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“Empty Threat or Serious Danger: Assessing North Korea’s Risk to the Homeland”

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Chairman Perry, Ranking Member Correa, and distinguished members of the Subcommittee:

It is my honor to testify on the Weapons of Mass Destruction threat posed to the United States by North Korea. The views expressed in this testimony are my own and do not reflect those of the National Defense University or the Department of Defense.

As to the seriousness of the dangers posed by the North Korean WMD arsenal to the U.S. homeland I would say, “We do not yet face a clear and present existential threat to the American homeland, but we are getting closer each day. The threat will be very real very shortly-- but it is nevertheless potentially manageable if we take the appropriate steps.”

North Korea is not a new threat that has suddenly developed; the United States has been dealing with North Korea for 67 years. For most of that time, the challenges posed by North Korea remained isolated to the Korean peninsula and Northeast Asia. Then particularly after the fall of the Soviet Union, North Korean arms sales particularly in the Middle East and African turned them into a global proliferation concern aiding other rogue regimes, such as Syria and Iran. With respect to North Korean WMD development, the North Korean leadership has long recognized the conventional military advantage the United States-Republic of Korea alliance maintains on the land, in the sea, and in the air. Therefore, Kim Il-Sung looked to develop asymmetric advantages, first through the development of chemical and possibly biological weapons, and subsequently through its extensive nuclear and missile programs.

Nuclear

Over the past forty years, North Korea has invested heavily in the development of ballistic missiles and nuclear weapons as a strategic capability. Additionally, the ballistic missile program provides real warfighting capabilities and a commodity that generates income for the state and the nuclear weapons program through sales to a myriad of countries to include Syria and Iran.

In May 2016, Kim Jong-un established the nuclear weapons program and economic growth as the two pillars of North Korean strength.¹ Under Kim Jong-un’s leadership, North Korea’s intermediate range ballistic missile (IRBM) and intercontinental ballistic missile (ICBM) testing has increased in frequency and success. While it may seem like a normal action for a nation to “develop, test, verify, and then field” a missile program, it is a shift for North Korea, which had previously fielded entire systems with little or no testing. Such a shift marks a change from North Korea being concerned about the appearance of its missile programs to being concerned about its efficacy of its missiles. The takeaway from the 77 tests since January 2014 (compared to 36 in the preceding 29 years) is that Kim Jong-un, unlike his father, has not been

afraid to fail, sometimes even catastrophically, which has been the key to learning and advancement in the missile program in order to reach key operational thresholds.ⁱⁱ

For many years under Kim Il-sung and Kim Jong-il, the nuclear weapons development process moved along at a deliberate pace. This offered opportunities for the United States to attempt to negotiate a halt to its progress through trade-offs and incentives. The nuclear tests in 2006 and 2009 acted as an inflection point in the international community's efforts to halt the nuclear program. Since Kim Jong-un has taken power, North Korea has conducted four tests, with the September 3, 2017 test having a yield of roughly 140 kilotons, or nearly ten times larger than the bomb dropped on Hiroshima.ⁱⁱⁱ

These recent and successful ballistic missile and nuclear weapons tests suggest that North Korea is close to completing the development of a functional road mobile ICBM capable of delivering a nuclear warhead to the continental United States. There are still several questions about the program ranging from 'how many ICBMs does Kim Jong-un plan to build', to 'how will North Korea control and safeguard the arsenal', and 'will North Korean behavior change'. We should remember that North Korea has been working at this for quite some time and while estimates range from ten to twelve weapons to thirty to sixty weapon, the important point is Kim Jong-un is beyond having a weapon he can brandish, but now has a growing stockpile and he will develop a doctrine to employ it.^{ivv} Not all weapons will use their most sophisticated designs, but it is almost a certainty that, if it chooses, North Korea can employ nuclear weapons today. This use could take multiple forms, such as defensively within North Korea or on short-range missiles against targets in South Korea or Japan or by cargo ship or plane to other locations within the surrounding region. North Korea could use whatever miniaturized warheads they have on intermediate range Hwasong-12 IRBMs capable of reaching Guam or on Hwasong-14 ICBMs capable of reaching the Continental United States. While the reliability, accuracy, and survivability upon reentry of the fully mated system is questionable, North Korea could still mount and attempt to deliver such munitions in times of crisis.

Chemical

North Korea maintains a large, operationally ready stockpile of persistent and non-persistent chemical warfare agents capable of delivery via artillery, rockets, missiles and aerial bombs. The program probably consists of the traditional chemical warfare agents mustard, lewisite, and both G-series and V-series nerve agents and fits the profile of a warfighting chemical weapons program intended for defensive and offensive employment along the demilitarized zone and against U.S. and ROK airbases and seaports to halt or slow down the flow of reinforcements and logistics.^{vi,vii} The geography of the Korean peninsula allows for a strategic employment of chemical weapons against unprotected civilians by long-range artillery in the Kaesong Heights against the 25 million people in Seoul and by ballistic missiles further north against other South Korean cities, such as Busan. This type of chemical weapons use by North Korea during a conflict in Northeast Asia would almost assuredly result in casualties to some of the 140,000 American citizens living in the Republic of Korea. These casualties would be not only U.S. Service Members, but also family members, Americans working abroad and traveling as tourists. The total number of civilians the U.S. could be required to evacuate could swell to 230,000, with some being potentially chemical casualties requiring transportation to the United States for long-term care. While the military would do everything possible to prevent the

unintentional transfer of contaminated materials to the United States, there will be a need for close coordination with Customs and Border Protection, the Environmental Protection Agency, and state regulators.

Of particular interest to the Departments of Homeland Security, Commerce, State, and Justice is the latest development regarding North Korea's chemical weapons program—and most brazen proof of the program's existence: the use of VX nerve agent to assassinate Kim Jong-nam in Kuala Lumpur, Malaysia on February 13, 2017. This attack indicates a willingness to use chemical weapons in unconventional ways and an ability to transport chemical agents across borders without being caught.^{viii} North Korea has a long established history of using front companies and their embassies to proliferate conventional arms, drugs and counterfeit money. North Korea could use these same connections to transport chemical weapons through the Middle East, Africa, or South America to agents in the U.S. homeland or to sell chemical weapons to violent extremists who could then attack American interests globally. While North Korea's goal presumably would be to achieve a greater impact than a single assassination, they would not be able to achieve an attack in any way close to the scale of massed artillery fire into Seoul; however, they could still disrupt daily American life, and create mass panic and fear.

Biological

We know far less about North Korea's biological weapons program. Even though it is a member of the Biological and Toxins Weapons Convention, it is believed to maintain the ability to conduct research and possibly produce some small amounts of biological agents.^{ix} Attempts by North Korea to smuggle biological agents into the U.S. would be challenging. Unlike chemical weapons, where the chief concern of the smuggler is with the shipping container breaking or leaking, with biological pathogens the virus or bacteria must be kept alive during transportation. A viable biological agent dissemination method must also be available. Biological agents, particularly toxins, have proven useful in assassinations, but to date they have not proven to be effective, nor necessarily sought after, for large-scale attacks.

North Korean Rationale for WMD

When considering the threat posed, it is important to understand why North Korea believes they need Weapons of Mass Destruction. While no one possess reliable insight into what or how Kim Jong-un thinks, we can reasonably surmise that his primary objectives remain - and will remain - his personal survival and the continued existence of a Kim-led regime. To that end, watching the demise of Saddam Hussain and Muammar Gaddafi could have led him to believe that he is more likely to remain in power by retaining an operational nuclear and chemical weapons capability to deter attack by the Republic of Korea and the United States. In order for North Korea to establish a deterrent, it must demonstrate a credible capability consisting of accurate and reliable missiles fitted with functional nuclear warheads. In the North Korean view, the fielding of this capability will change past rhetoric about attacking the U.S. into a real deterrent message. Therefore, we should not expect Kim Jong-un to halt his development until he feels he has adequate weapons systems to impose enough cost on the United States that we will not attempt a regime change. Since this is all about his perception of a U.S. threshold, he may have no realistic view of what size arsenal he needs. Therefore, it is difficult to predict how many nuclear weapons North Korea could eventually possess.

Next, we know North Korea is intent on decoupling the United States from the Republic of Korea and ultimately breaking the U.S.-ROK alliance. Kim Jong-un likely believes that by placing our homeland at risk, the U.S. will abandon South Korea should a conflict arise, or at least be too pre-occupied with homeland defense to adequately reinforce the Korean peninsula. To support this effort, North Korea has released propaganda videos showing attacks against major U.S. cities and key military bases. They understand the military utility in preventing U.S. Forces from reaching Korea and they believe that the U.S. Government is unwilling to trade Los Angeles or Seattle for Seoul. While there have been countless heinous acts committed by the Kim dynasty, in retrospect its foreign policy over the past twenty years has proven to have a certain rationality. Kim Jong-il used provocations to garner international assistance and Kim Jong-un uses provocations to shore up domestic support. Both father and son believed they could manage the level of escalation and end the provocation cycle before crossing a threshold that would lead to war. From Kim Jong-un's perspective, he may believe possessing nuclear weapons raises the U.S. threshold for war and allows him political space to engage in greater provocative actions in the region. Therefore, it is very possible that the United States will face an even more emboldened and belligerent North Korea.

Given these assumptions on North Korea's strategic aims and views on provocations, the challenge becomes, "What will lead to North Korean WMD employment and what does this mean for homeland security? Will Kim Jong-un only use nuclear weapons in a first strike and if so what indications will we have that he is planning an attack? What will be Kim Jong-un's priority targets for nuclear weapons employment?" Aspects of these answers are tied to how the United States reacts to the threat.

So what can the United States do?

The U.S. approach must be multi-faceted and include global isolation of North Korea, a strengthened homeland, and a modern approach to deterrence. Beginning overseas, the United States economic links and military posture are essential to demonstrate to North Korea and our allies U.S. permanency as a trans-Pacific leader. While sanctions against North Korean elites are important to raising pressure inside Pyongyang, financial, diplomatic, and informational pressure must be applied to cut off potential licit and illicit trading partners around the world. The Kim regime provides ample evidence that the U.S. can use to influence all legitimate governments or businesses to choose to forego any commercial or political support of North Korea.

Next, the United States must be prepared to protect all of our territory from a North Korean attack and respond should one occur. Ballistic missile defense is an important part of our overall strategy as it provides a layer of protection, but as with any shield, it is not perfect. The technological challenges associated with shooting down missiles in flight and the sheer scope of trying to stay ahead of a rapidly growing threat are enormous. This is an area that I know garners a lot of attention in both the House and Senate and I admit to not being an expert in this field, so I encourage you to meet with the right experts on what more can or should be done.

Many of the actions the United States has taken domestically to prepare for the risks associated with a terrorist chemical or biological weapons attack would also help in the event of a covert attack by North Korea. However, we should continue to review and enhance our nuclear preparedness posture. For instance, our current preparedness planning assumes single small-scale

terrorist devices; we should plan for and exercise responses to larger scale attacks, perhaps with multiple nuclear weapons, that would quickly overwhelm our ability to manage the consequences of such a campaign. We saw how difficult it was to respond to the three hurricanes that recently struck U.S. territory only weeks apart. While it is easy to say, “America can do anything”, I am not sure we have really grasped how difficult it would be to deal with three nuclear detonations on the homeland. This response would require a level of federal, state, and local coordination never seen before. A different yet equally difficult response would be an attack against Guam or Hawaii. Responses to either of these islands would require immediate lifesaving actions, short-term relief efforts and long-term rebuilding. All three of those areas can easily be crippled by the realities of time, distance, and the limitation of moving most logistics by ship.

As with past and current deterrence challenges, such as with the Soviet Union during the Cold War and Russia and China today, the United States should take this threat seriously, but not overreact. We have to tailor our deterrent approach to the unique challenge North Korea poses with nuclear, chemical, and potentially biological weapons programs capable of being employed against U.S. vital interests both abroad and in the homeland. Global isolation, ballistic missile defense, and domestic preparedness are all vital to deterring North Korea. Kim Jong-un must understand that any conflict with the United States or our allies will cost him the things he holds most valuable and that the United States will deny him the effects he seeks to achieve. Rather than seeing nuclear threats against the United States as a means to separate our alliances, he should see how it strengthens our alliances and our resolve. Such resolve is demonstrated not with words, but by deeds: proper resourcing, training, and exercising of our response force; exercising our local, state, and national response frameworks; demonstrating our ballistic missile defenses; ensuring that our critical infrastructure is hardened against the effects of a nuclear attack; and finally possessing a ready, reliable, and survivable nuclear triad.

Chairman Perry, Ranking Member Correa, thank you for the opportunity to share my views with the subcommittee and I look forward to your questions.

ⁱ James Pearson, “North Korea Leader Kim Sets Five-Year Economic Plan, Vows Nuclear Restraint,” *Reuters*, May 8, 2016, <http://www.reuters.com/article/us-northkorea-congress-idUSKCN0XY0QB>

ⁱⁱ Nuclear Threat Initiative, *The North Korean Missile Test Tracker*, <http://www.nti.org/analysis/articles/cns-north-korea-missile-test-database/>, accessed October 10, 2017.

ⁱⁱⁱ Panda, Ankit, “US Intelligence: North Korea's Sixth Test Was a 140 Kiloton 'Advanced Nuclear' Device”, *The Diplomat*, September 6, 2017, <https://thediplomat.com/2017/09/us-intelligence-north-koreas-sixth-test-was-a-140-kiloton-advanced-nuclear-device/>

^{iv} Deb Riechmann and Matthew Pennington, “Here's Why It's Hard to Pin Down the Actual Size of North Korea's Nuclear Arsenal”, *Time*, August 18, 2017, <http://time.com/4906219/north-korea-nuclear-weapons-how-many/>

^v Shane Smith, “North Korea’s Nuclear Futures Series: North Korea’s Evolving Nuclear Strategy”, AUGUST 2015, <http://www.38north.org/2015/08/nukefuture082415/>

^{vi} “North Korea: Chemical Program,” Nuclear Threat Initiative, Last modified December 2015, <http://www.nti.org/learn/countries/north-korea/chemical/>.

^{vii} Emma Chanlett-Avery et al, “*North Korea: U.S. Relations, Nuclear Diplomacy, and Internal Situation*,” Congressional Research Service, January 15, 2016, pg. 13.

^{viii} Executive Council Decision (EC-84/DEC.8), Organization for the Prohibition of Chemical Weapons (OPCW), March 9, 2017, https://www.opcw.org/fileadmin/OPCW/EC/84/en/ec84dec08_e.pdf.

^{ix} North Korea: Biological Program, Nuclear Threat Initiative, December 2015, <http://www.nti.org/learn/countries/north-korea/biological/>.