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North Korea’s nuclear, biological, and chemical weapons represent a grave threat to the United States and its allies. To convince North Korean leader Kim Jong Un to relinquish these weapons, the Trump administration initiated a “maximum pressure” campaign. This effort imposed significant economic costs on North Korea and incentivized Kim to come to the negotiating table. So far, however, this pressure has been insufficient to persuade him to denuclearize.

It is certainly possible that no level of pressure will persuade Kim to change course. But there is a need to test that proposition. The United States and its partners have not yet implemented a more aggressive and comprehensive maximum pressure campaign that targets Kim’s cost-benefit analysis. Such a campaign likely represents the only way to denuclearize North Korea without resorting to war.\footnote{Throughout this monograph, the authors refer to North Korea’s nuclear program or the need to “denuclearize” North Korea. In most cases, this is short-hand referring to all of North Korea’s weapons of mass destruction — including its chemical and biological programs.}

This monograph proposes that the United States, working with its allies and partners, implement a “Plan B” to drive Kim to relinquish his nuclear, biological, and chemical weapons. Such a campaign must integrate all tools of national power, including
After setting the scene in the introductory chapter, this study includes a dedicated chapter on each of the five lines of effort that together should constitute a “maximum pressure 2.0” campaign. Each chapter is written by experts at the Foundation for Defense of Democracies and provides background, analysis, and specific recommendations.

In the chapter titled “Aggressive Diplomacy,” Mathew Ha, David Maxwell, and Bradley Bowman warn against falling prey again to the North Korean regime’s longstanding practice of diplomatic deception. The authors note that Pyongyang routinely makes provocations both to advance its nuclear and missile capabilities and to win valuable concessions through negotiations. They also note that Pyongyang has violated every agreement it has reached over the last 20 years. The authors caution against additional presidential-level summits. Instead, they encourage the United States to redouble its efforts to jumpstart substantive working-level dialogues that establish specific timetables for the inspection, dismantlement, and verification of each nuclear and missile facility. In order to build necessary unity with South Korea and Japan while shaming China and Russia for obstructionism, the authors emphasize the importance of a comprehensive public diplomacy campaign that provides America leverage in its standoff with Pyongyang.

In the chapter titled “Military Deterrence and Readiness,” David Maxwell, Bradley Bowman, and Mathew Ha emphasize the importance of South Korea-U.S. military readiness in deterring North Korean aggression, protecting U.S. interests, empowering effective diplomacy, and supporting a maximum pressure campaign. The authors note that the North Korean military threat has not decreased. They also note the assessment of the U.S. Department of Defense’s 2019 Missile Defense Review that North Korea has “nearly the time when” it could “threaten the U.S. homeland with missile attack.” The authors propose several specific steps to strengthen allied military readiness, protect U.S. national security interests, and support a maximum pressure 2.0 campaign. In the end, they note, American power is what deters North Korea.

In the chapter titled “The Cyber Element,” Mathew Ha and Annie Fixler note that Pyongyang continues to employ an aggressive cyber campaign to generate revenue and conduct intelligence, surveillance, and reconnaissance. The authors call for a U.S.-led cyber-enabled information and offensive cyber campaign targeting North Korea. They propose specific cyber-related actions against China, Russia, and other countries to persuade them to dismantle North Korea’s cyber network. To help carry out these efforts, the authors call for the creation of a joint South Korea-U.S. cyber task force.

In the chapter titled “U.S. Sanctions Against North Korea,” David Asher and Eric Lorber detail the existing sanctions regime targeting North Korea. The authors describe Pyongyang’s efforts, working with Chinese entities and others, to circumvent these sanctions. The authors propose specific measures to increase the economic pressure on Pyongyang. Examples include revitalizing the North Korea Illicit Activities Initiative, designating the leadership of major Chinese banks that engage in prohibited transactions with North Korea, hardening small banks against North Korean sanctions evasion, and targeting joint ventures. In short, there is more room to squeeze the North Korean regime.

In the chapter titled “Information and Influence Activities,” David Maxwell and Mathew Ha argue that aggressive information and influence activities represent an essential component of a successful maximum pressure 2.0 campaign. The authors believe that external pressure alone is unlikely to persuade Kim to denuclearize. They recommend a number of specific information and influence activities targeting North Korea’s regime elite, second-tier leadership, and general population. These activities would seek to foster Kim’s perception that the security of his rule will continue to deteriorate until he decides to relinquish his nuclear weapons. Even if information and influence activities do not yield the desired outcome, these tools can prove useful in the event of renewed military conflict.
Introduction

Former President Barack Obama advised then President-elect Donald Trump that North Korea would be his top national security challenge. The outgoing president’s warning was prescient. During President Trump’s first year in office, the Democratic People’s Republic of Korea (DPRK) tested an intercontinental ballistic missile (ICBM) and a thermonuclear weapon. It was also a year of saber-rattling rhetoric between North Korean leader Kim Jong Un and Trump. This escalation follows a dangerous pattern that has prevailed for 25 years.3

On June 30, 2017, at a Republic of Korea (ROK)-U.S. summit, Trump and his South Korean counterpart, Moon Jae-in, agreed to pursue complete denuclearization of North Korea and a maximum

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pressure campaign to bring Pyongyang to the negotiating table. They also agreed that South Korea would take the lead in establishing conditions for peaceful intra-Korean unification. In the year that followed, the allies implemented a targeted pressure campaign – to which this monograph will refer as “maximum pressure 1.0” – that included strong UN and U.S. sanctions on key North Korean entities and certain Chinese banks and facilitators. This campaign also included aggressive measures against the North's global illicit activities, an international diplomatic effort, and increased emphasis on the military deterrence capabilities of the ROK-U.S. alliance. This pressure campaign cannot truly be described as “maximum,” however, since it lacked a holistic approach incorporating diplomatic and military pressure, cyber actions, and information and influence activities.

Conditions appeared to change in 2018, beginning with a seemingly conciliatory New Year's Day speech by Kim and an invitation from Moon for the North to participate in the upcoming Winter Olympics in South Korea. South Korean, North Korean, and American officials soon initiated discussions that culminated in three summits between Moon and Kim and a summit in Singapore between Trump and Kim. These engagements led to the so-called Panmunjom and Pyongyang Declarations, which included tension-reduction and confidence-building measures aimed at reducing the potential for military confrontation along the Demilitarized Zone (DMZ) and in the East and West Seas. Seoul and Pyongyang codified these measures in a Comprehensive Military Agreement (CMA) in September 2018.

U.S.-North Korean relations seemed to remain on a positive path during the beginning of 2019. A North Korean delegation visited the White House and scheduled a second Trump-Kim summit, which was eventually held in Hanoi in late February. However, Kim would not allow his negotiating team to discuss denuclearization, limiting talks to ancillary issues and summit preparations. At the summit, Kim demanded the removal of all sanctions imposed since March 2016, in return for closing North Korea's Yongbyon nuclear facility – a demand unacceptable to Trump, who walked out of the negotiations.

Kim’s failure to achieve substantial sanctions relief knocked him off balance. He almost certainly feels pressure from regime elites and the military to elicit additional concessions from the Trump administration. This perhaps explains a subsequent series of actions by Kim designed to enhance his legitimacy at home and coerce the United States into negotiations that would yield sanctions relief.

After Hanoi, the North began rehabilitating its Sohae missile launch facility, which Kim had promised at Singapore to dismantle. The DPRK military conducted exercises to demonstrate readiness and test-fired a new...
anti-tank guided missile system.\textsuperscript{10} Throughout the summer of 2019, the North tested a number of short-range ballistic missiles and multiple rocket launchers.\textsuperscript{11} There has been unusual training activity at the Yongbyon nuclear facility\textsuperscript{12} as well as reports of internal purges of North Korean officials associated with the nuclear negotiations.\textsuperscript{13} Finally, in an apparent attempt to shift blame for the Hanoi failure and separate Trump from his advisers, Pyongyang has spewed hostile rhetoric at the Trump administration – particularly Secretary of State Mike Pompeo and then-National Security Adviser John Bolton – while refraining from verbal attacks on the president himself.\textsuperscript{14}

North-South military and diplomatic activities, meanwhile, have reached a standstill.\textsuperscript{15} Despite the easing of security procedures in the Joint Security Area and the destruction of a dozen guard posts, North Korea regularly skips scheduled liaison meetings at Kaesong.\textsuperscript{16} While Seoul has high hopes for the CMA, Pyongyang has demonstrated a lack of sincerity in implementing even basic confidence-building measures.

While the United States focuses its attention mostly on North Korea’s nuclear and missile capabilities, Pyongyang possesses other significant capabilities that threaten U.S. and allied interests. The Kim regime retains a formidable arsenal of chemical and biological weapons, and its conventional military threat to the South remains substantial.\textsuperscript{17} Pyongyang has also developed a sophisticated cyber capability to hack banks, steal funds, conduct espionage, and execute influence operations in South Korea.\textsuperscript{18} In addition, North Korea routinely conducts illicit fundraising activities.\textsuperscript{19}

\begin{itemize}
  \item \textsuperscript{15} “South Korea begins excavation of war remains along DMZ without previously agreed help from North,” \textit{The Japan Times} (Japan), April 1, 2019. (https://www.japantimes.co.jp/news/2019/04/01/asia-pacific/south-korea-begins-exavation-war-remains-along-dmz-without-previously-agreed-help-north/#.XTZm5pNKiRs)
\end{itemize}
Finally, the Kim regime is one of the worst human rights abusers in the world. The 2014 UN Commission of Inquiry detailed the regime’s crimes against humanity and recommended Kim Jong Un for referral to the International Criminal Court. This was reaffirmed in a 17-page UN General Assembly report in August 2019.

That same month, a UN Panel of Experts also published a report on DPRK sanctions evasion activities. The 142-page report outlined Pyongyang’s global illicit activities, its extensive use of cyber operations to raise funds, and the methods it employs to evade UN sanctions. The report also provides an extensive list of entities contributing to these efforts.

In an interview with 38 North, the American member of the UN Panel of Experts highlighted Pyongyang’s cyber operations and its sanctions evasion activities:

In one notable example of the growing sophistication of the attacks, DPRK cyber actors gained access to the infrastructure managing entire ATM networks of a country in order to force 10,000 cash distributions to individuals across more than 20 countries in five hours...

The UN Panel of Experts report makes clear that maximum pressure 1.0 has not achieved its goals. The campaign has not achieved the denuclearization of North Korea. It has also failed to prevent Kim from obtaining the resources necessary for continued development of nuclear weapons and ballistic missiles, for support to his conventional military, and most importantly, for regime survival.

“Any effective approach toward North Korea should be based on two new assumptions. The first recognizes that Kim will give up his nuclear program only when he concludes that the cost to him and his regime is too great – that is, when he believes possession of nuclear weapons threatens his survival.”

This monograph offers a “Plan B” to drive Kim to relinquish his nuclear, biological, and chemical weapons. It is “maximum pressure 2.0.” We delineate five lines of effort: diplomacy, military, cyber, sanctions, and information and influence activities. It builds on and expands the work of the United Nations and the United States from 2017 to 2018.

Any effective approach toward North Korea should be based on two new assumptions. The first recognizes that Kim will give up his nuclear program only when he concludes that the cost to him and his regime is too great – that is, when he believes possession of nuclear weapons threatens his survival. But external pressure alone, although important, will almost certainly fail to create the right cost-benefit ratio. It is the threat from the North Korean people that is most likely to

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25. Although an end to the Kim family regime would be ideal, the authors do not necessarily endorse “regime change” by external military action. Korea is unique as a divided country, and unification is the only outcome that will solve the North’s seven decades-old threat to peace and stability. That unification could occur via diplomatic negotiations, war, external military action, or internal regime replacement.
cause Kim to give up his nuclear weapons. As former CIA analyst Jung Pak of the Brookings Institution has argued, “Kim fears his people more than he fears the United States. The people are his most proximate threat to the regime.” The ROK-U.S. alliance has yet to adopt a strategy with this in mind.

Kim, the DPRK military, and the North Korean elite must be made to recognize that keeping nuclear weapons poses an internal threat to their survival. External threats and actions alone will not suffice, though they are important. In addition, if these actors choose not to relinquish their nuclear, chemical, and biological weapons, a maximum pressure 2.0 campaign should threaten to weaken the regime.

The second new assumption is that Kim will continue to employ a strategy based on subversion of South Korea; coercion and extortion of the international community to gain political and economic concessions; and ultimately the use of force to unify the peninsula under the domination of the North, thereby ensuring the survival of the Kim family regime. A key element of his strategy is to drive a wedge between South Korea and the United States. Kim’s strategy can best be described as a “long con” whereby he extracts as much as possible for the regime while conceding little to nothing and preparing to achieve unification under his control. Kim is pursuing a strategy established long ago by his grandfather and improved by his father.

This assumption requires the United States and South Korea to prepare for the possibility that Kim might refuse to relinquish his weapons of mass destruction (WMD). This assumption is buttressed by a U.S. intelligence estimate maintaining that he is unlikely to denuclearize. This cannot be discounted and must be factored into a new strategy.

Plan B Overview

The proposed Plan B strategy consists of five elements: diplomatic, military, cyber, economic and financial sanctions, and information and influence activities.

The diplomatic component focuses on mobilizing the international community to adopt the maximum pressure 2.0 campaign and enforce domestic and international law to stop the regime’s illicit activities. Employing the U.S.-ROK strategy working group established in November 2018 will help the alliance prevent South Korean backsliding on the pressure campaign. While South Korea describes many of its
projects in conjunction with the North as economic engagement activities, they are merely conduits for funds that flow directly to the Kim regime.

The military element rests on the military readiness of the ROK-U.S. alliance. Any reduction in the alliance’s combat readiness will reduce Kim’s incentive to negotiate and invite North Korean aggression. Accordingly, the United States and South Korea must engage in robust combined training and other military activities. These should include aggressive maritime intercept operations to combat ship-to-ship transfers that facilitate North Korean sanctions evasion and proliferation. Military training and exercises must be conducted without regard to Pyongyang’s propaganda. No matter how benign, ROK-U.S. military activities will always receive Northern criticism. Moreover, the suspension or cancellation of military activities has never elicited a good faith response from Pyongyang.

A more aggressive U.S. cyber campaign is necessary to combat the damage and illicit revenue generated by the North’s cyber activities. Cyber provides a critical asymmetric capability for the Kim regime. Pyongyang is pursuing new cyber techniques to support its efforts to steal hard and crypto currency and conduct espionage and influence operations. The United States and the international community must counter these threats.

The UN and U.S. sanctions regimes must be expanded and fully enforced, including by targeting non-North Korean entities, banks, and individuals that enable Pyongyang’s sanctions evasion activities. This must include enforcement of UN sanctions on North Korean overseas laborers. Likewise, the United States must intensify its scrutiny of North Korea’s shipping sector through monitoring and surveillance efforts in areas known for illicit ship-to-ship transfers.\(^{30}\) Sanctions must not be used as a bargaining chip. North Korea must comply with all UN and U.S. sanctions – by denuclearizing, terminating its missile programs, ceasing its illicit activities, and ending its human rights abuses – before they are lifted. Sanctions and enforcement must be incorporated into the diplomatic approach and coordinated with information and influence activities.

Robust information and influence activities must also be part of maximum pressure 2.0. The campaign must separate the Kim family regime from the second-tier leadership and general population. Achieving this goal could generate an internal threat that prompts Kim to give up his nuclear weapons. Providing the North Korean people with more outside information, including information related to the regime’s horrific human rights record, would undermine the legitimacy of the Kim regime.

The following five chapters provide a plan policymakers and strategists could implement to protect and advance U.S. interests on the Korean Peninsula. Following his failure at Hanoi, Kim gave an ultimatum to the United States, stating that by the end of 2019, Washington must “adopt a new posture” toward the North if denuclearization negotiations are to continue.\(^{31}\) It is therefore necessary to prepare for what may come next in 2020, while leaving open the possibility that Kim might adopt a less confrontational approach.

Maximum pressure 2.0 rests on a foundation of sustained pressure and military strength. This is necessary even as the United States continues to pursue working level negotiations that give Kim the opportunity to denuclearize. Should he not make the right strategic decision, the United States and its South Korean allies would then have in place the strategy and forces necessary to deter or defeat the North.

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\(^{31}\) David Maxwell, “Kim has provided an expiration date for the bromance,” *The Hill*, April 23, 2019. (https://thehill.com/opinion/international/440147-kim-has-provided-an-expiration-date-for-the-bromance)
Background

The North Korean regime has mastered the art of diplomatic deception. It engages in provocations both to advance its nuclear and missile capabilities and to achieve valuable concessions. The regime calibrates its provocations to ensure they fall below the threshold that would elicit an armed response. Washington and its allies typically respond by offering diplomatic negotiations to address Pyongyang’s activities while avoiding military conflict.\(^\text{32}\) Once negotiations begin, North Korea avoids specific commitments or offers broad, ill-defined pledges they do not intend to honor.

Over the last 20 years, Pyongyang has violated every agreement it has reached with the international community regarding its nuclear weapons program. As a result, North Korea now possesses approximately 20 to 60 nuclear weapons and a formidable inventory of ballistic missiles capable of targeting South Korea,

Japan, Guam, and the United States. General Terrence O’Shaughnessy, commander of U.S. Northern Command, testified in April 2019 that North Korea has flight-tested “multiple ICBMs capable of ranging the continental United States.”

A survey of the diplomatic history between Pyongyang and the United States over the last few decades illustrates this strategy of deceit. After the United States withdrew all tactical nuclear weapons from South Korea as a good-will gesture in 1991, Pyongyang signed the 1992 Joint Declaration of the Denuclearization of the Korean Peninsula. In the declaration, North Korea made an open-ended commitment not to “test, manufacture, produce, receive, possess, store, deploy or use nuclear weapons” and not to “possess nuclear reprocessing and uranium enrichment facilities.” Despite this pledge, North Korea produced enough plutonium to build two nuclear weapons.

In the 1994 U.S.-DPRK Agreed Framework, the North agreed to implement the 1992 Joint Declaration and pursue nuclear energy for peaceful purposes. The new agreement required North Korea to freeze and eventually dismantle its graphite-moderated reactors. In exchange, an international consortium would provide two light water nuclear reactors, and the United States would provide annual shipments of 500,000 tons of heavy fuel oil. However, North Korea again violated the agreement by pursuing a uranium enrichment program.

In 2005, the United States and North Korea held the so-called Six Party Talks with South Korea, Japan, China, and Russia. As a result of these talks, the North Koreans signed a joint statement in which they agreed to “abandoning all nuclear weapons and existing nuclear programs and returning, at an early date, to the treaty on the nonproliferation of nuclear weapons and to IAEA safeguards.” Once again, North Korea cheated, detonating its first nuclear device in 2006.

In February 2007, North Korea agreed to shut down and dismantle its Yongbyon nuclear facility within 60 days. The North Korean government destroyed the cooling tower at this facility in June 2008. In response, the United States returned all the funds it had previously seized from Banco Delta Asia (BDA)

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43. In 2005, the U.S. Treasury Department designated BDA, a bank based in Macau, for laundering millions of dollars for Pyongyang. Macau’s banking authorities froze approximately $25 million in North Korean assets, sparking a backlash from Pyongyang.
and removed North Korea from the State Sponsors of Terrorism list. Yet by 2008, North Korea restarted its nuclear facilities, expelled inspectors, and pocketed funds from U.S. concessions, refusing to agree to a verification protocol proposed by the United States. In 2010, North Korea revealed a new secret uranium enrichment facility.\textsuperscript{44}

By 2009, the Six Party process was defunct. North Korea engaged in a series of provocations, including a nuclear test in May 2009, the continuation of its uranium enrichment program, and intra-Korean military skirmishes in 2010.\textsuperscript{45}

In 2017, the Trump administration implemented a maximum pressure campaign\textsuperscript{46} that integrated diplomatic and economic tools of national power.\textsuperscript{47} In 2018, in stark contrast with his biting rhetoric the previous year, Kim suggested that North Korea might want to participate in the Pyeongchang Olympics. This overture led to the first intra-Korean talks since 2012,\textsuperscript{48} culminating in an intra-Korean summit held in April and the Trump administration’s agreement to hold a bilateral summit.

Kim and Trump convened historic bilateral summits in Singapore and Hanoi on June 12, 2018,\textsuperscript{49} and February 27, 2019,\textsuperscript{50} respectively.\textsuperscript{51} At Singapore, Kim agreed to work toward the “complete denuclearization of the Korean peninsula” and to destroy a ballistic missile engine test site.\textsuperscript{52} Yet at the subsequent Hanoi summit, he refused to agree to a roadmap toward a final and fully verified denuclearization, leading Trump to walk away from the negotiations.\textsuperscript{53}

Since Hanoi, Kim has increased his hostile rhetoric in an attempt to coerce the United States into lifting sanctions as a concession to restart talks. To demonstrate its discontent, Pyongyang conducted 12 missile tests: two in May of 2019 and 10 more between August and October of 2019.\textsuperscript{54} Trump downplayed the severity

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\textsuperscript{47} The Trump administration’s so-called maximum pressure campaign likely played a role in convincing Kim to return to the negotiating table for the first time since 2012. In the interim, however, North Korea achieved several milestones in advancing its nuclear and ballistic missile programs.


\textsuperscript{53} Mathew Ha, “Kim Jong Un’s recent speech should remind the U.S. not to give up pressure,” Foundation for Defense of Democracies, April 17, 2019. (https://www.fdd.org/analysis/2019/04/17/kim-jong-uns-recent-speech-should-remind-the-u-s-not-to-give-up-pressure)

of these provocations, arguing that they were neither nuclear nor ICBM tests.\footnote{Karen Smith, “North Korea says it test-fired a ‘super large multiple rocket launcher’ on Tuesday,” CNN, September 10, 2019. (https://www.cnn.com/2019/09/10/asia/north-korea-projectiles-launch/index.html)}

But it is not that simple. So long as the Kim regime seeks to maintain or advance its nuclear weapon and ballistic missile programs, North Korea must conduct periodic tests. These tests help the regime advance its respective programs, and they also serve as important diplomatic signaling tools with which to extract concessions.


In June 2019, after a summit with Moon, Trump met Kim at the DMZ. After a brief hand-shaking ceremony, the two leaders shared a private discussion in the Inter-Korean House of Freedom.\footnote{Michael Crowley and David Sanger, “In New Talks, U.S. May Settle for a Nuclear Freeze by North Korea,” The New York Times, June 30, 2019. (https://www.nytimes.com/2019/06/30/world/asia/trump-kim-north-korea-negotiations.html)} This meeting fueled expectations of a resurgence in Trump-Kim summity. Some journalists have even speculated that the United States was seeking to fast-track negotiations by softening its negotiating position to require only a nuclear freeze.\footnote{Anthony Ruggiero, “Maximum Pressure 2.0: How to Improve Sanctions on North Korea,” Foundation for Defense of Democracies, June 8, 2018. (https://www.fdd.org/analysis/2018/08/03/treasury-designates-violators-of-north-korea-sanctions)} However, the U.S. government has denied this.

Assessment


However, maximum pressure 1.0 has failed to achieve tangible progress toward the final and fully verifiable dismantlement of North Korea’s nuclear, biological, and chemical weapons programs. Not surprisingly, the absence of a substantive working-level dialogue has played a negative role in the failure of the summits in Singapore and Hanoi. Limiting substantive discussions on denuclearization to the leaders plays directly into North Korea’s hands. It is likely that Kim never intended to denuclearize. The Trump administration should have attempted to test Kim’s intentions at the working level before giving the North Korean despot the diplomatic benefit of a summit with the U.S. president.

Trump’s unpredictability, as well as his personal ambition to reach a grand bargain, may well lead him to make unnecessary – and even dangerous – concessions. Trump’s indefinite suspension of select ROK-U.S. military exercises during the Singapore summit is just one troubling example.
A maximum pressure 2.0 campaign may increase risk and tensions in the short and medium term, but it represents the best hope of denuclearization without war. The success of this campaign will depend on the administration’s ability to establish a shared consensus among key allies and partners on resolving the North Korea threat.

History is replete with examples of the South undermining U.S. strategy. Former South Korean President Kim Dae-jung, for example, went as far as illegally paying $100 million to North Korea to hold the intra-Korean summit in 2000. In 2002, it became clear that Seoul’s inducement efforts failed when the world learned North Korea was covertly enriching uranium. Similarly, Washington’s decision to return North Korea’s frozen BDA assets in 2005 critically undermined U.S. diplomatic leverage over Pyongyang. The BDA freeze had deprived Pyongyang of funds and led other financial institutions to cut ties with North Korea, fearing penalization by the United States. Unfreezing these funds forfeited these benefits. In return, Pyongyang conceded nothing.

Maximum pressure 2.0 will succeed only if the United States and its allies, namely South Korea and Japan, are aligned. Unfortunately, throughout 2019, Seoul and Tokyo have engaged in an ugly dispute that has undermined their security cooperation. Despite initially impacting only their bilateral trade relations, this conflict culminated in Seoul’s decision in August 2019 not to renew its bilateral military information-sharing agreement with Japan. This decision, if upheld, would not only damage South Korea’s military-to-military cooperation with both Japan and the United States, but also would undercut South Korea’s own national security.

North Korea, China, and Russia undoubtedly relish this friction, as they seek to drive a wedge between the United States, South Korea,
and Japan.\textsuperscript{67} Washington should seek to address these divisions and encourage unity.

Japan's priority is the denuclearization of North Korea. But Tokyo also believes that any comprehensive deal must address Pyongyang's robust missile inventory — including missiles that can target Japan. Tokyo also seeks the return of Japanese citizens abducted by North Korean agents as far back as the 1970s.\textsuperscript{68}

There should be no further summits at the presidential level until senior negotiators have agreed to major elements of an explicit and detailed roadmap with milestones for the dismantlement process, and until persistent North Korean cyberattacks against the United States and South Korea have ceased.\textsuperscript{69}

Recommendations

The United States led an impressive diplomatic effort to implement maximum pressure 1.0. While the campaign likely played a role in bringing Kim to the negotiating table, the negotiations have failed to achieve their objective. Consequently, Washington should lead a new maximum pressure campaign targeting North Korea. A key element of this campaign should be diplomatic and should include the following elements:

- Avoid premature presidential summits: Until Kim is ready to move toward denuclearization, additional presidential-level summits would almost certainly be futile and potentially even counterproductive. In fact, there should be no further summits at the presidential level until senior negotiators have agreed to major elements of an explicit and detailed roadmap with milestones for the dismantlement process, and until persistent North Korean cyberattacks against the United States and South Korea have ceased.

- Establish a substantive working-level dialogue between the United States and North Korea: The U.S. special representative should continue to insist on the establishment of a substantive working-level negotiating process. Specifically, the two sides should prioritize reaching a consensus regarding the definition of “verifiable dismantlement” of North Korea’s nuclear, biological, and chemical weapons and ballistic missiles. Additionally, U.S. negotiators...
should seek agreement regarding specific timetables for the inspection, dismantlement, and verification of each nuclear and missile facility.\textsuperscript{70}

This process should pave the way for a comprehensive roadmap toward North Korea’s verifiable nuclear dismantlement based on an agreed definition. These negotiations should also include discussions of possible exit ramps for sanctions, such as humanitarian waivers for certain UN sanctions. But maintaining the existing sanctions architecture is important until North Korea verifiably dismantles its facilities. Withholding full relief will permit the United States to escalate pressure in the event that North Korea once again fails to negotiate in good faith or disregards its commitments.

- **Increase track II exchanges between the United States and North Korea:** Track II exchanges can play a positive role in supporting diplomatic progress. These exchanges also expose North Koreans to a range of perspectives that can help break down the regime’s totalitarian control. Pyongyang increasingly includes junior research staff in these events, yet American participants are often the same individuals who have been attending since the 1990s. American participants should include a new generation of specialists focusing on Korea. American participants should also include specialists from fields other than just nuclear nonproliferation—including economics, development, communications, and agriculture. This will broaden interactions between Americans and North Koreans and make clear the potential benefits should the regime relinquish its nuclear weapons.

- **Keep military options on the negotiating table:** U.S. and ROK diplomats and political leaders should refrain from saying there is no military option for North Korea. While renewed military conflict with North Korea should be avoided, if Kim comes to believe the United States wants to avoid military conflict at all costs, North Korean misbehavior and aggression will become more likely. U.S. and ROK leaders should avoid any comments that leave Kim with the impression that the status quo entails no risk of military conflict.

- **Refine the U.S. diplomatic approach:** The credibility of the Trump administration in the eyes of the international community will be pivotal in successfully implementing a new maximum pressure campaign. Trump should therefore eschew unwarranted and inappropriate praise of the despotic North Korean leader and should likewise avoid pronouncements of progress not supported by facts on the ground.

- **Strengthen coordination efforts with regional allies and partners:** The United States must ensure that its regional allies share a common North Korea strategy. Washington must establish a consensus with South Korea on the need to avoid premature concessions. The United States can best achieve this through the ROK-U.S. working group led by the American and South Korean special representatives. In addition, Washington should focus on helping South Korea and Japan ameliorate their strained relations. Given the depth of their disputes, this may merely limit damage in the short-term. With time, however, the United States must help its two allies mend ties, as tensions between Seoul and Tokyo militate against a successful outcome on the Korean Peninsula.\textsuperscript{71}

Washington’s lines of effort for mediation should include the Moon administration’s “two-track” strategy to separate security issues from historical disputes. Additionally, Washington should establish a trilateral working-level dialogue similar to the now defunct Trilateral Coordination and Oversight Group. The present absence of such a mechanism makes it more difficult for the three security partners


to establish the robust relationships among career defense and foreign policy practitioners necessary to forge a shared vision and strategy. 

**Initiate a public diplomacy campaign:** To build a common understanding of the North Korean threat and generate support for new multilateral pressure, the United States should lead a comprehensive public diplomacy campaign – ideally in conjunction with South Korea, Japan, Australia, and key European partners. This campaign should emphasize (1) the Kim regime's refusal to make concessions; (2) Pyongyang's continued provocations and violations of existing sanctions; (3) the desire of the United States and its allies to avoid war by achieving successes at the negotiating table; and (4) the many good faith efforts and concessions by the United States and South Korea that have yielded little so far.

**Make human rights a priority:** Highlighting Pyongyang's abysmal human rights record serves U.S. interests and values. In so doing, Washington can stand up for the oppressed, honor the best traditions of American foreign policy, and apply additional pressure on the regime. As part of an escalating information and diplomatic campaign, highlighting the regime's abuses can help undermine the regime's credibility, support domestic opposition, and suggest to Kim that his predicament will only worsen if he refuses to negotiate in good faith and relinquish his nuclear weapons.

**Target Chinese and Russian obstruction:** Maximum pressure 2.0 should seek to build the most comprehensive and cohesive multilateral diplomatic effort possible. This must include efforts to build consensus for additional action at the UNSC. If Beijing and Moscow obstruct additional measures against North Korea, the United States should name and shame both governments wherever possible to raise the diplomatic costs of their obstruction. If this obstruction persists, the United States should shift the cost-benefit analysis of both governments. For example, Washington could move to build an increased U.S. military presence in the region and on the peninsula (with South Korean agreement). The mere announcement of this step could create new leverage and elicit increased cooperation from Beijing and Moscow. Washington could also initiate a diplomatic campaign to impose aggressive secondary and sectoral sanctions against Chinese and Russian persons that do business with North Korea or undermine existing sanctions. Beijing and Moscow are vulnerable to such sanctions.

**Stop North Korean exploitation of diplomatic privileges:** North Korea uses its embassies overseas to engage in a wide range of illicit financial activity. The U.S. State Department conducted a worldwide campaign starting in 2017 to stop North Korea's illicit activities, with a number of countries expelling North Korean diplomats and workers and even severing economic ties. The United States should seek to reduce further North Korea's diplomatic and commercial footprint as a key element of maximum pressure 2.0.

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Background

ROK national security and U.S. interests in Northeast Asia depend on the military readiness of the ROK-U.S. alliance. A successful outcome on the Korean peninsula is unlikely if the alliance fails to maintain this readiness. The primary mission of the ROK-U.S. Combined Forces Command (CFC) in South Korea is to deter a North Korean attack. If deterrence fails, its mission is to defend the ROK and defeat the North Korean military to set the conditions for resolution of what the 1953 Armistice Agreement calls the “Korean question” – the division of the Korean peninsula.⁷³

General Robert Abrams, the commander of the United Nations Command, CFC, and U.S. Forces Korea, testified in March that diplomatic activity and the September 2018 intra-Korean CMA have led to a “palpable reduction in tension when compared to the

⁷³ The Korean War Armistice Agreement, Panmunjom, July 27, 1953, article IV. (https://www.usfk.mil/Portals/105/Documents/ SOFA/G_Armistice_Agreement.pdf)
recent years of missile launches and nuclear tests.” 74 Specifically, the CMA’s main terms included ending all training exercises near the North-South border and the withdrawal of all DMZ guard posts. 75 The South and North negotiators intended for the CMA to serve as a trust-building mechanism. 76

Although the opposing forces have started to demilitarize the Joint Security Area in Panmunjom pursuant to the CMA, the North Korean conventional military threat has not decreased. “Current modifications in atmospherics … do not represent a substantive change in North Korea’s military posture or readiness,” General Abrams testified. “The North Korean military remains formidable and dangerous, with no discernable differences in the assessed force structure, readiness, or lethality.” 77 In fact, the North Korean People’s Army (NKPA) completed its 2018–2019 Winter Training Cycle as scheduled. 78

The North Korean military, the fourth largest in the world, remains formidable. It includes some 1.2 million active troops, 79 14,000 artillery systems, 80 and 2,500 armored vehicles. 81 Seventy percent of the NKPA remains forward deployed between the DMZ and Pyongyang, with a large concentration of artillery systems located in the Kaesong Heights, just north of Seoul. 82

Pyongyang has also developed a wide array of missiles capable of threatening U.S. forces and allies in the region and even the U.S. homeland. 83 North Korea has conducted more than 80 ballistic missile tests since Kim


76. Interview on June 9, 2019, with members of the ROK negotiating team, who described to one of the authors their arguments with the North Korean negotiators about including the United Nations Command in the CMA.


Jong Un took power in 2012. In July and November 2017, North Korea launched the Hwasong-14 and Hwasong-15 ICBMs. The Department of Defense’s (DOD’s) 2019 Missile Defense Review assessed that North Korea has “nearly the time when it could … threaten the U.S. homeland with missile attack.”

This is particularly concerning in light of the regime’s nuclear program. North Korea has conducted six nuclear weapons tests since 2006, each with an increased yield. Experts assess that the regime possesses 20 to 60 nuclear warheads. In September 2017, Pyongyang claimed to have tested a thermonuclear weapon. It is unclear whether North Korea has successfully developed such a weapon, but if so, it would mark a significant upgrade in Pyongyang’s arsenal.

North Korea’s nuclear weapons program encompasses various facilities, the most important of which is the Yongbyon Nuclear Scientific Research Center. This facility has multiple reactors, including a 5-megawatt reactor, a light water reactor, and an IRT-2000 reactor. The latter utilizes highly enriched uranium and could enable Pyongyang to boost warhead efficiency and develop smaller and lighter designs. Yongbyon also has facilities that reprocess plutonium and enrich uranium to produce weapons-grade fissile material.

The only nuclear facility that North Korea has declared is Yongbyon. However, open-source intelligence yielded new information about another facility, in Kangson, which U.S. intelligence claims to be North Korea’s first covert uranium enrichment facility. Intelligence sources suspect North Korea has at least one more undeclared nuclear facility.

North Korea’s ballistic missile program features not only ICBMs but also short-range, medium-range, intermediate-range, and submarine-launched ballistic missiles. These include solid-fuel ballistic missiles, which have a faster reaction and reload times, making them more difficult to detect. Pyongyang tested a variant of one such missile, the KN-15 Pukguksong-2 medium-range ballistic missile, in 2017 and again

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in May, July, and August of 2019. This is alarming because solid-fuel missiles could enable Pyongyang to overwhelm its adversaries’ missile defense systems, strengthening its first-strike capability.

Pyongyang also possesses a formidable arsenal of chemical and biological weapons. The North maintains an estimated 2,500 to 5,000 tons of chemical munitions, and analysts suspect it possesses a deadly arsenal of biological weapons as well. A former Obama administration official called North Korea’s biological weapons “advanced, underestimated, and highly lethal.”

Pyongyang has a formidable global network that could be used to conduct a chemical and biological attack abroad – including in the United States. The regime may also be developing an electromagnetic pulse capability to target the U.S. electrical grid with nuclear-armed ICBMs.

Approximately 28,500 U.S. troops are currently based in South Korea. From 2018 to 2019, in order to help defray the financial cost of the U.S. military posture, the Trump administration conducted routine burden sharing negotiations. The administration demanded a significant increase in ROK contributions for U.S. “stationing costs.” The two countries eventually reached an agreement, and the ROK assembly approved a $915 million deal.

The 1953 Mutual Defense Treaty (MDT) provides the legal basis for the presence of U.S. military forces in South Korea. The MDT commits both countries to mutual defense against threats in the Asia-Pacific region but notably omits specific mention of the North Korean threat. The negotiators sought to ensure the MDT would transcend the Kim regime’s rule. Indeed, even a cessation of North Korean hostilities would not alone determine the future status of U.S.

forces on the Korean Peninsula. To change the status of U.S. forces, ROK and U.S. political leaders would need to renegotiate the terms of the MDT.105

"Trump apparently considers the U.S. military presence on the Korean peninsula an act of American charity. In reality, this presence helps deter far more costly North Korean aggression. Moreover, Trump does not seem to appreciate that the cost of the U.S. troops on the peninsula is a bargain compared to the cost of war."  

The two allies are already considering the future of the alliance’s structure and command. Since 2003, ROK and U.S. forces have undertaken an aggressive transition program to develop independent ROK warfighting capabilities, in preparation for a transition in operational control. The goal of this effort is to give the ROK military the lead defense role. This will eventually culminate with an ROK general officer in command of CFC, supported by a U.S. deputy commander.106 A U.S. general officer will continue to command the UNC. The associated Yongsan Relocation and Land Partnership Plans have led to the consolidation of most U.S. forces south of Seoul in the Camp Humphreys-Osan Air Base area.107 While this consolidation improves logistical support and coordination and reduces costs of multiple bases throughout Korea, it also leaves U.S. forces vulnerable to North Korean missile attacks.108

Assessment

The Trump administration deserves credit for focusing on the North Korean military threat and taking actions to address it. The cessation of North Korean missile launches and nuclear tests from November 2017 to May 2019 was a notable positive development. However, the regime can easily resume missile launches (as has happened) and even nuclear tests. The suspension of those activities therefore should not be confused with a reduction of the North Korean military threat.

The U.S. military presence helps deter North Korean aggression and prevents a war on the peninsula. Yet Trump seems to think otherwise. In recent months, he has openly mulled a withdrawal of U.S. forces from the Korean Peninsula. This approach suffers from several mistaken assumptions. For instance, Trump apparently considers the U.S. military presence on the Korean peninsula an act of American charity. In reality, this presence helps deter far more costly North Korean aggression. Moreover, Trump does not seem to appreciate that the cost of the U.S. troops on the peninsula is a bargain compared to the cost of war. It is worth remembering that the Korean War (1950–1953) cost 36,000 Americans lives and an estimated $276 billion in today’s dollars.109

It is also worth remembering that South Korea’s contribution to its own defense is not insubstantial. The ROK military is composed of approximately 599,000 troops across its army, navy, and air force.110 The ROK military also operates ROK-U.S. combined


information assets, such as satellites, signal, and imagery analysis, which provide early warning and detection capabilities that are essential for U.S. readiness.\textsuperscript{111}

In addition, South Korea hosts key U.S.-operated missile defense assets and operates its own. Specifically, U.S. missile defense systems in the ROK include one Terminal High Altitude Area Defense battery and eight Patriot Advanced Capability-3 batteries. South Korea operates three KDX-III Sejong the Great-class destroyer vessels equipped with the Aegis system. Currently, ROK is developing its Korea Air and Missile Defense multi-platform system to respond to short-range air and missile threats.\textsuperscript{112}

Given the size and success of the South Korean economy, it is certainly appropriate for the administration to press Seoul to pay more of the cost of basing U.S. troops there. However, the manner and timing of such U.S. efforts matter. Initiating a contentious and public dispute with South Korea about burden sharing is shortsighted and counterproductive. Pyongyang, Beijing, and Moscow undoubtedly welcome friction animated by ill-informed populist impulses in the United States and South Korea that could potentially result in the departure of U.S. military forces.

In Singapore, Trump unilaterally announced the suspension of large-scale exercises. He adopted Kim's rhetoric, calling the exercises “war games” and criticizing them as being provocative and too expensive.\textsuperscript{113} In the past year, while attempting to maintain military readiness, CFC scaled back numerous exercises and cancelled two major ones, Key Resolve and Foal Eagle.\textsuperscript{114} This was a mistake. Limiting ROK-U.S. military exercises has not elicited similar North Korean concessions. In fact, unilaterally cancelling or scaling back allied exercises has never resulted in significant, reciprocal, and durable concessions from North Korea.\textsuperscript{115}

In addition to these conventional military concerns, North Korea's definition of denuclearization of the entire Korean Peninsula is different from that of the United States. The Kim regime's view is that denuclearization must include an end to the ROK-U.S. alliance, the removal of U.S. troops from the peninsula, and the termination of U.S. extended deterrence and the America nuclear umbrella over South Korea and Japan. These demands are consistent with the Kim regime's longstanding objective of dividing the ROK-U.S. alliance so that the North can dominate the South.\textsuperscript{116}

After his defection in 1991, Hwang Jong Yop, the highest-ranking defector in North Korean history and the architect of Kim Il Sung's Juche ideology, was asked


why the regime invested so much in its military yet has never executed its plan to unify the peninsula by force. His answer was simple: U.S. forces had deterred Kim Il Sung and Kim Jong Il. It is therefore unsurprising that a key focus for the regime is the departure of U.S. forces from South Korea.\textsuperscript{117}

Since the failure of the Hanoi summit, Kim Jong Un has conducted a series of military and propaganda operations designed to increase his leverage in negotiations and generate internal support from his military and elite. These include the rehabilitation of the Sohae missile launch facility,\textsuperscript{118} a new anti-tank guided missile system test,\textsuperscript{119} combat aviation exercises,\textsuperscript{120} unusual activity at the Yongbyon nuclear facility,\textsuperscript{121} and multiple tests of a short-range tactical ballistic missiles and multiple rocket launchers in the summer of 2019.\textsuperscript{122} This indicates that Kim will continue to rely on his military to pursue a diplomatic strategy based on coercion and extortion.\textsuperscript{123}

### Recommendations

Ready and capable ROK-U.S. combat power is essential to deter North Korean aggression, defend South Korea, protect U.S. interests, empower effective diplomacy, and support a maximum pressure campaign. There has been no reduction in North Korea’s offensive military capabilities and no discernable change in the regime’s strategy to dominate the peninsula. CFC must be prepared to respond to the full spectrum of North Korean aggression. We recommend the following actions:

- **Strengthen allied military posture in South Korea:** Seoul should be encouraged to invest in additional military capacity and capability – including missile defense assets. Simultaneously, in full coordination with Seoul, the United States should deploy to South Korea additional combat power consisting of rotational or permanent forces. As these deployments proceed, it is essential to avoid any decline in capability or gap in the deployment of rotational forces. In addition to strike capabilities, the United States should deploy additional missile defense and intelligence, surveillance, and reconnaissance (ISR) assets. Additional missile defense assets, perhaps as part of DOD’s Dynamic Force Employment concept,\textsuperscript{124} could strengthen the ROK-Japan-U.S. integrated air and missile defense regional architecture, adding protection for Americans and U.S. allies.

As China refuses to take additional substantive steps, and as Kim refuses to negotiate in good faith, the United States should incrementally add U.S. combat

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\textsuperscript{120} “N. Korean leader visits military unit for first time in 5 months,” *Yonhap News Agency* (South Korea), April 17, 2019. ([https://en.yna.co.kr/view/AEN201904170011200325](https://en.yna.co.kr/view/AEN201904170011200325))


\textsuperscript{122} O Youn-hee, “New N.Korean Missile Threaten S.Korea,” *The Chosun Ilbo* (South Korea), May 13, 2019. ([http://english.chosun.com/site/data/html_dir/2019/05/13/2019051301080.html](http://english.chosun.com/site/data/html_dir/2019/05/13/2019051301080.html))


power in South Korea. Simultaneously, Washington should make clear publicly and privately that the alliance does not seek military conflict and is prepared to resolve differences diplomatically if Pyongyang is prepared to honor its commitments in a verifiable manner. Also, as part of a systematic and ongoing effort to assess U.S. military posture in South Korea and maximize readiness, every effort must be made to address the priority lists and unfunded requirements of U.S. Forces Korea and U.S. Indo-Pacific Command. As DOD and Congress allocate finite American resources, priority should be given to requirements on the peninsula related to ISR capabilities, integrated missile defense, command and control, counter-fire systems, and prepositioned equipment.

**Strengthen the new ROK-U.S. CFC’s exercise program:** U.S. and ROK leaders must constantly assess military readiness. Accordingly, CFC’s exercise program should be as comprehensive, challenging, and realistic as possible. The ongoing exercise program must include theater-level command post computer-simulated exercises in order to coordinate joint and combined warfighting elements. If readiness declines or does not keep pace with the North Korean threat, CFC should reform the exercise program without delay. Sustained combined exercises can help set the conditions necessary for the successful transfer of operational control of CFC to an ROK General Officer. By ensuring that CFC maintains readiness through this transition process, the United States will emphasize the continued strength and unity of the military alliance.

**Address weaknesses inherent in the September 2018 CMA:** The United States should press ROK negotiators to update the CMA to focus on reducing the offensive capabilities of North Korea’s frontline forces, with a specific objective of withdrawing the North’s artillery from the Kaesong Heights. This will be an indicator of the regime’s sincerity in reducing tensions. If the North does not expeditiously implement sufficient reciprocal confidence-building measures and continues to sustain its large-scale winter and summer training cycle program, the ROK-U.S. alliance should enhance deterrence and readiness by returning to large-scale exercises such as Ulchi Freedom Guardian, Foal Eagle, and Key Resolve and by developing additional exercises that include the deployment of strategic assets.

**Stabilize the burden sharing process:** The United States must not allow the burden sharing negotiation process to weaken the alliance’s diplomatic unity or military strength. The United States and South Korea should quickly conclude current negotiations on mutually agreeable terms. The United States should then seek to return to a five-year process to reduce unnecessary friction in the alliance and provide financial stability and resource continuity. Failure to do so would provide Pyongyang’s Propaganda and Agitation Department an opportunity to divide the U.S.-ROK alliance.

**Strengthen the Ground-Based Mid-Course Defense (GMD) system:** The U.S. GMD system is “designed to defend against the existing and potential ICBM threat from rogue states such as North Korea and Iran,” according to DOD.125 Although it currently has the capability to defend the homeland against a limited North Korean ballistic missile attack, the United States should improve the system’s reliability, capability, and capacity. Decision makers should expedite improvements to GMD interceptors, sensors, and kill vehicles. These improvements take time, and given the nature of the North Korean ballistic missile threat, there is no time to waste.

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THE CYBER ELEMENT

By Mathew Ha and Annie Fixler

Background

North Korea’s cyber operations generate revenue for the regime and play an important role in Pyongyang’s espionage and reconnaissance efforts. North Korea’s cyberattacks against the United States, South Korea, and allied countries continue unabated and are likely to endure, barring a more assertive response. Less than a month after the first intra-Korean summit in April 2017, the ROK government disclosed numerous DPRK intrusions against academic think tanks and financial organizations.¹²⁶ Even as Kim and Trump were meeting in Hanoi, North Korean hackers were attempting to infiltrate more than a hundred companies in the United States and around the world.¹²⁷ The U.S. intelligence community concluded in 2019 that North Korea’s government will continue sponsoring cyber operations “to raise funds and to

gather intelligence or launch attacks on South Korea and the United States.”

“Straight up cyber bank theft” accounts for a significant portion of North Korea’s malicious cyber activity, according to John Demers, the U.S. assistant attorney general for national security. Experts at the Royal United Services Institute believe these operations and the regime’s use of crypto currencies to evade sanctions are helping to finance North Korea’s nuclear and unconventional weapons program.

To date, North Korea’s highest-profile cyberattack remains its February 2016 hack of the Bangladeshi central bank, during which the attackers pilfered $81 million. The hackers infiltrated the bank’s network and issued fraudulent requests for the Federal Reserve of New York to transfer funds to accounts the hackers controlled. Had the Federal Reserve not grown suspicious, North Korean hackers could have stolen up to $1 billion.

In addition to fraudulent electronic transfers, North Korean hackers have also used cyberattacks to physically empty ATMs of cash to fill regime coffers. Dating back to 2016, North Korean government-supported hackers known as the Lazarus Group (also known as Hidden Cobra) infiltrated banking networks around the world to conduct fraudulent ATM withdrawals. On September 13, 2019, the U.S. Treasury Department sanctioned Lazarus Group and two of its subordinate hacking organizations, Blunoroff and Andraiel. In two separate incidents, the group initiated simultaneous cash withdrawals in dozens of countries, stealing tens of millions of dollars. North Korea likely utilized local networks in those countries to retrieve the cash.

North Korean hackers have also targeted cryptocurrency exchanges. Between hacks, mining, and scams,
North Korea has generated hundreds of millions of dollars in foreign currencies and cryptocurrencies.138 In August 2019, a UN Panel of Experts estimated this total to be as high as $2 billion, accumulated over 35 attacks across 17 countries.139 While there are reasons to question this number, there is little doubt that North Korea uses the cyber domain to acquire a significant portion of its funding.140

The Wannacry malware attack offers insights into another element of Pyongyang’s cyber operations: disruption. The Wannacry malware infected more than 200,000 computers in 150 countries, locking up systems until victims paid a ransom.141

FireEye released a report on a North Korean hacker group it calls Advanced Persistent Threat (APT) 37. From 2014 to 2017, the group infiltrated chemical, electronic, manufacturing, aerospace, automotive, and healthcare companies in Japan, Vietnam, and the Middle East for espionage purposes. FireEye concluded that the hackers’ strategic intent was to learn more about South Korea’s government, military, and defense industrial base.142 More recently, FireEye confirmed multiple North Korean APTs targeting South Korean companies, government agencies, and public services. Each group appeared to have a separate mission in support of Pyongyang’s espionage, theft, and disruption goals.143

The Wannacry malware attack offers insights into another element of Pyongyang’s cyber operations: disruption. The Wannacry malware infected more than 200,000 computers in 150 countries, locking up systems until victims paid a ransom.144 Health care services, manufacturing, and critical infrastructure sectors were severely impacted by North Korea’s most destructive ransomware attack to date.145 While fewer than 400 victims paid the ransom and hackers


140. This $2 billion estimate, however, is inaccurate. The UN Panel reached this total estimate by adding the values listed in the report’s Annex 21, which listed all of North Korea’s reported theft operations – both successful and unsuccessful. Including the latter yields an inflated estimate. The aggregate value of all successful reported theft operations equals $232 million. While the larger $2 billion figure is not valuable as a direct estimate of North Korean cyber theft, it does reflect the regime’s intent to use cyber means to help fund its military budget and offset the revenue lost due to sanctions.


generated only $140,000, the total cost of the attack, including damage mitigation and business interruption, may have been as high as $18 billion. Wannacry likely aimed not to generate funds but to wreak havoc. Pyongyang is likely assessing how a similar attack synchronized with an escalation on the Korean Peninsula might affect Washington and Seoul’s ability to respond.

Assessment

North Korea’s cyber capabilities are the newest component of the regime’s asymmetric strategy. Kim Jong Un has reportedly called cyber warfare an “all-purpose sword,” granting Pyongyang the ability to “strike relentlessly.” Cyber operations provide North Korea with a less conspicuous way to engage in peacetime provocations and illicit activities. Pyongyang’s ongoing malicious cyber activities suggest it will continue its multi-pronged strategy of deception, coercion, and extortion.

The Trump administration has deployed a range of tools to combat the North Korean cyber threat. The Computer Emergency Readiness Team, jointly run by the U.S. Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI), has issued numerous technical alerts and malware reports so that targeted industries can mitigate North Korean malware. DHS is also partnering with U.S. Cyber Command (CYBERCOM) to publicly disclose samples of North Korean malware to assist cybersecurity professionals in protecting private industry. It is unclear, however, whether these efforts have reduced or prevented North Korean cyberattacks.

The Trump administration has also relied on sanctions and legal mechanisms. In September 2018, the U.S. Department of Justice (DOJ) issued criminal charges against a North Korean computer programmer, Pak Jin Hyok, for his role in cyberattacks sponsored by Pyongyang. The indictment provided detailed evidence attributing these cyberattacks to the DPRK government through Pak and his company. In conjunction with the indictment, the Treasury Department sanctioned Pak and his company, Chosun Expo Joint Venture, which Treasury noted was likely a front company for the RGB.

This joint Treasury and DOJ action was the first cyber-related charge the United States brought against

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In 2017, CYBERCOM reportedly cut the internet access of RGB hackers as part of operations ordered early in the Trump administration. That operation aligns with the Pentagon’s subsequent September 2018 Defense Cyber Strategy and its goal of “defend[ing] forward to disrupt or halt malicious cyber activity at its source.” The Trump administration also delegated greater authority over battlefield decisions to U.S. offensive cyber operators. Press reporting indicates that CYBERCOM has begun to operate accordingly, but much remains classified.

Pyongyang maintains the ability to engage in cyber-enabled economic warfare and target the ROK and U.S. economies to indirectly undermine the alliance’s military and strategic capabilities. The world witnessed a test run in 2013 with the DarkSeoul attacks against South Korean banks and media companies. While North Korea has yet to unleash large-scale cyber-enabled economic warfare attacks, such tactics align with Pyongyang’s “peacetime provocations” strategy of operating below the threshold of war to achieve political and economic gains that help preserve the Kim family regime.

Pyongyang’s cyber capabilities would likely also prove useful to the regime if military conflict erupts on the peninsula. The North Korean military’s conventional war plans focus on integrating “strong surprise attacks” and asymmetric capabilities to gain an immediate advantage. In a military conflict, Pyongyang would likely launch cyber-attacks against ROK-U.S. command, control, communications, computer, intelligence, surveillance, and reconnaissance nodes. The presence of cyber units within Pyongyang’s General Staff Department highlights the importance the North Korean military places on cyber.

“In a military conflict, Pyongyang would likely launch cyber-attacks against ROK-U.S. command, control, communications, computer, intelligence, surveillance, and reconnaissance nodes.”

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Recommendations

North Korea uses the cyber realm to generate illicit revenue and conduct ISR operations. Even if negotiations make progress, these activities will almost certainly continue. While the Trump administration has taken steps to hold Pyongyang accountable for its malicious cyber operations, Washington must do more to deter and impose costs on the Kim regime.\textsuperscript{170}

- **Initiate offensive cyber operations to mitigate and deter Pyongyang's cyber activity:** The United States should undertake additional cyber operations to deter and thwart Pyongyang's hacking. Washington should engage in cyber operations to restrict adversarial cyber capabilities. Recently reported examples that could serve as models include the dismantlement of North Korean hackers' internet access and the joint FBI-U.S. Air Force operation to map and disrupt a global network of malware-infected computers under North Korean control.\textsuperscript{171}

   Washington should also use cyber-enabled information warfare options to widen social fissures between the Kim leadership and North Korean elites, who are vulnerable to information operations. Such operations should intensify if the regime does not move toward denuclearization in good faith.\textsuperscript{172}

- **Impose additional sanctions focused on North Korean cyber operations:** Cyber-focused sanctions have been an underutilized tool to address North Korean capabilities. Washington should target foreign front companies that help fund key North Korea cyber institutions.\textsuperscript{173} One particular target that may warrant scrutiny is Malaysian company Glocom, which a March 2018 UN Panel of Experts report determined is engaged in sanctions evasion to fund the RGB.\textsuperscript{174} In September 2019, the UN Panel of Experts further recommended that member states highlight cyber when drafting future sanctions.\textsuperscript{175} Implementing this recommendation could generate momentum for both individual and collective action among UN member states.

- **Pressure China, Russia, and other countries to dismantle North Korean networks in their jurisdictions:** The United States should increase efforts to persuade other nations, namely China and Russia, to monitor and restrict the activities of North Korean personnel and expel those involved in malicious cyber activity. China not only provides North Korea with an outbound internet connection\textsuperscript{176} but also hosted North Korean hackers in the Chilbosan Hotel in Shenyang, China. (The hotel is now closed.)\textsuperscript{177} Since October 2017, a


\textsuperscript{172} “North Korea’s Ruling Elite are Not Isolated,” Recorded Future Insikt Group, July 25, 2017. (https://www.recordedfuture.com/north-korea-internet-activity)


\textsuperscript{176} Martyn Williams, ”Russia Provides New Internet Connection to North Korea,” 38 North, October 1, 2017. (http://www.38north.org/2017/10/mwilliams100117)

Russian firm, TransTelecom, has also provided North Korea an outbound internet connection.\textsuperscript{178} However, foreign nation support likely extends beyond China and Russia. If Washington has evidence to confirm reports of North Korean cyber operations routing through India, Malaysia, New Zealand, Indonesia, or other countries, it should share actionable intelligence with allies to patch vulnerable systems that are being exploited.

Washington should urge these foreign governments to expel in-country personnel responsible for the operations. If these foreign governments refuse, Washington should be prepared to impose sanctions on companies and individuals in countries under section 104(a)(7) of the North Korea Sanctions and Policy Enhancement Act (NKSPEA), which requires the president to submit a report to Congress describing “the identity and nationality of persons that have knowingly engaged in, directed, or provided material support to conduct significant activities undermining cybersecurity.”\textsuperscript{179} The administration should sanction the companies or individuals helping North Korean personnel operating overseas.

- **Create a joint ROK-U.S. cyber task force:** The Trump administration should work with South Korea to establish a joint cyber task force to develop a combined strategy for operations, exchange cyber intelligence, and prepare defensive and offensive options.\textsuperscript{180} The task force should incorporate a joint cyber intelligence center to enhance information sharing and cyber threat detection. With South Korea suffering as many as 1.5 million North Korean cyber intrusions per day, it is imperative that Seoul responds.\textsuperscript{181} Through this task force and intelligence sharing mechanism, Seoul and Washington could more effectively share information to jointly attribute North Korea’s regime-sponsored attacks.

The two nations should also conduct joint cyber training to test interoperability, prepare for challenges the allies will confront in a military conflict with North Korea, and demonstrate shared resolve. Simultaneously, the United States should explore a similar cyber task force with Japan, ultimately aiming to create a trilateral task force capable of synchronizing defenses against both North Korea and China.

- **Create a cyber defense umbrella:** To bolster the ROK-U.S. alliance and cyber deterrence, the United States should declare that significant cyberattacks on South Korea would trigger U.S. obligations under the Mutual Defense Treaty (as Washington and Tokyo declared in April) and work closely with Seoul to define that threshold.\textsuperscript{182}


Background

The United States has employed economic tools of power in its policy toward North Korea since the Korean War – increasing and relaxing pressure to incentivize Pyongyang to make concessions on its nuclear program and other destabilizing activities. In the early 1990s, the Clinton administration imposed sanctions on certain DPRK government entities in response to North Korean ballistic missile and nuclear activities, but it later lifted a number of key restrictions pursuant to the 1994 Agreed Framework. Likewise, in the mid-2000s, the Bush administration unwound several important restrictions, including through the removal of North Korea from the State Sponsors of Terrorism list.

As U.S. sanctions and special measures ebbed and flowed, additional, multilateral sanctions came into effect – principally through UN Security Council Resolutions (UNSCRs), such as UNSCR 1718. While circumstances have varied, this history demonstrates a repeated cycle of North Korean provocations followed by punitive economic measures that are later lifted for ultimately unreliable North Korean commitments.
The most recent round of enhanced economic pressure began during the Obama administration in response to North Korea’s fourth nuclear test, in January 2016.183 The passage of NKSPEA in February 2016, combined with both Executive Order (E.O.) 13722 and UNSCR 2270, marked a major expansion of U.S. and multilateral sanctions.

The Trump administration enhanced this effort by working through the United Nations to successfully secure the passage of four additional UNSCRs with an array of economic and diplomatic actions for all UN member states to enact. These included restrictions or bans on the purchase of North Korean coal, iron, lead, and seafood as well as prohibitions against North Korea’s use of expatriate labor. The Trump administration has also increased pressure by working with Congress to implement additional statutory sanctions and by issuing executive orders to strengthen sanctions that incorporate and expand the UN sanctions framework.

## U.S. Sanctions Expansion Since February 2016

|------------------------------------------|----------------|
| **North Korea Sanctions and Policy Enhancement Act of 2016**<sup>184</sup>  
Effective date: February 18, 2016 | Mandated the application of sanctions related to North Korea's proliferation, arms trafficking, money laundering, censorship, luxury goods purchases, cyberattacks, and human rights abuses. It blocked all assets of the DPRK government and its officials. |
| **E.O. 13722 – Blocking Property of the Government of North Korea and the Workers’ Party of Korea, and Prohibiting Certain Transactions With Respect to North Korea**<sup>185</sup>  
Effective date: March 16, 2016 | Prohibits U.S. nationals from exporting or re-exporting goods, services, or technology to North Korea, and prohibits any new investments in North Korea by U.S. persons. It also imposed sanctions against both U.S. and non-U.S. persons dealing in luxury goods, minerals, and certain industries; engaging in human rights abuses; undermining U.S. cybersecurity; or promoting censorship on behalf of the DPRK government. |
| **Countering America’s Adversaries Through Sanctions Act**<sup>186</sup>  
Effective date: August 2, 2017 | Mandated a range of sanctions for purchasing or acquiring from North Korea key precious metals or other natural resources; selling or transferring to North Korea aviation fuel or providing other services; providing insurance or registration services to a vessel owned or controlled by the DPRK government; and maintaining a correspondent account with a North Korean bank. The legislation also limited U.S. assistance to governments purchasing arms or related services from North Korea, and it authorized the administration to prohibit any ships registered with countries that enable the circumvention of UNSCR requirements from landing in the United States. Finally, the legislation imposed sanctions related to North Korea’s use of slave labor. |
| **E.O. 13810 – Imposing Additional Sanctions with Respect to North Korea**<sup>187</sup>  
Effective date: September 21, 2017 | Applied sanctions on key sectors of North Korea's economy and on aircraft and vessels that have traveled to North Korea. Most importantly, it introduced secondary sanctions on foreign financial institutions that engage in a range of transactions involving North Korea. |

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UN Sanctions Against North Korea Since March 2016

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<td>UNSCR 2270[^188] Effective: March 2, 2016</td>
<td>Prohibited the supply of luxury goods to North Korea and the sale or transfer of gold, titanium, vanadium ore, and other materials from North Korea. It also placed limitations on North Korea's sale of coal and iron, and mandated cargo inspections to and from North Korea. Finally, it froze the assets of entities of the DPRK Government and Worker’s Party of Korea and prohibited the leasing or chartering of vessels and airplanes and the provision of crew services to North Korea.</td>
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<tr>
<td>UNSCR 2321[^189] Effective: November 30, 2016</td>
<td>Placed prohibitions on the purchase or sale of North Korean coal, iron, and iron ore, and imposed an annual limit of $400 million on transactions for North Korean coal. It also prohibited North Korea from exporting copper, nickel, silver, zinc, new helicopters and vessels, or statues. Finally, it placed further limits on North Korean diplomats and on banking by North Korean diplomatic missions and consular posts.</td>
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<tr>
<td>UNSCR 2371[^190] Effective: August 5, 2017</td>
<td>Prohibited or limited North Korean sales or transfers of coal, iron, iron ore, seafood, lead, and lead ore to other countries. It prohibited member states from increasing the total number of work authorizations for North Korean nationals in their jurisdictions unless approved by the Security Council. It also mandated that UN member states prohibit North Koreans from opening new joint ventures, expanding existing joint ventures, or opening other businesses.</td>
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<tr>
<td>UNSCR 2375[^191] Effective: September 11, 2017</td>
<td>Prohibited the supply, sale, or transfer of all condensates and natural gas liquids to North Korea, and banned North Korean exports of textiles such as fabrics and apparel products. It also further limited the sale of refined petroleum and crude oil. Finally, it prohibited member states from authorizing North Korean nationals to work in their jurisdictions unless specifically approved by the Security Council.</td>
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<tr>
<td>UNSCR 2397[^192] Effective: December 22, 2017</td>
<td>Limited North Korea's imports of refined petroleum to 500,000 barrels over 12 months. It also mandated the return to North Korea by December 2019 of all North Korean nationals working abroad, with some humanitarian exceptions. It authorized member states to seize, inspect, freeze, and impound any vessel in their territorial waters found to be illicitly providing oil to North Korea through ship-to-ship transfers or smuggling North Korean coal or other prohibited commodities. It also banned exports of North Korean food products, machinery, electrical equipment, earth and stones, wood, and vessels and prohibited the export to North Korea of industrial equipment, machinery, transportation vehicles. and industrial metals.</td>
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These measures placed significant economic pressure on North Korea[^193] – and on its leading trading partner, China. According to an analysis by Sayari Labs of shipment data from China’s General Administration of Customs, from 2013 to 2016, approximately 5,000 Chinese companies conducted an estimated $9 billion worth of trade with North Korea.^[194]

Beijing tightened trade restrictions after the 2017 passage of UNSCR 2371, with China’s General Administration of Customs reporting a decline in Chinese imports of targeted commodities, such as coal and seafood. China’s reported imports of coal from North Korea declined by 30 percent between August and September of 2017, then dropped to

zero through the rest of 2017. Similarly, imports of seafood reported by Chinese customs dropped to zero starting in September 2017.\textsuperscript{195}

Nonetheless, China remains North Korea’s most significant trading partner.\textsuperscript{196} China ceased public reporting of shipment-level trade with North Korea in 2017, making it difficult to determine exact trade volumes. However, last year the Chinese customs claimed an aggregate annual trade volume with North Korea of $2.3 billion – less than in prior years but still greater than that of any other country. The volume of China-DPRK trade is likely underreported given Beijing’s interest in projecting the appearance of compliance with UN regulations and China’s longstanding practice of not reporting data on major trade categories, such as oil.\textsuperscript{197}

China continues to export mining equipment, electronics, chemicals, and other potential dual-use items to North Korea.\textsuperscript{198} Shipment data from previous years illustrate this trend: In 2017, more than 250 unique Chinese companies traded with North Korea in commodities that appear to be blocked by U.S. and/or UN sanctions, based on the bills of lading.\textsuperscript{199}

North Korea also transships goods through China to the rest of the world. UN Panel of Experts reports in recent years are replete with examples of how Chinese facilitators transship goods to witting or unwitting end users worldwide. In 2017, for example, at least 65 Chinese companies imported goods from North Korea and then exported these goods globally.\textsuperscript{200} This practice is particularly evident in North Korea’s export of garments that require cheap, high-skilled labor.

In September 2017, pursuant to UNSCR 2375, Chinese authorities directed all DPRK joint ventures in China to close within 120 days.\textsuperscript{201} According to a 2018 analysis by Sayari Labs, however, at least 250 Chinese companies owned by DPRK entities still appear to be active. The Chinese central corporate registry deleted these companies’ records entirely, a departure from its normal practice of retaining records but marking the company status as “closed.” This suggests that Beijing may be concealing the companies’ continued operation.\textsuperscript{202}


\textsuperscript{200} Analysis of exports by Chinese companies trading with North Korea, provided by Sayari Labs on November 13, 2019.


Russia also plays a critical role in North Korea’s circumvention of sanctions, particularly with hard currency derived from expatriate labor. Despite UNSCRs 2375 and 2397, the Russian government continues to provide work authorizations for DPRK laborers. On July 30, 2018, the Russian Ministry of Labor published its annual list of authorizations, with 57 Russian companies authorized to hire a total of 4,103 DPRK laborers for 12-month terms.204

Trade between North Korea and Russia is dominated by Russian oil exports. Oil and related products comprised over 80 percent of the value of Russian exports to North Korea in 2017 and 60 percent in 2018.205 In terms of corporate ties, Sayari Labs has identified at least 18 active Russian companies owned by DPRK companies, including a construction company in Khabarovsk wholly owned by U.S.-sanctioned Korea Rungrado General Trading Corporation. Many more Russian companies have DPRK citizens as shareholders.206

**Assessment**

While the maximum pressure 1.0 campaign imposed significant economic costs on North Korea and incentivized Kim to come to the negotiating table, the pressure has been insufficient to persuade him to agree to final, fully verifiable denuclearization.

There are several possible explanations for this, including the possibility that no level of economic pressure will persuade Kim to relinquish North Korea’s nuclear weapons.

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203. After 2014, China discontinued the inclusion of crude oil exports to North Korea in its data, even though reports indicate the flow of crude oil continued. Using 2019 prices, these exports would add $10-15 million a month.


The will of the Trump administration is an open question. There has been a discernable decrease in the number of designations since the first summit between Trump and Kim. From June 1, 2018, to June 3, 2019, the administration designated 36 persons (including vessels) for violations of North Korean sanctions, down from 200 such designations from June 2017 through June 2018. Likewise, Trump has indicated that he opposes measures that may impact his efforts to negotiate with Kim.

“Meanwhile, North Korea continues to circumvent economic restrictions through sophisticated evasion schemes. China represents the primary facilitator of DPRK sanctions evasion.”

Meanwhile, North Korea continues to circumvent economic restrictions through sophisticated evasion schemes. China represents the primary facilitator of DPRK sanctions evasion. Pursuant to UNSCR 2375, the Chinese government closed numerous DPRK joint ventures in the past year. But active joint ventures still exist between Chinese and DPRK companies, including at least four joint ventures with at least one U.S.- and/or UN-sanctioned shareholder, making them immediate candidates for designation. Joint ventures also exist between Russian and DPRK companies, with many domiciled in Russia.

Similarly, Chinese banks and insurance companies continue to provide banking services to North Korean front and shell companies as well as insurance and reinsurance for vessels involved in illicit transfers. For example, in April, the U.S. District Court for the District of Columbia ordered three Chinese banks to comply with federal grand jury subpoenas for records related to North Korea, a decision upheld unanimously by a three-judge panel of the D.C. Circuit. These rulings likely signal the complicity of Chinese banks in moving North Korean money.

North Korea also continues to violate the UN arms embargo by supplying military equipment and training to foreign customers in Libya, Sudan, and Yemen. Meanwhile, North Korean diplomats continue to engage in sanctions evasion. For instance, according to Treasury’s Financial Crimes Enforcement Network, they work with DPRK state-owned enterprises to “use foreign-based front or shell companies and covert representatives based abroad to obfuscate the true originator, beneficiary, and purpose of transactions, enabling millions of dollars of North

212. Admittedly, this is a broader concern with respect to financial sanctions, which North Korea continues to actively evade.
Korean illicit financial activity to flow through U.S. correspondent accounts.\textsuperscript{216} Without continuous enforcement, sanctions can lose their effectiveness as networks adapt, companies rebrand, and sanctioned persons continue to transact freely. Furthermore, inconsistent messaging threatens to undermine U.S. credibility.\textsuperscript{217}

**Recommendations**

Implementing a maximum pressure 2.0 campaign will require deploying existing but underutilized sanctions mechanisms as well as new ones. This re-invigorated campaign should be implemented alongside continued efforts to push forward with working-level negotiations. Increased pressure should be viewed as a catalyst for effective diplomacy – not as a threat to it. Pyongyang understands this principle; Washington should, too.

- **Revitalize the North Korean Illicit Activities Initiative and appoint a North Korea pressure czar:** The North Korean Illicit Activities Initiative (2002–2006) was a Bush administration effort to deprive the Kim regime of financial resources and generate diplomatic leverage. It targeted the revenue that directly underwrote North Korea's leadership. The targeted revenue sources included everything from North Korea's counterfeiting of U.S. one hundred-dollar bills to its exports of counterfeit U.S. and Japanese cigarettes to its trafficking of methamphetamine across Asia and even the United States. The Illicit Activities Initiative also targeted the finances of the North Korean nuclear, biological, chemical, and missile programs. The impact has been felt in North Korea for years. The effort is best known for the dramatic designation of the Macau-based bank BDA in September 2005, under Section 311 of the USA PATRIOT Act. This action sent financial shockwaves through North Korea's system, stirring significant internal dissension and raising doubts regarding Kim Jong Il's ability to maintain regime stability. The move ultimately blocked billions of dollars of the Kim regime's overseas assets and became a model for subsequent U.S. efforts. North Korea's leadership has nest eggs parked abroad in secret accounts. They should be targeted comprehensively to deny the regime the financial resources it needs to survive, thereby coercing Kim to reach a nuclear deal and, ultimately, a peace deal. This task will require U.S. leadership that goes beyond the duties of a lead negotiator. A special coordinator for pressuring the North Korean regime – who could be a Treasury Department official co-located with the secretary of state's special representative for North Korea – should be appointed and empowered.

- **Designate the leadership of major Chinese banks engaging in prohibited DPRK transactions:** The Trump administration should designate Chinese bankers that knowingly engage in prohibited transactions with North Korea. It could then condition the resumption of normal operations with these banks upon their not only ceasing all problematic behavior, but also bringing in a new leadership consisting of non-designated persons. This could allow Treasury to integrate punitive measures with a clear path toward the bank's rehabilitation.

- **Fully implement the provisions of the Countering America's Adversaries Through Sanctions Act regarding North Korea:** Title III of the bill outlines specific sanctions targeting North Korea. Notably, this includes a prohibition on indirect correspondent accounts, enhanced inspection authorities, limitations on foreign assistance to noncompliant governments, and sanctions with respect to human rights abuses by the government of North Korea.

- **Harden small banks against North Korean sanctions evasion activity:** The State Department and Treasury


Department should empower smaller regional banks to crack down on North Korean sanctions evasion. North Koreans access the legitimate financial sector by using small- and medium-sized banks in Europe and Southeast Asia. Often the financial institutions exploited by North Korea do not have the knowledge or capabilities to properly detect and disrupt this activity, in part because their compliance programs are lacking and in part because of North Korea’s advanced ability to evade sanctions.

To better prepare these institutions, the departments of State and Treasury should continue sending outreach teams to financial institutions and their regulatory authorities, arming them with best practices to detect DPRK activity, including by suggesting watch lists for enhanced due diligence. Private sector firms, particularly those advising financial institutions on combating sanctions evasion, should consider providing services pro bono or at discounted rates to smaller financial institutions that face substantial risks but may lack significant compliance budgets. Such an approach would help these institutions harden their systems and frustrate Pyongyang’s ability to move money.

- **Target joint ventures involved in sanctions-busting:** The Trump administration not only must continue targeting Chinese and Russian companies owned or controlled by DPRK persons, but also should focus its efforts on joint ventures. Furthermore, U.S. sanctions tend to name only one or two nodes of a broader network, thus permitting sanctioned facilitators to shift business from one company to another without disruption. Aggressive designations of these joint ventures would remove opportunities for sanctions evasion. Doing so would inhibit North Korea sanctions evasion across the board, including the use of forced labor.

- **Use existing authorities to target maritime sanctions evasion:** The administration should use its authorities to target North Korea’s maritime sanctions evasion by targeting shipping registries, not just individual ship-to-ship transfers. Title III of the Countering America’s Adversaries Through Sanctions Act provides the authority to blacklist shipping registries that deliberately fail to ensure compliance with relevant UN and U.S. sanctions. While North Korean ships are already blacklisted, the administration could publicly threaten problematic jurisdictions with being blacklisted in the same manner, which would prohibit the ships from operating in U.S. waters or landing at any U.S. ports.

- **Step up maritime interdictions:** Recent ROK-U.S. exercises employing the U.S. Coast Guard and ROK and Japanese navies and coast guards demonstrate excellent trilateral capabilities. But exercises alone are insufficient. A maximum pressure campaign worthy of the name requires aggressive sanctions enforcement – which should include aggressive interdiction of North Korea’s illicit maritime activities.

- **Screen for imports from jurisdictions of North Korea sanctions evasion concern:** North Korea uses mislabeled goods, services, and technology; consignment firms; and other mechanisms to evade U.S. sanctions. The administration should require the enhanced inspection of any goods entering the United States that originated in jurisdictions used by North Korea to introduce its content or labor into global supply chains. Dandong, China, is one known jurisdiction, but there are many others. Such actions could supplement Treasury’s July 2018 guidance to the private sector on the risks for businesses with links to North Korean supply chains.

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Background

Information and influence activities (IIA) are the means by which governments attempt to influence key populations to support strategic objectives. Despotic regimes use IIA to manipulate their populations to maintain authoritarian control. In contrast, the United States can use IIA to promote U.S. strategic objectives, including by informing oppressed populations and promoting principles related to democratic and human rights. Thus, IIA provide a key tool for generating the internal divisions and threats to Kim that could incentivize him to negotiate in good faith and relinquish his nuclear, biological, and chemical weapons.

IIA are a critical and longstanding element of Pyongyang’s efforts to maintain power. The Worker’s Party of Korea’s Propaganda and Agitation Department has aggressively employed IIA to support the Kim family regime for the past seven decades. North Korea’s information strategy is focused on three broad lines of effort: enhancing the reputation of Kim Jong Un and the Kim dynasty among

domestic and international target audiences; undermining the legitimacy of the ROK government; and countering U.S. influence in Korea and the region, with an emphasis on dividing the ROK-U.S. alliance.

Despite Pyongyang’s coordinated and persistent effort, North Koreans are increasingly gaining access to outside information. A Center for Strategic and International Studies (CSIS) survey of 36 North Koreans living across several North Korean provinces found that almost 92 percent of them consume foreign media at least once a month. Eighty-three percent assessed that foreign media had a greater impact on their lives than decisions by the North Korean government. 221

Despite the limited sample, the survey has several advantages. First, all those queried were living inside North Korea and were not escapees. Moreover, the surveys were conducted in person, meaning “respondents were free to voice critical opinions about their own government unfettered.” 222 Relying solely on escapee surveys can distort findings since escapees are usually from border provinces near China and therefore do not necessarily provide a representative sample of the entire North Korean population. The CSIS survey, however, drew opinions from beyond these border areas. 223

A key method of distributing foreign media in North Korea is through cross-border traders and smugglers. These individuals provide foreign media stored on various devices, such as DVDs and thumb drives, which are then distributed at private markets that have emerged in recent decades. 224 Since the famines of the 1990s, these private markets have become an important component of everyday life for many non-elite North Koreans. Additionally, the proliferation of smart phones (some 6.5 million) is providing people in the North the ability to communicate. These developments offer opportunities for U.S. and ROK IIA. 225

On the other hand, the emergence of fifth-generation (5G) telecommunications technology along the Chinese-North Korean border is a potentially dangerous development. The Chinese are using this technology to track and interdict North Korean smuggling operations. 226 Although North Korea cannot yet produce its own 5G technology, leaked documents reveal that Chinese telecommunications giant Huawei has helped Pyongyang build wireless networks. The Washington Post reports that the Kim regime’s contact with Huawei began as early as 2006, when former leader Kim Jong Il visited Huawei’s headquarters in Shenzen, after which he oversaw the establishment of North Korea’s wireless provider Koryolink. 227

Experts believe this represents the beginning of North Korea and Huawei’s cooperation. 228 While North Korean telecommunications capabilities may not yet

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be ready for 5G technology, this relationship should raise concerns. Huawei could equip the regime with the technology and infrastructure to surveil anyone in North Korea using a smart phone.

**Assessment**

The Kim regime is one of the most oppressive and abusive governments in the world. Freedom House gives North Korea the worst possible rating for freedom, political rights, and civil liberties, summarizing the situation in North Korea this way:

> North Korea is a one-party state led by a dynastic totalitarian dictatorship. Surveillance is pervasive, arbitrary arrests and detention are common, and punishments for political offenses are severe. The state maintains a system of camps for political prisoners where torture, forced labor, starvation, and other atrocities take place … human rights violations are still widespread, grave, and systematic.\(^{229}\)

In its annual human rights report on North Korea, the State Department echoed these concerns, noting that human rights abuses “continued to be a widespread problem.”\(^{230}\) These egregious human rights violations are part of a deliberate, systematic, and brutal system designed to keep the Kim regime in power.\(^{231}\)

Any maximum pressure campaign targeting Kim Jong Un should feature robust IIA focused on human rights. A well-orchestrated campaign would enable the United States and South Korea to highlight and confront Kim’s human rights atrocities while shifting his cost-benefit analysis on denuclearization.

Undertaking such operations in a foreign country is a significant decision that should not be taken lightly. However, the nature of the totalitarian Kim regime and its human rights abuses, as well as the severity of the threat it poses, demonstrate the need for such an approach. In fact, such an approach would be consistent with the best traditions of U.S. foreign policy, simultaneously advancing U.S. interests and honoring American democratic and humanitarian principles.

Kim apparently believes that he can best ensure his survival by retaining his nuclear weapons, oppressing the North Korean people, and refusing to negotiate in good faith. The purpose of an IIA campaign would be to change Kim’s perceptions in each of these areas. The goal will be to persuade him that he can better secure his personal survival by respecting the human rights of the North Korean people and agreeing to relinquish his nuclear weapons in a permanent and verifiable manner.


Kim must become convinced that the status quo poses a greater threat than charting a new course through good faith diplomatic negotiations.

An effective IIA campaign should target three North Korean audiences: the regime elite, the second-tier leadership, and the North Korean people. Messaging focused on the regime elite should highlight that denuclearization offers the best hope of survival.

The second-tier leadership is a key target audience. It comprises military and party officials outside of the core regime elite who lack sufficient power to act alone but whose collective action during war, crisis, or regime collapse would influence the outcome of any contingency. In the military, this category includes brigade commanders and assistant commanders, commanders and assistant commanders of specialized units (intelligence, missile, and WMD), and key senior staff controlling logistics and transportation. The military second tier would also include senior General Political Bureau and Military Security Command officers assigned to the aforementioned commands. All told, the military second tier numbers approximately 250 personnel.

Finally, Ministry of State Security (secret police) and Ministry of People’s Security (national police) leaders in those same geographical districts also have enormous influence within their jurisdictions. They also number approximately 400 personnel.

After accounting for roughly 50 key scientists and project leaders of WMD programs, the second-tier leadership totals approximately 1,100 personnel. Each of these individuals has the potential – in critical contingencies – to resist guidance orders, stop or alter logistical and transportation actions, and neutralize elite-level action officers.232

The IIA campaign targeting this second-tier should focus on providing information and media that sow doubt regarding the regime elite and suggest that life could improve if the regime changed its policies. As renowned North Korea analyst Andrei Lankov has noted, informing North Koreans about “attractive alternatives to their current way of life” represents a key way to pressure the regime to change its behavior.233 In addition, messages to the second-tier leadership should highlight how they could play a positive role in a non-nuclear North Korea or a unified Korea.

IIA focused on the third target audience, the North Korean people, should prioritize foreign media. The widespread dissemination of foreign media has already created fissures between the everyday North Koreans and the regime elite, thereby weakening the government’s propaganda and information blockade.234 As the CSIS survey found, North Koreans who consume foreign media will likely continue seeking this information despite the potential consequences if they are caught.235 Moreover, continually injecting foreign media into North Korea

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232. Interview with Robert Collins on August 31, 2019, based on his research for numerous unclassified publications on the leadership of the North Korean regime.
will help break down the regime’s ideological controls while encouraging more independent thinking among everyday North Koreans.

Although the United States possesses IIA capabilities, they have not been deployed in a robust and well-coordinated manner. Voice of America (VOA) and Radio Free Asia pump news into North Korea via radio, television, and the internet. According to one North Korean escapee, VOA broadcasts are transcribed and provided to the regime elite, who represent up to 10 to 15 percent of North Korea’s 24 million population. Similarly, the Department of State’s Bureau of Democracy, Human Rights and Labor provides funding to nongovernmental organizations for “fostering the free flow of information into, out of, and within the DPRK.” Non-governmental organizations such as the Defense Forum Foundation support private efforts such as Free North Korea Radio. Given the relatively closed nature of North Korean society, however, it is difficult to assess how many of these programs are performing.

Moreover, an effective IIA campaign requires close coordination between the U.S. and ROK governments. However, Seoul has often undermined effective IIA tools, an approach rooted in the Moon administration’s belief that concessions lead to “better inter-Korean relations.” This belief ignores North Korea’s persistent failure to respond to such concessions with verifiable steps toward denuclearization. Washington therefore should remind Seoul that no prior intra-Korean agreements, such as the April Panmunjom Joint Declaration or the September Pyongyang Declaration, should encumber IIA against North Korea.

Alarmingly, South Korea has cracked down on activities by escapee and refugee organizations. This is particularly problematic because the efforts of such organizations likely represent the most effective IIA. They have been successful in getting information into the North by flying balloons and floating plastic bottles filled with USB drives and other material.

### Recommendations

The United States and South Korea should implement a comprehensive and aggressive IIA campaign in North Korea. The focus should be three-fold: create internal threats against the regime from among the elite, provide the second-tier leadership with alternative paths to survival, and prepare the Korean people for eventual unification under a United Republic of Korea. To do so, we recommend the following steps:

- **Develop organizational infrastructure to facilitate IIA:** The United States and South Korea lack a single organization to direct IIA against North Korea. Washington and Seoul should establish institutions that would work together to plan and shape combined IIA. Fortunately, as discussed earlier, the United States already has numerous tools at its disposal, such as the State Department’s Bureau of Democracy, Human Rights, and Labor; Voice of America; and Radio Free Asia. The United States should centralize these activities under an oversight organization. This organization would coordinate all agencies and departments and work with non-government organizations.

Under the Moon administration, there will likely be concerns that IIA could upset diplomatic conditions. Admittedly, an IIA campaign targeting Pyongyang could risk stirring additional short-term tensions with Pyongyang. But U.S. diplomats should remind their ROK counterparts that those tensions may ultimately forge a path to the peaceful

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240. See the work of Suzanne Scholte and the Defense Foundation Forum, available at: https://www.defenseforumfoundation.org
denuclearization of North Korea. U.S. diplomats also need to remind their South Korean allies that Seoul’s persistent use of concessions has not elicited progress with Pyongyang.

- **Encourage Moon’s government to increase intra-Korean people-to-people exchanges**: Washington should encourage intra-Korean engagement by sponsoring people-to-people educational and cultural exchanges. Such exchanges could expose North Korea’s intelligentsia and emerging elites to democratic concepts as well as personal relationships with South Koreans.241

- **Implement aggressive IIA targeting the North Korea regime**: After building a baseline consensus, the United States and South Korea should implement increasingly aggressive IIA targeting the North Korean regime. These activities should inform North Koreans of their universal human rights and civil liberties that the regime is failing to respect. This will undermine the legitimacy of the Kim family regime and give hope to the people living in the North. Alternate sources of information can put regime propaganda in perspective. This campaign could also help lay the initial groundwork for emergent leaders who could replace Kim and who might seek to unify with the South as equal partners under the values of individual liberty and freedom, liberal democracy, and a free market economy. At a minimum, this campaign could help persuade Kim that the status quo poses a greater threat than good faith negotiations with the United States and South Korea. The ultimate goal is to create internal divisions and threats that will influence Kim to denuclearize.

- **Increase exposure of North Koreans to the outside world**: IIA must exploit North Koreans’ growing access to DVDs, USB drives, and smart phones from outside the country.242 These media devices can carry content popular among North Koreans, such as South Korean dramas, which can implicitly help Koreans in the North better understand the difference between the regime they have and the government they deserve.243

- **Establish a Korea Defector Information Institute (KDII)**: There is no single organization in the United States or South Korea that harnesses the information of defectors to support IIA. If both nations worked together to establish a KDII, it could serve as a repository for defector information to inform policymakers, strategists, and those responsible for developing IIA themes and messages. This institute should utilize defector knowledge and advice in devising appropriate messages and communications techniques. It could also encourage North Koreans to defect, particularly members of Office 39 (also known as Department 39), who are knowledgeable of the Kim family regime’s finances.

- **Provide military support to ROK-U.S. government programs for IIA**: U.S. Psychological Operations (PSYOP) forces should be deployed on a permanent basis to support ROK PSYOP forces as part of a national-level alliance IIA campaign. ROK and U.S. PSYOP forces should advise and assist defector organizations to synchronize themes, messages, and dissemination methods to ensure unity of effort.

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U.S. and ROK national security interests require that Washington and Seoul not permit Kim to drag out the status quo indefinitely. In the short term, if he fails to demonstrate good faith with tangible steps toward relinquishing his nuclear, biological, and chemical weapons, the United States should lead an international campaign to implement a new maximum pressure campaign. Similarly, if Kim resumes ICBM or nuclear testing, the administration should initiate the new campaign.

To be successful, maximum pressure 2.0 should include diplomatic, military, cyber, economic and financial sanctions, and information and influence activities. There will undoubtedly be challenges associated with implementation. And no plan fully survives contact with the adversary. But this campaign offers the best hope of securing American, South Korean, and international interests on the Korean Peninsula without war.
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Cover Illustration: Daniel Ackerman / FDD
Cover Photos: Ed Jones / AFP via Getty; STR / AFP via Getty
About The Authors

**Dr. David Asher** is a senior fellow at FDD and on the board of advisors of FDD’s Center on Economic and Financial Power. He is well known as one of the most experienced subject matter experts to the U.S. government on countering money laundering, terrorism financing, and sanctions evasion schemes. Over the last 25 years he has played a senior role in many economic and financial pressure campaigns involving defiant states, terrorist organizations, drug cartels, and weapons proliferation networks. From 2001 to 2005, he was senior advisor for East Asian and Pacific affairs at the State Department, special coordinator of the State Department’s North Korea Working Group, co-chair of the North Korea Activities Group policy coordinating committee for the National Security Council, and U.S. delegation adviser to the Six Party Talks. He developed and oversaw the global targeting and disruption of the Kim Jong Il regime’s financial, illicit trading and WMD networks. He was also the strategic architect of the September 2005 designation of Banco Delta Asia in Macao. He is chairman of Sayari Analytics, a financial intelligence and commercial data provider.

**Bradley Bowman** serves as senior director of the Center on Military and Political Power (CMPP) at the Foundation for Defense of Democracies. He has served as a national security advisor in the U.S. Senate to members of the Senate Armed Services and Foreign Relations Committees, as well as an active duty U.S. Army officer, pilot, and assistant professor at West Point. Bradley has nearly nine years of experience in the U.S. Senate. This includes working for two years as national security advisor to U.S. Senator Todd Young (IN), a member of the Senate Foreign Relations Committee. Bradley served for six years as national security advisor (formerly military legislative assistant) to U.S. Senator Kelly Ayotte (NH), chair/ranking member of the Senate Armed Services Readiness and Management Support Subcommittee. He also worked as a Council on Foreign Relations international affairs fellow on the Senate Foreign Relations Committee. Prior to working in the Senate, Bradley served as an active duty officer in the U.S. Army for more than fifteen years, including positions as a company commander, “Blackhawk” pilot, assistant professor in the Department of Social Sciences at West Point, congressional affairs officer on the Army staff in the Pentagon, and staff officer in Afghanistan.

**Annie Fixler** is the deputy director of FDD’s Center on Cyber and Technology Innovation, contributing to the cyber-enabled economic warfare project and the Transformative Cyber Innovation Lab. She works on issues related to the national security implications of cyberattacks on economic targets, adversarial strategies and capabilities, and U.S. cyber resilience. She also contributes to the work of FDD’s Center on Economic and Financial Power on offensive and defensive tools of economic coercion. Prior to joining FDD, Annie served as the director of public affairs at a strategic communications and public affairs firm based in Washington, DC. She also worked for the American Israel Public Affairs Committee (AIPAC) in Washington as a senior research analyst and gained expertise in congressional affairs and Middle East policy. Annie earned her BA in International Affairs from The George Washington University.
Mathew Ha is a research associate at FDD focusing on North Korea. He studies North Korea’s illicit financing, human rights, the U.S.-Korea alliance, and inter-Korean relations. He brings experience working with the Korea Chair at the Center for Strategic and International Studies and the Committee for Human Rights in North Korea. He completed an MA in Asian Studies at Georgetown University with a concentration in Politics and Security and the Korean peninsula. He holds a BA in World Politics from Hamilton College.

Eric Lorber is the senior director of FDD’s Center on Economic and Financial Power. He is also a director at the Financial Integrity Network, where he advises global financial institutions on issues related to sanctions and anti-money laundering/combating the financing of terrorism (AML/CFT) compliance. Previously, Eric was a senior advisor to the under secretary for terrorism and financial intelligence (TFI) at the United States Department of the Treasury, where he provided strategic guidance on U.S. sanctions and AML/CFT policies. Earlier in his career, he was an attorney at Gibson, Dunn & Crutcher, where he advised clients in the areas of international trade regulation, compliance, and anti-corruption. His articles and commentary on sanctions and related issues have appeared widely in the press and academic journals. He has testified before the United States Senate Judiciary Committee, Senate Banking Committee, and the House Financial Services Committee on sanctions-related issues, and is a term member at the Council on Foreign Relations.

David Maxwell is a senior fellow at FDD. He is a 30-year veteran of the United States Army, retiring in 2011 as a special forces colonel with his final assignment serving on the military faculty teaching national security strategy at the National War College. He has served in various command and staff assignments in the infantry in Germany and Korea as well as in special forces at Ft. Lewis, Washington; Seoul, Korea; Okinawa, Japan; and the Philippines, with total service in Asia of more than 20 years. He served on the United Nations Command / Combined Forces Command / United States Forces Korea CJ3 staff where he was a planner for UNC/CFC OPLAN 5027-98 and co-author of the original ROK JCS – UNC/CFC CONPLAN 5029-99 (North Korean Instability and Collapse) and later served as the director of plans, policy, and strategy (J5) and the chief of staff for Special Operations Command Korea (SOCKOR). From 2000 to 2002 he commanded 1st Battalion, 1st Special Forces Group (Airborne) in Okinawa, Japan. He has been the G3 and chief of staff of the US Army Special Operations Command. He commanded the Joint Special Operations Task Force-Philippines in 2006-2007.
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