troop count by 300,000, a move that the *New York Times* reports will free up funding for sea and air forces, which “require fewer but better trained personnel.”²¹¹

Notably, China is focusing its remaining ground troops in Northeast Asia. The larger Northern Theater Command that has resulted from this strategic shift encompasses Mongolia, the far eastern reaches of Russia, and the Korean Peninsula.²¹² This means that PLA forces could quickly intervene in Northeast Asian affairs. Given how the PLA has strengthened its ability to respond quickly and operate at long range, South Korean forces would face a heavier burden contending with their Chinese peers if the latter were to actively intervene in Korean affairs. Since at least 2004, China has sought to strengthen its ability to conduct joint operations near the Korean Peninsula.²¹³ China's recently recalibrated force posture and training exercises, including high-profile naval drills off the Korean Peninsula in December 2016 and August 2017, indicate that the country is prepared to infiltrate the Korean Peninsula by ground, sea, and air if necessary to protect its interests. That said, precisely how these forces would be combined would depend on the actual contingencies at hand.

If a major conflict were to break out, it is also possible that the PLA would pull extra forces from the Central Theater Command. If Beijing did so, it would be seeking to deter the forward deployment of additional U.S.

military assets based in the United States to discourage possible escalation and an unwanted confrontation with the Chinese military. It is no surprise, then, that South Korea has major concerns about how the PLA is strengthening its ability to conduct military operations near the Korean Peninsula.

On some level, it is understandable why Beijing would feel compelled to take such steps. China shares an 880-mile long border with North Korea, and the country's leaders are well aware of the impact an emergency in North Korea could have on China's own security and internal stability.²¹⁴ Beijing's chief concerns center on the risk of a flood of North Korean refugees seeking to cross the border into northeastern China or a loose arsenal of uncontrolled weapons of mass destruction in the event of state collapse or severe unrest in North Korea.²¹⁵ In any major crisis, China's first priority would be tasking the Northern Command's army aviation brigades and special operations forces with securing Pyongyang's weapons of mass destruction. Given that the relevant known weapons facilities are closer to the Chinese border than to the South Korean border, Chinese forces could do this more quickly than ROK-U.S. combined forces.²¹⁶

As China seeks to transform the PLA into an expeditionary force, its military modernization is overwhelmingly focused on the maritime and air domains. The modernization of the PLA Navy includes the development and production of new surface vessels and new submarines, a change in line with the military's strategic goal of improving its operational capabilities.²¹⁷ The PLA Air Force is seeking to modernize its military aircraft including fighter jets, aerial refueling tankers, and transport planes to enhance its ability to deploy aircraft quickly, support them effectively, and secure the airspace at the border in case of a crisis. In particular, the next-generation J-20 fighter jet is intended to improve the country's air defense capabilities.

The expansion of the PLA Navy Marine Corps, which began in April 2017, requires analytical attention too.²¹⁸ China's Marine Corps is expected to be a 30,000-strong force by 2020, and its mission will likely grow "to include expeditionary operations on foreign soil."²¹⁹ Previously, the Marine Corps were assigned only to the South Sea Fleet stationed in Zhanjiang in Guangdong Province. Marine Corps units can now be found all along China's eastern seaboard all the way to Shandong Province in the north. A former army motorized infantry brigade of the former Twenty-Sixth Group Army stationed in northern Shandong has reportedly been transformed into a new marine brigade. In southern Shandong Province near the port city of Qingdao, a new second marine brigade has been formed.²²⁰ Considering that the North Sea Fleet is known to be tasked with leading the military response to a crisis on the Korean Peninsula, South Korea has legitimate concerns about China's increasing amphibious and expeditionary warfare capabilities.

These military changes have affected not just China's conventional forces but its nuclear forces as well, a number of which are under the Northern Theater Command and could thus come into play in a conflict on the Korean Peninsula. China is also upgrading its nuclear arsenal. Beijing maintains that its nuclear forces are a strategic necessity for safeguarding national sovereignty and security, and the country is prepared for the worst-case scenario of a nuclear confrontation with another nuclear-armed country. Although China traditionally has employed a policy of no first use of nuclear weapons, Beijing still has an interest in optimizing its nuclear force structure, improving its strategic early warning system, projecting power with its missile arsenal, the ability to act quickly under tight time constraints, and maintaining a strong level of deterrence vis-à-vis the United States. To modernize its nuclear forces, China is strengthening its silo-based intercontinental ballistic missiles and improving the viability and mobility of its missiles.²²¹ The Chinese

military is also speeding up the development of new technologies including hypersonic glide vehicles to better penetrate ballistic missile defenses. The PLA Rocket Force is pursuing innovations in weaponry and other equipment to strengthen its capabilities in terms of strategic deterrence, nuclear counterattacks, and medium- and long-range precision strikes. The Fifty-First and Twenty-Eighth Bases of the PLA Rocket Force (some of the units that control China's nuclear weapons) also report to the Northern Theater Command.

When China clearly maintained a posture of restraint with a modest strategic nuclear force, it was widely believed that Beijing had limited deterrence goals.²²² But the scope and scale of China's nuclear modernization has renewed questions about its intentions, raising the possibility that the country may be looking to move from a modest strategy of minimum deterrence to a more robust strategy of assured retaliation even without formally changing its policy against first use.²²³ When China has a wider range of options for engaging in a war, it could have the flexibility to wage damage-limiting strikes aimed at preventing escalation to an all-out war and winning a limited conventional war. Preparing for various nuclear scenarios such as initiating a surgical strike on lines of communications or logistic nodes to delay force movement is complex, considering the process of determining threats and making decisions to choose an appropriate response. Besides, China's increased capabilities to strike rival military bases could change U.S. allies' perceptions and effectively diminish strategic stability, which would increase the risks of escalation and could undermine U.S. extended deterrence in East Asia.

The loss of a key nuclear weapons treaty has heightened Beijing's sensitivity to the nuclear balance of power in East Asia. Until the United States and Russia scrapped it in 2019, the 1987 Intermediate-Range Nuclear Forces

(INF) Treaty had eliminated Russian and U.S. ground-based missiles with ranges between 500 and 5,500 kilometers. One reason the United States left the INF Treaty is that some policymakers in Washington felt that China's short- and medium-range missiles should be subject to the same restrictions imposed on the INF Treaty's signatories. U.S. decisionmakers worried that Beijing's military modernization has allowed it to field short- and medium-range missiles so as to prevent the United States from intervening militarily in geographic areas near the Chinese mainland.²²⁴ By extension, the fear is that China may exercise preemptive strike capabilities against U.S. military bases in Northeast Asia.²²⁵ This line of thinking has been used as justification for the United States to potentially station nuclear forces in Asia, a possibility that China is very concerned about.

After the Trump administration announced that the United States would pull out of the treaty, Beijing criticized Washington for disrupting regional stability.²²⁶ With new flexibility to station short- and medium-range nuclear-armed missiles in Asia, one country in which the United States could potentially station such nuclear forces is South Korea. On the one hand, this might provide added deterrence for South Korea against the North Korean threat. But if Seoul were to agree to let the United States station such missiles in South Korea, China would see that move as highly escalatory. China has shown willingness to retaliate economically against South Korea against even the deployment of U.S. defensive systems like THAAD, and the stationing of nuclear-armed missiles in South Korea would almost certainly provoke a similar or even more severe response. Beijing will continue to pressure U.S. allies in Asia to not deploy U.S. ground-based nuclear weapons.

To sum up, these various changes to the Chinese military have profound implications for South Korea and allied U.S. forces. As a consequence of U.S.-China

strategic competition and growing fears of instability in North Korea, China is shifting its military focus to the Korean Peninsula. At the same time, neither Seoul nor Washington's defense establishments have positive relationships with Beijing for the purpose of coordinating planning for North Korean contingencies. This could create a scenario in which all three countries' militaries are operating in a conflict without prior consultation and disparate strategic goals. This state of affairs greatly increases the potential for accidents or miscalculation in the event of a crisis on the peninsula. Even in the absence of conflict, Beijing's adjustments to its military posture could weaken the U.S.-ROK alliance by increasing the stakes for Seoul as it tries to navigate its relationship with its largest trading partner, China, and its most important ally, the United States. Amid unrelenting competition between China and the United States, China will keep trying to get the ROK to refrain from conducting military exercises with its ally or deploying new U.S. capabilities.

CHANGE OF PRACTICES

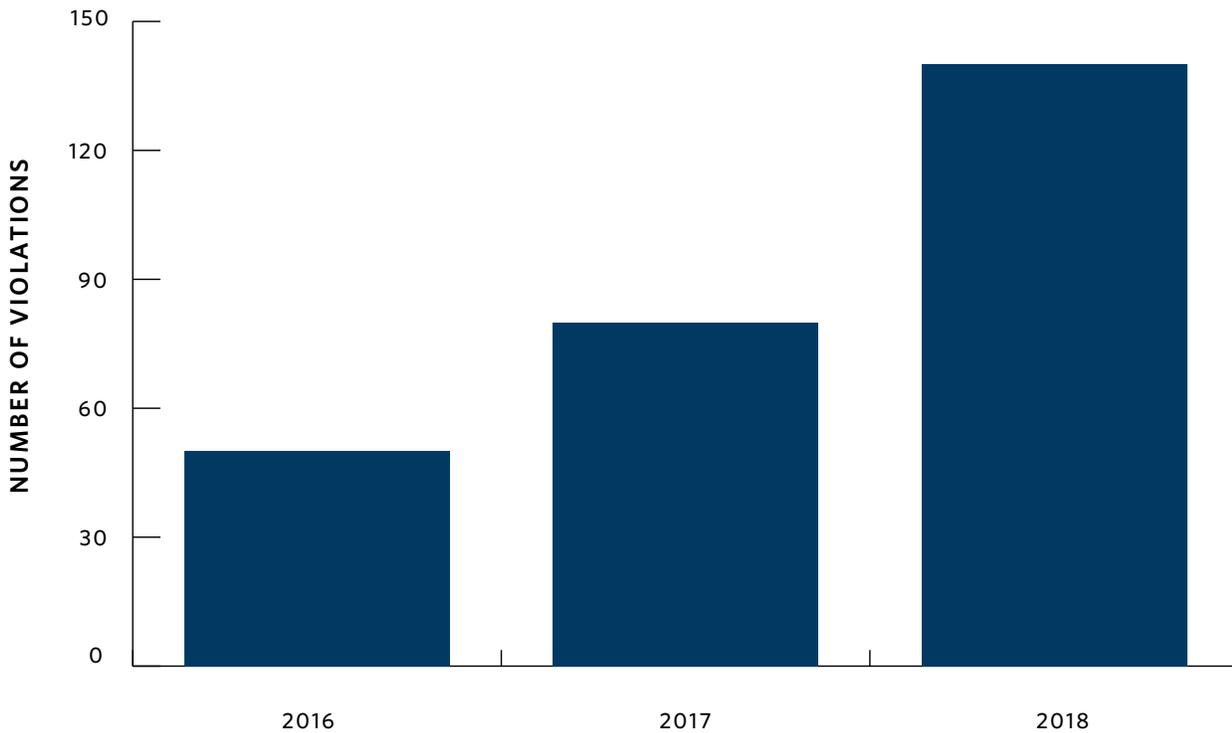
In conjunction with its more expansive military posture and rapidly modernizing military forces, China has altered its operational behavior in several notable ways. For starters, Beijing has bolstered its ability to conduct maritime reconnaissance missions with a new vessel designed for this purpose. In January 2017, China commemorated the launch of the PLA Navy's new intelligence-gathering ship, the *Haiwingxing*, which is capable of conducting all-weather, around-the-clock reconnaissance on multiple different targets.²²⁷ The new ship supports China's North Sea Fleet, joining two other intelligence-gathering ships deployed in 1989 and 2015, respectively. The *Haiwingxing's* deployment confirms the Chinese navy's increasing ability to conduct multiple, widely dispersed operations simultaneously in the region. This addition to the fleet may not directly increase tensions with China's neighbors, but it could

invite other countries (including South Korea) to more determinedly assert their own rights to conduct naval and intelligence-gathering operations.

More broadly, in recent years, the PLA has increased patrols near the Korean Peninsula. Between January 2016 and February 2019, Chinese warships intruded into South Korea's exclusive economic zone (EEZ) 465 times, or 84 percent of the total such incursions (see figure 3).²²⁸ This naval activity became more prevalent over time. In 2016, there were 110 Chinese intrusions into South Korea's EEZ, a figure that more than doubled to 243 cases in 2018. These heightened incursions are certainly, at least in part, a product of China's close-in air and sea surveillance and reconnaissance activities, though these movements could be meant to serve other purposes too. For instance, Beijing could be aiming to test the South Korean military's posture and response. Another possibility is that China intends to try to claim effective control of waters near the Korean Peninsula. Specifically, Seoul and Beijing have yet to define an EEZ in the waters near Socotra Rock in the West Sea, which both countries lay claim to, despite many rounds of talks. In South Korea, this submerged rock, which has been the subject of a maritime dispute for many decades, is referred to as Jeodo; South Korea has built a maritime research station and helipad there. Beijing's attempt to apply military pressure on Seoul is a cause of great concern for South Koreans who worry that China could renew a jurisdictional claim to Socotra Rock.

Aside from maritime surveillance, China has also regularized large-scale naval exercises in the West Sea since 2016 for purposes of power projection, personnel training, and contingency planning.²²⁹ When tensions between the United States and North Korea escalated, Chinese military forces held a large-scale training exercise in July 2017 in the Yellow Sea involving aircraft carriers and battle groups. China staged a second naval drill the following month near the Korean Peninsula in Chinese coastal waters from Qingdao and Lianyungang

FIGURE 3
Chinese Violations of South Korean Airspace

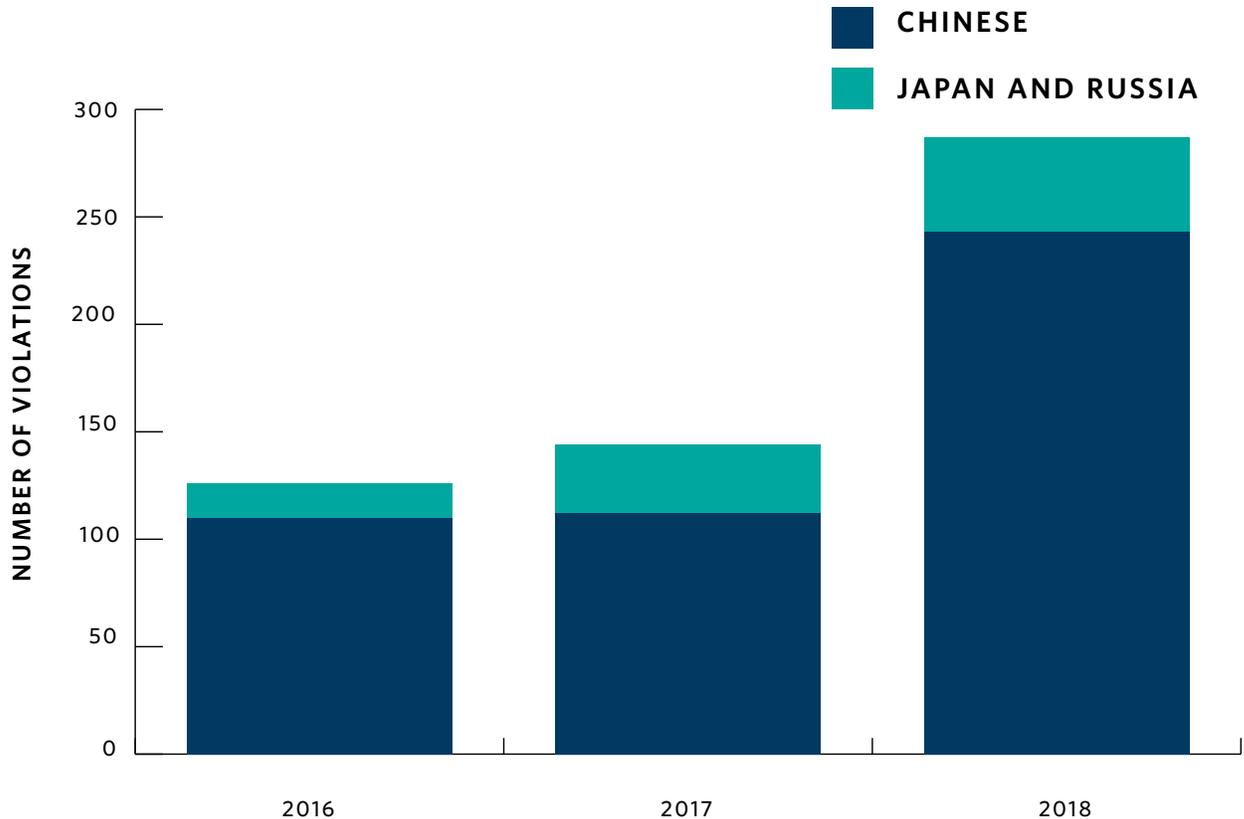


SOURCE: *Chosun Ilbo*

after a major North Korean missile test in late July. These exercises could have been a message to Pyongyang to stand down or a signal to deter other countries from escalating military tensions on the Korean Peninsula. A year later, Chinese theater commands held a round of live-fire exercises and simulated antisubmarine attacks in the Yellow Sea too. China's domestically designed aircraft carriers were reportedly involved in the exercise because of the drill's proximity to its home port of Qingdao.²³⁰

More frequent Chinese military activity has not been limited to the seas adjacent to the Korean Peninsula. Chinese military planes have violated the Korean Air Defense Identification Zone (KADIZ) more often in recent years too (see figure 4).²³¹ For instance, a Chinese Shaanxi Y-9G reconnaissance aircraft entered airspace claimed by South Korea northwest of Jeju Island in late December 2018. Air defense identification zones (ADIZs) refer to geographically designated air space that countries like China, Japan, and South Korea have arbitrarily established to prevent other countries from

FIGURE 4
Naval Violations of South Korea's EEZ



SOURCE: *Chosun Ilbo*

violating their airspace, requiring unauthorized aircraft to identify themselves and seek permission to enter in advance. There is no basis for such a designation in international law, but it is international common practice to provide advance notice before entering an ADIZ.

To cite another example, on July 23, 2019, when a Russian warplane violated South Korean air space above the Dokdo Islets, two Chinese H-6 strategic bombers entered the KADIZ without giving prior notice. Denying that any violation of international law had occurred, China explained that the planes were

conducting a joint air patrol mission with Russian aircraft in neutral air space.²³² Whenever Chinese military aircraft violate the KADIZ, South Korea deploys fighter jets to track and monitor them. South Korea sees the regular intrusion of PLA aircraft as aimed at testing Seoul and Washington's joint posture and response.

China's shift to focus on overseas threats, military modernization, and military competition with South Korea's strongest ally pose a new challenge to the U.S.-ROK alliance. War on the Korean Peninsula is unlikely, but with China's increasing demonstrations,

through increased surveillance and military drills, of its willingness to proactively protect its interests abroad, U.S. allies including South Korea may have less faith in the decisiveness of U.S. military predominance. As pressure to choose between the United States and China grows amid intensifying competition, South Korea is in an increasingly difficult position. To continue prioritizing the U.S. alliance over ties to China, South Korea must be assured that the United States retains the ability to help Seoul withstand Chinese attempts to interfere with its security.

CONCLUSION

Even as Seoul and its allies in Washington continue to grapple with Pyongyang's nuclear ambitions, Beijing's growing military footprint is casting an additional shadow of uncertainty over the security landscape of the Asia Pacific. The stop-and-start nuclear talks with North Korea are an obvious development to watch, despite the uneasy impasse negotiators seem mired in. Yet relevant actors from South Korea to the United States surely remain cognizant of how the shifting security balance in the region seemingly owes at least as much to China's heightened military capabilities and greater apparent willingness to use them.

For its part, South Korea should strengthen its capacity for maritime deterrence both through its own efforts and in coordination with the United States. As China's naval might and attempts to tighten maritime control over the waters adjacent to the Korean Peninsula grow, Seoul should also seek to defend its maritime interests. In the near term, South Korea needs to be prepared to respond effectively to the possibility of a small dispute with neighboring countries and the minimum deterrence needed to prevent any provocations, as these are far more likely than any large-scale conflict.

Seoul and Washington should both understand how important multilateral security cooperation, information sharing, policy consultations, and joint exercises all are to maintaining peace and stability in the region.

Over the short term, sufficient naval and air forces are already in place to guard against the risk of small-scale conflict within South Korea's EEZ. In the medium to long term, the South Korean military will have to build up its defense capabilities to discourage armed provocations by neighboring countries. To augment its own efforts, South Korea should coordinate with the United States so Seoul can better engage in joint naval and air operations and improve its intelligence, surveillance, and reconnaissance capabilities by employing satellites and aircraft. Seoul should continue to pursue its Defense Reform 2.0 and U.S. cooperation to develop and acquire advanced military assets and capabilities.

The robust U.S.–South Korea alliance remains essential to both nations' security despite the shifting regional security environment. To keep the alliance strong, the two countries need to expand its scope by promoting South Korea's ability to make contributions to regional stability rather than orient the alliance solely toward deterring North Korea. Such regional contributions should include peacekeeping operations, counterpiracy operations, reconstruction efforts, humanitarian assistance, and disaster relief.

In this spirit, Seoul and Washington should both understand how important multilateral security cooperation, information sharing, policy consultations,

and joint exercises all are to maintaining peace and stability in the region. It is in South Korea's interest to participate in networked security cooperation with U.S. allies and partners to advance shared fundamental values, improve connectivity, and assist with capacity building. That being the case, South Korea should work to lay out on what terms and to what extent it will help support the U.S. Free and Open Indo-Pacific strategy.

South Korea can tacitly endorse aspects of this vision that call for advancing shared goals such as maintaining the presence of U.S. forces on the Korean Peninsula, continuing negotiations with North Korea on denuclearization, preserving joint readiness to respond with overwhelming force to any attack by North Korea, and preventing unilateral changes to the regional security's environment. Although these goals are in South Korea's best interests, the sensitivities of Seoul's relationship with Beijing would have consequences for any formal endorsement, which may discourage Seoul from signing on to the strategy in the near future.

Collaborative efforts to monitor changes to North Korea's military capabilities should continue. Sharing relevant information among concerned countries is important in terms of preparing for possible future negotiations on biological and chemical weapons and missile disarmament. It should be noted that the more denuclearization and disarmament discussions proceed, the higher North Korea's willingness to develop new weapons systems could be. Because North Korea is sensitive to the changing balance of power on the peninsula, North Korea's interest in developing asymmetric conventional weapons systems will likely grow. This reality makes information sharing on North Korea's military research and development activities even more important. In particular, it is vital to do more to monitor items banned under international export controls with the eventual goal of bringing North Korea into the global nonproliferation regime. South Korea and the

United States can pursue a variety of policy responses to the attendant proliferation challenges such as strengthening sanctions enforcement, updating export control lists, building systemized review processes, and assisting national capacity-building so as to strengthen the international nonproliferation regime.

Confidence-building measures (CBMs) are also an important consideration that China and South Korea should pursue to help ease regional tensions. The key lesson of the THAAD debacle was that strengthening defense cooperation in the Asia Pacific, though intended to deter North Korea, could trigger strategic distrust in China. It is necessary for South Korea to carefully analyze China's military rise and hold discussions with China on various CBMs and crisis management measures through a security consultative body. To this end, Seoul needs to further internalize regular, high-level security dialogue, which has already been established via multiple channels. These channels include a communication line between the Blue House National Security Office and China's State Council for Foreign Affairs, vice minister-level strategic dialogues, and director general-level dialogues on foreign affairs and security matters.

South Korea will need to operate deftly to manage the competing prerogatives of keeping the U.S. alliance strong, maintain a stable diplomatic equilibrium with China, and curb the worst excesses of North Korean behavior. A key ingredient of such diplomatic acumen will be a clear-eyed understanding of what China's key interests are and how it is prepared to employ its growing clout to defend them.

The analysis, opinions, and conclusions in this section are solely the author's own views and in no way reflect any views or positions of the ROK Ministry of National Defense, the Korea Institute for Defense Analyses, or any other branch or unit of the ROK government.

CHAPTER 6

OVERCOMING OBSTACLES TO TRILATERAL U.S.-ROK-JAPAN INTEROPERABILITY

KATHRYN BOTTO

For decades, Japanese and South Korean national security has been inextricably linked by common threats and both countries' alliances with the United States. But lingering animosities between Seoul and Tokyo dating back to before World War II have long made cooperation uneasy. Those tensions have burst back into the open in recent years, threatening to erode the basis of cooperation even as common rivals in North Korea and China are becoming more formidable. But policymakers in Tokyo and Seoul must remain mindful of the enduring need for a common defense, because any weakening of cooperation could have severe ramifications if a sudden crisis or outright war were to test the limits of their relationship.

At the start of the Korean War, when the North Korean military crossed the thirty-eighth parallel and invaded South Korea on June 25, 1950, no foreign troops were on the peninsula to aid the Republic of Korea's (ROK) fledgling military. In the spring of 1949, the few remaining U.S. troops had withdrawn at the direction of U.S. president Harry Truman, despite warnings

from numerous intelligence and defense institutions that withdrawal would trigger an invasion by North Korea.²³³ Still, even with only 500 U.S. advisers physically on the peninsula, the United States was able to respond more quickly than any other nation due to its military presence in Japan supporting the U.S. occupation there. Truman committed air and naval forces to the defense of South Korea on June 27, the very day the United Nations (UN) Security Council passed Resolution 83 recommending member states provide assistance to South Korea. The first foreign ground troops, U.S. Task Force Smith, arrived from Japan on July 1, 1950.²³⁴

Just as during the Korean War, U.S. and ROK readiness for conflict on the peninsula today is partially a function of Japanese contributions. During the Korean War, Japan's geostrategic location made it vital to the U.S. response. Today, Japan's ability to respond defensively and of its own volition in support of U.S. and ROK efforts is important to the defense of South Korea and Japan alike. Trilateral cooperation is more than a force

multiplier—it is integral to ensuring the United States, South Korea, and Japan can prevent catastrophic conflict, loss of life, and widespread destruction on all sides.

But South Korea's and Japan's negative perceptions of each other inhibit closer trilateral cooperation. Differing positions on Japan's colonial past, Japan's military goals, and appropriate approaches to China and North Korea often prevent the two countries from coming together over their common interest in promoting peace in the region. More than just disagreements, these issues make the two countries view one another as unreliable security partners. This divergence was acutely felt in 2019 when Seoul and Tokyo's disagreements over historical issues snowballed to impact their economic and security relationship, leaving ROK-Japan relations at their lowest point in decades.

A major catalyst of this deterioration occurred in October 2018, when the South Korean Supreme Court ordered the Nippon Steel Corporation to pay compensation to South Koreans forced to work in its factories during Japanese colonization. A similar verdict was handed down to Mitsubishi Heavy Industries of Japan in November. Amid this escalating legal battle, Japan removed South Korea from its trade whitelist in August 2019, although Tokyo claimed that it did so due to national security concerns over South Korean exports of highly sensitive materials rather than in retaliation for the Supreme Court decisions. Seoul responded in kind by removing Japan from its own trade whitelist and subsequently threatened to withdraw

South Korea and Japan's ability to cooperate remains dependent on the United States as a conduit and impeded by bilateral strategic mistrust.

from the General Security of Military Information Agreement (GSOMIA), an intelligence-sharing pact with Tokyo. These disagreements were punctuated by a December 2018 dispute over whether or not an ROK Navy destroyer directed its fire-control radar at a Japanese Maritime Self-Defense Force patrol aircraft.²³⁵ South Korea then accused a Japanese surveillance plane of making “provocative” flights over its naval vessels.²³⁶ Unable to resolve their differences, the two countries suspended port calls and canceled senior-level defense exchange programs.

Throughout 2019, the lines between Japanese and Korean history, security, and economic issues were entangled. This marks a departure from the two countries' approach to one another over the past decade. Though hostile domestic political rhetoric has always persisted, both nations largely have allowed security and economic cooperation to increase incrementally but substantially over the past few decades without resolving lingering historical issues. This is not to say that these issues have never intersected. But since the normalization of relations in 1965, neither country had previously allowed domestic politics to seep into the security realm to the extent they did in 2019.

While tensions remain high in early 2020, Japan and South Korea both have incentives to cooperate with the United States and one another to prepare for contingencies on the Korean Peninsula. All three countries want to mitigate the North Korean threat and hedge against China's rise. But to ensure a coordinated response to such challenges, the United States, South Korea, and Japan need to improve their interoperability, which refers to their ability to conduct joint operations. Enhancing interoperability requires attention on three dimensions: human, procedural, and technical. In each area, South Korea and Japan's ability to cooperate remains dependent on the United States as a conduit and impeded by bilateral strategic mistrust. Given the stakes, developing interoperability

despite differences is a far better outcome than allowing any fundamental drawdown in trilateral security cooperation—and the accompanying security risks—to emerge.

STRATEGIC MISTRUST AND OTHER BARRIERS TO SOUTH KOREAN-JAPANESE COOPERATION

Policy makers and experts largely accept that Japan and South Korea both have an interest in closer bilateral cooperation with each other and trilateral cooperation with the United States. In some respects, Tokyo's and Seoul's security concerns align even more closely than either party's views do with Washington's. While the United States is primarily concerned with North Korea's long-range and intercontinental ballistic missiles, Japan and South Korea see North Korea's short- and medium-range missiles as a common threat as well.

Pyongyang has driven this point home by launching missiles not only into the East Sea (or the Sea of Japan) but also over Japanese territory, most recently over the northern island of Hokkaido in 2017.²³⁷ Like South Korea, Japan is a potential target for North Korea's nuclear arsenal too. The centrality of the East Sea (Sea of Japan) in any potential conflict, Japan's role in facilitating the transit of allied reinforcements to South Korea and evacuating civilians in such a conflict, and Japan's economic dependence on China and South Korea, as well as its involvement in global and regional supply chains and international organizations are among the many other, well-documented issues that would make a crisis on the Korean Peninsula a major concern for Tokyo.

Although these commonalities make Japan and South Korea seem like natural security partners, they perceive one another as unreliable security partners. This inhibits them from improving the interoperability that their aligned security interests would otherwise seem to

encourage. Differing interpretations of Japan's colonial history are one contributing factor. Transitioning from a colonizer-colonized relationship to one of cooperative partnership is never natural. In addition, the two countries also have increasingly divergent perceptions of their two biggest security threats: North Korea and China. While Tokyo and Seoul share common threats, their divergent perceptions of those threats undermine cooperation and prevent closer alignment on how to approach security issues.

Moreover, the modern South Korea-Japan relationship was not initially borne of shared national security concerns—until the 1990s, the relationship was approached overwhelmingly in economic terms. In the 1960s, then South Korean president Park Chung-hee desperately required more aid to stimulate the country's economy, particularly in the face of U.S. threats to reduce aid at the time. Despite strong domestic protests, he sought to normalize diplomatic relations with Japan to secure economic assistance.²³⁸ Japan provided South Korea with \$800 million (about \$6.5 billion today) in grants and loans, and in exchange Japanese firms got access to the developing South Korean market.

In the 1990s, the security environment in Northeast Asia began to change in ways that compelled Japan and South Korea to explore deeper security cooperation. Tokyo's relationships with friends and foes alike changed in remarkable ways. Japan's primary security threat shifted from being the Soviet Union to North Korea following the end of the Cold War, as Pyongyang's nascent nuclear weapons program began to grow. With the Cold War over, Japan's utility to the United States as a proxy for Communist containment was also diminished.²³⁹ With the rationale for the U.S.-Japan alliance already tenuous, suspicions had taken hold among some U.S. observers that Japanese technological superiority posed a threat to U.S. national security.²⁴⁰ Meanwhile, South Korea shared Japan's concerns over the North Korean threat and the future of the U.S. role in Northeast Asia. Amid this newfound volatility in

their regional security environment, the two countries began high-level exchanges between their defense establishments.²⁴¹

Yet while economic links have expanded and high-level defense exchanges between the two countries have taken place, South Korea still mistrusts Japan's military intentions. This has been particularly true since Prime Minister Shinzo Abe's cabinet announced a 2014 reinterpretation of Article 9 of the country's pacifist constitution to allow for limited collective self-defense.²⁴² Japan's exercise of collective self-defense could be beneficial to South Korea in the event of a conflict, as it would allow Japan to militarily help another country if it were attacked in a way that "threatens Japan's survival and poses a clear danger to fundamentally overturn [Japanese] people's right to life, liberty and pursuit of happiness."²⁴³

Yet many South Koreans nonetheless view Japan's constitutional reinterpretation as a return to Japanese militarism. The Abe government has reinvigorated efforts to not only reinterpret but outright amend Article 9 and other parts of the constitution to allow the Japan Self-Defense Forces to function as a traditional military. The increased frequency with which Abe and other conservative Japanese political figures visit the controversial Yasukuni Shrine and heightened tensions over the disputed Dokdo Islands (also called Takeshima or the Liancourt Rocks) have lent some credence to the concerns of many South Koreans. In Japan, South Korean anxieties over its potential remilitarization are mostly viewed as unfounded and create a perception that South Korean perspectives on security matters are unreasonable and imprudent.

Tokyo's and Seoul's views on North Korea are diverging as well. Although Abe has sought a summit with North Korean Supreme Leader Kim Jong Un, on the whole Japan has maintained a far more hardline stance on North Korea than the Moon administration. But Abe's seemingly conciliatory shift was less due to a change in

Japan's fundamental view of North Korea and more a reaction to the United States' exclusion of vital Japanese national interests in its talks with North Korea. Tokyo felt increasingly sidelined as U.S. President Donald Trump continually deferred any chance to bring up North Korea's human rights record in his meetings with Kim, particularly in regard to the Japanese abductee issue.²⁴⁴ Additionally, Trump has made clear that he is not concerned about the North Korean short- and medium-range missiles that threaten Japan and South Korea, but rather only the country's intercontinental ballistic missiles capable of reaching the United States.²⁴⁵

Under Moon, Seoul has been far softer on Pyongyang. The Moon administration has advocated for sanctions exemptions that would allow various inter-Korean projects to proceed, such as the reopening of the Kaesong Industrial Complex or the Mount Kumgang tourist site.²⁴⁶ The relationship between sanctions relief and denuclearization presents somewhat of a chicken-and-egg dilemma. South Korean conservatives and U.S. and Japanese government officials insist that there can be no sanctions relief until North Korea denuclearizes (or at least shows tangible progress toward denuclearization), whereas progressives like Moon in South Korea maintain that sanctions relief is critical to confidence building in hopes of persuading North Korea to denuclearize. This fundamental mismatch of perceptions creates more skepticism of one another's judgment and intentions.

Increasingly, South Korea's and Japan's perceptions of China are also divergent. In 2019, Japan's annual defense white paper placed China over North Korea as Japan's most serious security threat for the first time.²⁴⁷ Japanese Defense Minister Taro Kono cited China's rapid increases in military spending and increased deployment of assets in waters surrounding Japan as the reasoning behind this decision.²⁴⁸ Japan's cooperation in the Free and Open Indo-Pacific strategy and the Quadrilateral Security Dialogue, two initiatives

born of strategic competition with China, also underscore Japan's perception of the China threat. While deeply concerned about China's regional influence, particularly after its retaliation to the deployment of the Terminal High Altitude Area Defense (THAAD) system, Seoul feels constrained in its options for challenging Beijing.²⁴⁹ China remains the key to mitigating the threat from North Korea, Seoul's utmost priority. South Korea therefore has been reluctant to endorse the Free and Open Indo-Pacific strategy or to oppose the Chinese-led push to fund worldwide infrastructure projects through the Belt and Road Initiative, decisions that would invite retaliation or jeopardize the success of its North Korea policy. Many in Tokyo perceive Seoul as ambivalent on the threat China poses, once again deepening the skepticism Japan and South Korea harbor over one another's strategic goals.

These issues are deep-seated and unlikely to be resolved in the near term, yet the incentives for Japanese-Korean cooperation remain and are growing more pressing as North Korea continues to expand its nuclear and ballistic missile programs. If Tokyo and Seoul allow bilateral and trilateral cooperation (with the United States) to weaken, the opportunity costs will be significant. The limited level of cooperation the two countries have today has taken decades to build and is still lacking. The shaky foundations of cooperation in Japan-ROK relations means that if engagements or agreements are terminated, the two countries will be left with few institutionalized processes to fall back on, and previous progress made would likely be lost and difficult to recover.

The trilateral alliance would then be left with little recourse other than to rely on ad hoc mechanisms of cooperation if conflict broke out, mechanisms that would not be coherent or efficient enough to facilitate genuine interoperability. The vulnerabilities this creates in the relationships between Tokyo, Seoul, and Washington could lead to miscalculation, wasted

resources, and greater loss of life. For these reasons, it is imperative that the three nations work to insulate security cooperation from historical grievances, even as the thorny underlying issues remain unresolved.

TRILATERAL COOPERATION, BIFURCATED INTEROPERABILITY

Interoperability is often discussed in the context of trilateral cooperation, but the term tends to be inconsistently and vaguely defined. The North Atlantic Treaty Organization (NATO), arguably the best example of multinational cooperation, defines it as "the ability for allies to act together coherently, effectively and efficiently to achieve tactical, operational and strategic objectives."²⁵⁰ Interoperability has three dimensions: human, procedural, and technical. The human element of interoperability includes the education and training of actual personnel as well as the degree of mutual understanding, communication, and respect between them. Procedural interoperability describes the compatibility of partners' doctrines, policies, and procedures, whereas technical interoperability refers to the connectivity of allies' hardware, communications and information systems, and other equipment. Using this definition is not to say that the trilateral alliance between Seoul, Tokyo, and Washington will ever amount to an Asian NATO, but NATO's definition does provide a gold standard for understanding the nuances of interoperability and for facilitating effective cooperation.

While the United States has achieved a high level of bilateral interoperability with Japan and South Korea individually in all three dimensions, true trilateral interoperability remains elusive. Trilateral interoperability with the United States can satisfy the first condition for interoperability in the NATO definition of enabling the three countries to simply "act together."²⁵¹ Currently, interoperability between Japan and South Korea tends to rely on the United States as

an intermediary. But working through Washington does not make for coherent, effective, or efficient interoperability—the second condition of the NATO definition. Decisions must be made efficiently and quickly in the fog of war, and any lack of these three qualities could prevent the United States, South Korea, and Japan from achieving their desired outcomes.

Despite ongoing differences in the bilateral relationship between South Korea and Japan, tabletop exercises have consistently reaffirmed that trilateral cooperation can readily arise when a major crisis unfolds, including in ways that did not previously exist.²⁵² Importantly, coordination mechanisms between the countries' foreign and defense ministers and cooperation on ballistic missile defense, threat monitoring, and other critical areas emerge on an ad hoc basis. However, while many areas of cooperation arose naturally at the strategic level, the lack of prior consultation, planning, and exercise of these functions at the operational and tactical levels degraded the quality and effectiveness of cooperation between the two partners. As the radar lock-on dispute demonstrated, even where prior consultation and practice occurred, cooperation is often undermined by the tone of the bilateral relationship. The dispute occurred while South Korea was attempting to rescue a North Korean fishing boat in distress, and though Japan and South Korea have frequently exercised coordination in naval search and rescue operations, deep mistrust turned this potential opportunity for utilizing existing avenues of cooperation into a crisis.²⁵³

Tabletop exercises have also demonstrated that uneasy relations between Seoul and Tokyo can impede the effectiveness of a trilateral response. As one account of a Sasakawa Peace Foundation tabletop exercise described:

Seoul-Tokyo relations limited trilateral policy effectiveness. The absence of a genuinely trusting relationship between Tokyo and

Seoul impacted trilateral approaches. Japan was willing to share information with the ROK, but the interactions were mainly passive (communicating each other's actions/goals rather than a discussion on coordinated courses of action). Japan and South Korea found it easier to coordinate in trilateral (with the United States) rather than bilateral settings. This impeded their ability to work together in concert.²⁵⁴

To some extent, the United States can successfully help its two allies communicate better; exchange data and intelligence; align training priorities; and adopt shared terminology, procedures, and doctrine. This facilitates the first condition of the NATO definition of interoperability in that it enables allies to act together to deter and defend against the North Korean threat. Still, bifurcated cooperation is not as coherent, effective, or efficient as it should be. Using the United States as a facilitator is cumbersome, wastes valuable time (even more so in a conflict scenario), risks miscommunication, and makes coordination between the three militaries more difficult. Greater interoperability can help ensure that Japan and South Korea are not forced into a scenario where they must cooperate without experience working together, formalized relationships, or knowledge of each other's systems and procedures. The limits of current Japanese–South Korean interoperability and room for future improvement apply to the human, procedural, and technical elements of interoperability alike.

HUMAN INTERACTION VERSUS HUMAN INTEROPERABILITY

For any military, mere interactions with a partner do not necessarily deepen human interoperability in meaningful ways. In human terms, interoperability requires that multinational partners have a mutual understanding of how to communicate and operate

together so as to smoothly facilitate technical and procedural interoperability between forces and systems. This helps ensure that allied efforts are deconflicted and in sync and that resources are efficiently used. But while Japan and South Korea are interacting significantly more at the strategic level, most of the activities they are undertaking to facilitate this interoperability—particularly exercises, education, and training—are vulnerable to fluctuations in the two countries’ political relationship.

The human element shapes every aspect of interoperability. As detailed by the Army Sustainment Command, “of the three dimensions, the human dimension is most closely connected to interoperability effectiveness and is the most likely to determine system effectiveness.”²⁵⁵ This dimension contains a multitude of facets “rang[ing] from communication at the individual level” to the coalition’s ability to employ standardized and executable capabilities that maximize national contributions.”²⁵⁶ This element of interoperability requires more than interactions through meetings and engagements—it requires that those interactions lead to actions that enhance the ability of multinational defense establishments to work together efficiently and effectively. Having established channels and modes of communication enables every aspect of an allied response. The human dimension in Korean-Japanese cooperation has occurred mostly through interactions at the strategic rather than through sustained and shared operational experience. Japan and South Korea have greatly improved the level and quality of the interactions between their defense establishments over the past thirty years, particularly at senior levels. But institutionalized channels for communication remain insufficient.

Engagements

Face-to-face meetings are an especially necessary ingredient for closer coordination between partners. In 1994, Lee Byung-tae became the first South Korean

defense minister to visit Japan, a major step toward greater high-level engagement between the two countries.²⁵⁷ Since that time, such interactions have expanded to include a number of regular bilateral, trilateral, and multilateral meetings. In particular, the annual Defense Trilateral Talks provide a forum for dialogue between senior U.S., Japanese, and South Korean defense officials. The three countries have also had defense ministerial meetings on the sidelines of the Shangri-La Dialogue annually in most of the past twelve years.²⁵⁸

By establishing familiar channels between high-level officials, these meetings give the partners a degree of consistency and a forum to set priorities for lower-level engagement. Consistency is crucial for monitoring trends and setting shared goals. It is also vital for strengthening existing cooperation by helping policymakers and officials develop institutionalized familiarity with their counterparts and clear lines of communication.

Though the quality of these encounters has greatly improved since the inception of the first of the Defense Trilateral Talks, many of these forms of engagement remain ad hoc or depend on the tone of Japan–South Korea relations at a given time. To some extent, ad hoc engagements are an asset—at both the working and senior levels—as a way for counterparts to make contact and respond to current events in realtime. For instance, when the need arises, the Joint Chiefs of Staff and other high-level defense officials hold video teleconferences, often in response to North Korean missile tests and other provocations, even at times when Japan–South Korea relations have been strained.²⁵⁹ That being said, human interoperability is still undermined when political tensions between Japan and South Korea interfere with the regularity and quality of engagement. When political issues disrupt such interactions, that signals that mutual respect and understanding between the two parties are not sufficiently institutionalized to the extent that they constitute human interoperability.

Exercises and Training

To some extent, senior-level meetings will always be prone to political pressures, as leaders often use them to send a public message on the state of a given relationship for domestic consumption. A critical focus at the senior level should be furthering trilateral education and training, which are less public and less sensitive to changing political winds. In this regard, military exercises are a foundational component of education and training. They enhance human-level interoperability by establishing and familiarizing participants with channels and methods of communication, helping participants navigate language barriers, and reconciling differing doctrines and procedures. In doing so, exercises provide an opportunity to gauge whether human cooperation can successfully facilitate the procedural and technical aspects of interoperability. Though military exercises touch on all three dimensions of interoperability, the technical and procedural dimensions of an exercise are nearly impossible to carry out without the foundation of human interoperability.

To cite one set of examples, since at least 2012, the South Korean, Japanese, and U.S. navies have participated in trilateral exercises to improve interoperability and communication. The scope and scale of these exercises and this training has also expanded over the past few years, particularly since 2015. In that year, the United States and Japan revised their defense guidelines to allow the Self-Defense Forces to support the U.S. response to regional contingencies without a direct attack on Japan. Tokyo, Seoul, and Washington also signed the Trilateral Information Sharing Arrangement in December 2014 to allow the three nations to share classified information, albeit with the United States as a go-between.²⁶⁰ This allowed the three countries to conduct trilateral missile defense exercises in 2016 and 2017, the first of their kind outside a major multinational exercise.²⁶¹ The

exercises focused on facilitating communication between each country's Aegis systems, which can detect, track, and intercept North Korean missiles—a critical need in any potential contingency.

Japan and South Korea also participate in larger-scale multinational exercises with the United States. They have participated alongside one another in all twenty-six iterations of the biennial Rim of the Pacific (RIMPAC) exercises since 1971.²⁶² Meanwhile, the Proliferation Security Initiative (PSI) has also been invaluable in terms of facilitating multinational cooperation to prevent the transfer of weapons of mass destruction. South Korea and Japan have both hosted PSI exercises, including the Eastern Endeavor exercise hosted by the ROK in 2019 and the Pacific Shield iteration hosted by Japan in 2018.²⁶³ Additionally, the two countries cooperate closely in an U.S. Indo-Pacific Command sanctions enforcement coordination cell hosted at the Japanese city of Yokosuka. Under this initiative, South Korea and Japan join the United States and its Five Eyes partners (Australia, Canada, New Zealand, and the United Kingdom) to coordinate efforts from a single headquarters to enforce UN Security Council sanctions and prevent illicit oil and ship-to-ship transfers to North Korea.²⁶⁴ The ability of personnel and equipment to share facilities is a vital ingredient of efficient cooperation and other aspects of interoperability.²⁶⁵

Like other trilateral forms of engagement, exercises have often been inconsistent and subject to the ebbs and flows of political tensions between Seoul and Tokyo. While missile defense has been an important aspect of multilateral PSI exercises, no trilateral missile defense exercises have occurred since 2017. And although major multilateral exercises like RIMPAC are consistent and can reveal areas for improving interoperability, they do not necessarily train participating countries to confront the North Korean threat specifically.

Beyond tensions between Japan and South Korea, other diplomatic considerations have also impeded attempts to enhance trilateral training, particularly the ROK's fears that doing so could disrupt South Korean relations with China or North Korea. *Nikkei Asian Review* reported that, in November 2017, the United States proposed that Japan be involved in a naval exercise with South Korea, but Seoul reportedly objected because it could upset the South Korean public and antagonize Beijing while South Korea was trying to mend ties with China over the THAAD deployment controversy.²⁶⁶

Military exercises inherently have a political dimension, as the United States has underlined in its recent attempts to create diplomatic space with North Korea by downsizing, postponing, and canceling exercises. Unlike trilateral engagement, the bilateral U.S. and ROK military relationship is institutionalized to the extent that the allies have options for adjusting their normal routines. The two countries have the flexibility to compensate by conducting computer-simulated exercises, scaling exercises down, or rescheduling exercises to mitigate reductions in readiness in the near term. But trilateral engagement has not been routinized enough to make such flexibility possible. If a trilateral exercise does not occur, there is often nothing to take its place and trilateral readiness is lost.

FORCE FLOW AND PROCEDURAL INTEROPERABILITY

As important and foundational as the human element of interoperability is, there are other important facets of keeping allied military personnel and national security policymakers in sync, including procedural interoperability. The procedural dimension of interoperability is achieved through “standardization agreements, standardized communication, and agreed upon terminology, tactics, techniques, and procedures that minimize doctrinal differences.”²⁶⁷ These mechanisms prevent militaries from having conflicting

or misunderstood procedures that can slow—or even halt—critical aspects of the mission, such as the transit of troops and equipment or approval of operational plans.

As with other aspects of interoperability, the United States serves as a go-between to facilitate procedures for Japanese support of a contingency on the Korean Peninsula, but procedural coordination directly between Japan and South Korea lacks even basic established command relationships. Japan does have a role in Korean contingencies through multinational mechanisms like the UN Command–Rear (UNC–Rear), but this role is seldom exercised on a trilateral basis. Most procedural interoperability between Japan and South Korea is bifurcated, derived from each country's respective bilateral relationship with the United States.

Between the United States and Japan, the impetus for Japanese support of Korean contingencies and the procedures needed to facilitate such support emerged in the 1990s. At that time, the two countries began to revise the architecture of their alliance to address the new post–Cold War security environment, including the North Korean threat. In 1997, Tokyo and Washington revised the Guidelines for Japan-U.S. Defense Cooperation to reflect a commitment not only to planning for an armed attack against Japan but also to “mutual cooperation planning in situations in areas surrounding Japan.”²⁶⁸ This departure from the earlier 1978 guidelines marked Japan's willingness to support U.S. military activities in response to Korean contingencies, particularly in areas such as rear-area support, intelligence gathering and surveillance, noncombatant evacuation operations, and minesweeping.²⁶⁹

Rear-support functions include command, control, communications, computers, and intelligence (C4I); wartime host nation support; reception, staging, onward movement, and integration (RSOI); and

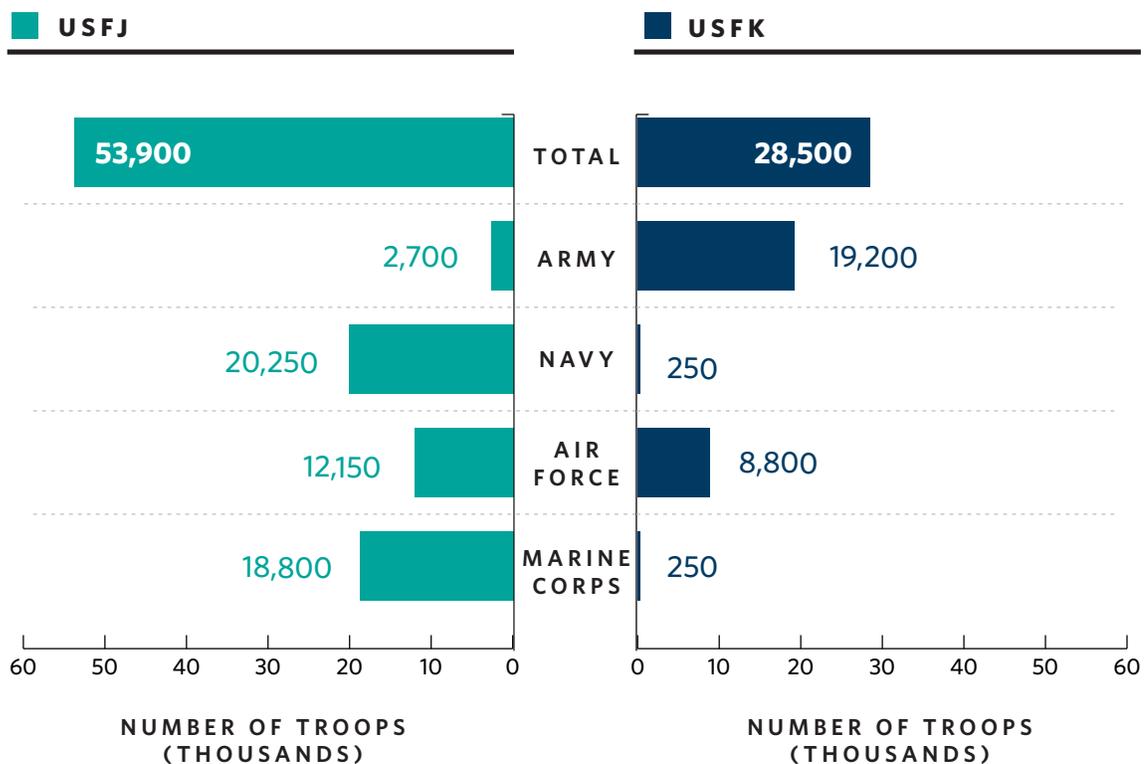
noncombatant evacuations. Japanese bases are critical to the United States' ability to execute all of these functions, but when it comes to the procedural dimension of interoperability RSOI is particularly important. RSOI refers to the processes by which personnel and equipment arriving in a new military theater transition into forces ready and capable of meeting operational requirements."²⁷⁰

In the event of a crisis on the Korean Peninsula, U.S. forces and equipment would transit to the peninsula from the United States (including Guam) and Japan. Coordinating this movement is a major logistical challenge that requires coordination and approval at many levels, including from all service branches, national authorities, and multiple commands. (The

relevant military commands include those of individual allied countries like the U.S. Indo-Pacific Command, United States Forces Japan [USFJ], United States Forces Korea [USFK], the Japan Self-Defense Forces, and the ROK Armed Forces, as well as the binational Combined Forces Command and multinational UNC.) Having familiar and established relationships and communication channels is essential to ensuring that every aspect of an operation happens smoothly and efficiently.

Japan's chief utility for procedural interoperability with respect to the Korean Peninsula is a function of geographic proximity, the U.S. defense posture in the region, and Japan's role in UNC as the host country of UNC-Rear. Any crisis on the peninsula would require

FIGURE 5
USFJ-USFK Defense Posture



SOURCE: IISS, *The Military Balance 2019*

significant augmentation from U.S. forces off the peninsula, the most well-positioned of whom are in Japan.

U.S. forces stationed in South Korea are predominantly ground forces, while U.S. troops in Japan include far more naval and air force personnel. USFK is comprised of 19,500 soldiers and 7,800 airmen on the peninsula. Only about 470 personnel from the U.S. Navy and the U.S. Marine Corps are stationed in South Korea.²⁷¹ The ROK military is also largely a ground force. Whereas USFK lacks naval and air resources, the U.S. military has 20,250 sailors, 18,800 marines, and 12,500 airmen in Japan (see figure 5).²⁷²

Support of U.S. naval forces on the peninsula is the responsibility of the U.S. Seventh Fleet, the navy's largest forward-deployed armada, which is based at Yokosuka. In addition to personnel, Japan is home to a high concentration of U.S. naval and air assets that USFK lacks, including the permanently deployed USS *Ronald Reagan* aircraft carrier, Aegis destroyers, antisubmarine warfare assets, and a significant number of combat-capable aircraft.²⁷³ Outside of the forces already in the theater, the United States will also require its bases in Japan, as well as the logistics, support, and transport capabilities there, to be used for the transiting of U.S. Indo-Pacific Command forces to the peninsula.²⁷⁴

U.S. bases in Japan also would serve as UNC–Rear bases for the U.S. military and a subset of UNC sending states who have an agreement in place with the Japanese government to use such facilities to send personnel to the theater in response to a contingency on the Korean Peninsula. According to this standing agreement, the Agreement Regarding the Status of United Nations Forces in Japan (more commonly referred to as the UN-GOJ SOFA), the United States and eight other sending state signatories are permitted to exercise the use of seven UN/U.S. bases in Japan to “rehearse the procedures necessary to conduct missions during a

contingency and to enable USFJ to enhance their preparedness to support Sending State forces which would either transit through or operate from Japan.”²⁷⁵ Specifically, Camp Zama, Yokota Air Base, Yokosuka Naval Base, Sasebo Naval Base, Kadena Air Base, White Beach Naval Facility, and Futenma Marine Corps Air Station are used for this purpose.

In addition, although the agreement with Tokyo is technically the approval authority for such transit, the Japanese government has made explicitly clear that the United States should consult with it before using Japanese bases for any emergency deployments, making Japanese support and cooperation essential to exercising the function of UNC–Rear bases.

U.S. procedure for facilitating cooperation with its allies in such contingencies is well established, but links between Japan and South Korea are less developed. When it comes to the bilateral U.S.–Japan relationship, these roles are standardized through agreements and common procedures. The aforementioned UN-GOJ SOFA and the U.S.–Japan Defense Guidelines commit Japan to aiding in the U.S. response, directly or indirectly, to a crisis on the Korean Peninsula.

But the only formally established command relationship between the Japan Self-Defense Forces and either USFK or the ROK military is through UNC, a tenuous connection that has seldom been exercised. In a crisis, the shared interests of both countries would likely compel them to cooperate should the need arise, but the procedures and mechanisms for this cooperation are not clearly delineated.²⁷⁶ Japan has a number of valuable roles to play in addition to enabling the movement of U.S. forces, including on missile defense, minesweeping, noncombatant evacuation, search and rescue, humanitarian assistance, intelligence gathering, and other functions. Agreements with the United States can facilitate these functions to an extent, but ad hoc connections that arise are likely to be incoherent and insufficient.

CONNECTIVITY, INFORMATION SHARING, AND TECHNICAL INTEROPERABILITY

While the human and procedural elements of interoperability are undoubtedly vital, there is also a technical dimension, which refers to connectivity and compatibility between allies' hardware, equipment, armaments, and other military systems. Technical interoperability does not necessarily require that partners share the same military equipment; rather, the most important factor is "that the equipment can share common facilities, and is able to interact, connect and communicate, [and] exchange data and services with other equipment."²⁷⁷

South Korea and Japan share several capabilities, such as Aegis missile defense systems, as both countries' defense imports are predominantly from the United States. There are a number of capability-related interoperability issues pertaining to both Japan's and South Korea's respective bilateral alliances with the United States and related to the trilateral relationship, but those issues fall beyond the scope of this publication. The more pressing need in the trilateral relationship at this moment is for agreements that establish information exchanges and a common operational picture, without which all other aspects of technical interoperability are without value or even useless.²⁷⁸

Information Sharing

The need for Japan-Korean information sharing has been acutely apparent amid ongoing tensions over the GSOMIA intelligence-sharing arrangement. It is increasingly clear that South Korea needs greater communication with Japan to adequately monitor and address North Korea's missile threat. In October 2019, Chong Jong-sup, an opposition lawmaker in the Liberty Korea Party, revealed ROK Navy data showing

that Seoul had failed to detect and track at least five North Korean missile launches between May and September 2019.²⁷⁹ South Korea's chief of naval operations commented that South Korean radar failed to detect the missiles because they were out of range.²⁸⁰ Closer coordination with Japan could have prevented these gaps in South Korea's detection capabilities.

Japan and South Korea have the interoperable capability to detect, track, and engage North Korean missiles with their Aegis ballistic missile defense systems. Seoul has long held that it would not integrate trilateral missile defense and reiterated that position in 2017 in response to China's retaliation over the deployment of THAAD. But, at the same time, South Korea and Japan have demonstrated the interoperable potential of their missile defense systems in numerous exercises. Moreover, sharing information on North Korea's programs is in the best interests of Tokyo and Seoul.²⁸¹

Given this need, the near disintegration of GSOMIA in late 2019 is highly concerning. If the GSOMIA mechanism had been dissolved, Japan and South Korea could still swap classified information on North Korea's nuclear and missile programs through the Trilateral Information Sharing Agreement with the United States serving as an intermediary.²⁸² GSOMIA, however, allows the two countries to share intelligence directly, a far more streamlined process that would improve response time and reduce the chances of miscommunication in the event of a crisis. Timeliness and efficient communication is highly crucial, as a North Korean missile can reach Tokyo in ten minutes and takes even less time to reach Seoul.²⁸³

GSOMIAs, for their part, are a very basic form of intelligence-sharing agreement. Memorandums of understanding or GSOMIAs are often the first foundational document in an intelligence-sharing arrangement. These agreements are not legally binding, but they set parameters for and establish channels for

intelligence sharing. The United States has hundreds of such agreements with foreign governments.²⁸⁴ Prior to the signing of the Japan-ROK GSOMIA, Seoul had such agreements with thirty-two countries and NATO.²⁸⁵ South Korea even signed a 2001 GSOMIA with Russia, a country whose security interests are far less aligned with Seoul's.²⁸⁶ Yet while basic in form, this agreement marked a major step in the trilateral relationship, given that no other bilateral intelligence sharing agreement exists.

A Common Operational Picture

The limits of current information sharing and exercises have hampered efforts to determine whether allied hardware and other systems can adequately communicate and have prevented the United States, South Korea, and Japan from establishing a common operational picture to work from in a conflict scenario. The Joint Chiefs of Staff define a common operational picture as “a single identical display of relevant information shared by more than one command that facilitates collaborative planning and assists all echelons to achieve situational awareness. fully informed command and control.”²⁸⁷ By establishing a common operational picture, the United States, Japan, and South Korea can assure they are making decisions based on the same information.

The management of C4I systems from bases in Japan is critically important to the United States' ability to attain and maintain a common operational picture, particularly as command functions are now predominately concentrated in a single location at Camp Humphreys, making them more vulnerable. But these functions are not well coordinated at the trilateral level. The GSOMIA and other intelligence-sharing arrangements can help accomplish this. With proper permissions, all three countries would be able to share information and establish a common operational picture by way of common systems like Link 16, a tactical data information exchange system used by the

United States and NATO allies, which all three countries already operate. Japan is particularly important to the United States' ability to attain a common operational picture as Japanese bases are tasked with C4I as part of their rear-area support functions.

However, it is unclear whether existing systems would be able to establish a common operational picture quickly and effectively at the tactical level in the event of a conflict without prior coordination. Particularly, Japanese defensive maritime and air support would be active in the East Sea (Sea of Japan), where allied U.S., Japanese, and South Korean vessels and submarines would be operating in the same waters as rival North Korean, Russian, and Chinese vessels.²⁸⁸ The high concentration of maritime assets increases the risk of incidence, making it highly important that the United States, South Korea, and Japan are working from a common operational picture to accurately track threats and communicate in the tight confines of that operating area. Without prior consultation and planning, the quality and level of detail contained in any common operational picture at the tactical level would be compromised. Beyond the increased risk of a military incidence, the absence of a common operational picture makes accurate tracking of North Korean missiles, vessels, and other threats extremely difficult. But to even establish this base level of coordination, the two countries require mutual understanding of the parameters of their information sharing relationship. Both sides need to have a common understanding of what information they are permitted to share and when they can do so. Otherwise, the coherence and efficiency required of interoperability will be undermined.

CONCLUSION

While no short-term diplomatic or political fixes will fully bridge the lingering animosities and differences that hamper deeper Japanese-ROK cooperation, the

two countries' security concerns continue to coincide to a considerable degree. Beyond that, the fact remains that if they do not make adequate preparations to cooperate seamlessly in peacetime, fragile, ad hoc arrangements will almost certainly fail in a crisis.

South Korea and Japan are far from being able to commit to long-term participation in regular trilateral exercises. That said, both Tokyo and Seoul have managed to incrementally but substantially improve their security cooperation since diplomatic ties normalized, despite the fact that their historical issues remain unresolved. U.S. leadership should continue to encourage both countries to build on existing education and training opportunities to establish more routinized, large-scale trilateral engagement insulated from historical issues.

Small, near-term steps can pave the way for further cooperation. All three countries should expand the scale and scope of existing tabletop exercises, particularly with scenarios to specifically address the North Korean threat. Various tabletop exercises have found that all three countries were readily willing to establish coordination mechanisms such as a 2+2+2 forum at the foreign and defense minister-level during crises.²⁸⁹ Establishing a coordination forum of this sort in peacetime would contribute greatly toward a dedicated mechanism for coordinating and prioritizing how to develop a trilateral strategic response.

Formalizing and exercising direct command relationships in advance will be essential to an effective response. Particularly, the three countries should invest

more time and effort in exercising the role of Japan in UNC-Rear operations and build on this role to formalize command relationships between the ROK military and the Japanese Self-Defense Forces. To facilitate greater technical interoperability, GSOMIA should not only be maintained but used often. Since the agreement was signed, it has been infrequently used, including after North Korean missile tests that threaten both countries.²⁹⁰ The two countries must go further to actually exercise existing procedures to ensure their efforts to enhance security cooperation can coherently, effectively, and efficiently facilitate interoperability.

The level of cooperation the two countries have today has taken decades to build and is still lacking. The shaky foundation of cooperation in the bilateral relationship means that if engagements or agreements are terminated, the two countries would be left with few institutionalized processes to fall back on, and progress made would be lost and difficult to repair. The trilateral alliance would then be left with little recourse other than relying on ad hoc cooperation mechanisms in conflict, which lack the coherence and efficiency to facilitate interoperability. The vulnerabilities this would create in the relationship could lead to miscalculation, wasted resources, and a greater loss of life. For that reason, it is imperative that the three nations work to make security cooperation independent from historical issues, even as these issues remain unresolved.

CONCLUSION

CHUNG MIN LEE

The most important military developments in North Korea since Supreme Leader Kim Jong Un assumed power in December 2011 have been his decisions to fast-track the country's nuclear weapons program, nascent submarine-launched ballistic missile capability, and asymmetrical assets such as its super-large multiple rocket launchers (MRLs). While Kim has not reduced the conventional forces of the Korean People's Army, the qualitative gap between the two countries' conventional forces—particularly those the two Koreas have arrayed across the thirty-eighth parallel—has begun to shift in South Korea's favor. In response, because Kim cannot afford to revamp his conventional forces while continuing to augment his weapons of mass destruction, he has opted to emphasize nuclear weapons, ballistic missiles, long-range artillery, and increasingly robust MRLs to offset the Republic of Korea's (ROK) firm commitment to its own military modernization.

Assessing prospects for conflict and military balances necessitates delving into key political factors. The Korean Peninsula is hardly an exception. Political forces are particularly dominant on the peninsula

today because of the critical impact of U.S. President Donald Trump's overtures toward North Korea and his branding of South Korea as a defense free rider. No U.S. president has contested the fundamental rationale for maintaining the U.S.-ROK alliance or pursued such personal diplomatic solutions with North Korea to the degree that Trump has. While Trump was the first sitting U.S. president to meet with a North Korean leader, his decision to cancel major U.S.-ROK military exercises, his constant pressure on South Korea to pay much more for shared defense costs, and his willingness to ignore Kim's provocations (including multiple short-range missile tests) have resulted in confusion, mixed signals, and, worst of all, uncertainty for U.S. and South Korean military planners.

Meanwhile, South Korean President Moon Jae-in's de facto one-sided engagement with Kim has also contributed to the politicization of South Korean security given the immense importance he has attached to fostering inter-Korean détente. Moon continues to believe that Kim is a fundamentally different leader compared to his father and that he will keep his promise of denuclearization. The Moon administration remains

optimistic about the resurgence of inter-Korean talks and continues to press for U.S.–North Korea dialogue. Seoul currently believes that implementing a permanent peace regime on the Korean Peninsula is eminently possible provided that the United States and South Korea offer North Korea key incentives. Only time will tell if such confidence bears fruit. But Kim is highly unlikely to give up his nuclear weapons since they play a crucial role in propping up his regime. A nuclearized North Korea also wields significant political weight and even though China continues to call for the denuclearization of the Korean Peninsula (and not explicitly North Korea), there is little Beijing can do to roll back North Korea's nuclear program.

It would not be unprecedented for two foes with decades of animosity and rivalry to turn over a new leaf and introduce landmark political and military changes. Former U.S. presidents Ronald Reagan's and George H. W. Bush's concerted efforts with Soviet president Mikhail Gorbachev to end the Cold War are a primary example. Yet Reagan and Bush were very different presidents from Trump. Bush had a wealth of experience on foreign policy and national security. And while Reagan came to office with virtually no international background, he trusted his national security team and the intelligence community. Indeed, no U.S. president before Trump publicly denigrated his intelligence community or second-guessed its utility as blatantly as the current U.S. president has. One wonders how North Korea, or for that matter other adversaries such as China and Russia, feel when the occupant of the Oval Office ignores his intelligence community and relies more on cable news networks to understand current events and critical items on the country's national security agenda.

Kim's military strategy will likely remain constant for the next several years. While it is not impossible to imagine a last-minute nuclear deal between Trump and Kim before November 2020, the chances remain slim. The U.S. presidential election cycle is well under way,

and domestic politics will consume much of Trump's bandwidth. If Kim cannot secure a nuclear deal during Trump's first term, that means he would have to either wait until Trump is re-elected in November 2020 or deal with a new U.S. president starting in January 2021. Either way, Kim may have already concluded that the negotiating window with the United States and his initial hopes of a breakthrough with Trump have faded.

If Pyongyang's core military strategy and policies remain unchanged, how will that continue to affect Seoul's ability to objectively assess and respond to the wide range of threats North Korea poses? Most pervasive is the increasingly growing gap between the Moon administration's rosy expectations of the state of inter-Korean relations and unchanging strategic realities. While Moon continues to place great faith in Kim's goodwill, the North Korean leader and the state organs he controls have not reciprocated.

The Moon government's overarching North Korea policy is premised on providing Kim with incentives that will ultimately convince him to keep his promise of denuclearization. But hope is not a strategy, much less a viable national security policy. At a critical juncture when North Korea's stockpiles of nuclear warheads and other weapons of mass destruction are growing, national leaders in Seoul and Washington are pursuing policies that have not constrained or deterred Kim's policies.

Consequently, it falls on South Korean and U.S. professional diplomats and bureaucrats to ensure that, despite mixed and oftentimes confusing and contradictory signals, combat readiness is maintained, strategic and tactical intelligence remains unencumbered by political considerations, and military interoperability is sustained. Absent concerted efforts to accomplish these objectives, the ROK-U.S. alliance is likely to be eroded by political forces. Both the National Assembly in South Korea and the U.S.

Congress should play much more assertive roles when it comes to ensuring that ROK forces and their U.S. counterparts can readily meet deterrence and defense missions regardless of conflicting political directives.

Whether Moon and Trump will seek to recalibrate their approaches toward North Korea remains uncertain and unclear. But there has been no indication that Kim is on the cusp of changing his basic strategy toward

South Korea or that he is seriously contemplating negotiating away nuclear weapons in exchange for normalized ties with the United States and key economic benefits. South Korean security must continue to be based on a strong alliance with the United States even though maintaining an even keel under the Trump administration continues to be an unprecedented challenge.

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