

MILITARY AND SECURITY DEVELOPMENTS INVOLVING THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

REPORT TO CONGRESS

2015

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Military and Security Developments Involving the Democratic People's Republic of Korea 2015

*A Report to Congress
Pursuant to the National Defense Authorization Act
for Fiscal Year 2012*

Section 1236 of the National Defense Authorization Act for Fiscal Year 2012, Public Law 112-81, as amended by Section 1292 of the National Defense Authorization Act for Fiscal Year 2013 and Section 1245 of the National Defense Authorization Act for Fiscal Year 2014, provides that the Secretary of Defense shall submit a report "in both classified and unclassified form, on the current and future military power of the Democratic People's Republic of Korea" (DPRK). The report shall address an assessment of the security situation on the Korean Peninsula, the goals and factors shaping North Korean security strategy and military strategy, trends in North Korean security, an assessment of North Korea's regional security objectives, including an assessment of the North Korean military's capabilities, developments in North Korean military doctrine and training, an assessment of North Korea's proliferation activities, and other military security developments.

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EXECUTIVE SUMMARY

The Democratic People's Republic of Korea (DPRK or North Korea) remains one of the most critical security challenges for the United States and the broader international community. In particular, North Korea's willingness to undertake provocative and destabilizing behavior, including attacks on the Republic of Korea (ROK), its continued development of nuclear weapons and long-range ballistic missiles, and its proliferation of weapons in contravention of United Nations Security Council resolutions (UNSCRs) pose a serious threat to the United States, the region, and the world.

Since assuming control in December 2011, Kim Jong Un has solidified his grip on power by embracing the coercive tools used by his father and grandfather. His regime has used force and the threat of force combined with inducements to quell domestic dissent and strengthen internal security; co-opt the North Korean military and elites; develop strategic military capabilities to deter external attack; and challenge the ROK and the U.S.-ROK Alliance. In April 2013, Kim announced the "byungjin" policy, which emphasizes the parallel development of the country's economy and nuclear weapons program, to reinforce his regime's domestic, diplomatic, economic, and security interests.

North Korea fields a large, conventional, forward-deployed military that retains the capability to inflict serious damage on the ROK, despite significant resource shortfalls and aging hardware. The U.S.-ROK Alliance has deterred large-scale conventional attacks by maintaining a robust combined defense posture and strong military readiness. On a smaller scale, however, the DPRK has demonstrated a willingness to use military provocation to achieve national goals. In August 2015, two North Korean landmines exploded in the Demilitarized Zone (DMZ), which seriously wounded two ROK soldiers, raised tensions on the Korean Peninsula for several weeks, and was resolved through high-level inter-Korean talks.

North Korea's continued pursuit of nuclear technology and capabilities and development of intermediate- and long-range ballistic missile programs underscore the growing threat it poses to regional stability and U.S. national security. North Korea's pursuit of a submarine-launched ballistic missile capability also highlights the regime's commitment to diversifying its missile force, strengthening the missile force's survivability, and finding new ways to coerce its neighbors. Furthermore, North Korea continues to proliferate ballistic missile technology prohibited under UNSCRs 1718, 1874, 2087, and 2094, exacerbating the security challenge for the United States and the international community.

Given the continued and growing threat from North Korea, its nuclear and missile programs, and its proliferation of related technology, the U.S. Department of Defense will continue to manage the North Korean security challenge through close coordination and consultation with the international community, particularly the ROK and Japan. The United States remains vigilant in the face of North Korea's continued provocations and steadfast in its commitments to allies in the region, including the extended deterrence commitments provided through both the nuclear umbrella and conventional forces.

CHAPTER ONE: ASSESSMENT OF THE SECURITY SITUATION

KEY DEVELOPMENTS IN NORTH KOREAN AND PENINSULAR SECURITY

Over the past year, the Democratic People's Republic of Korea's (DPRK or North Korea) leader Kim Jong Un has solidified his grip on power and continued to implement his broader national agenda. Kim has embraced the coercive tools used by his father and grandfather — force and the threat of force combined with inducements — to quell domestic dissent, strengthen internal security, and co-opt the North Korean military and elites. Under Kim's leadership, North Korea has continued to develop strategic military capabilities to deter external attack and challenge the Republic of Korea (ROK or South Korea) and the U.S.-ROK Alliance. In April 2013, Kim announced the “byungjin” policy, which emphasizes the parallel development of the country's economy and nuclear weapons program, to reinforce his regime's domestic, diplomatic, economic, and security interests.

In early 2015, Kim began reaching out diplomatically to Southeast Asia, Africa, and Russia to improve North Korea's economy, lessen its dependence on China, and counteract international efforts

to disparage the regime's human rights record. These efforts have had little success, and North Korea remains unable to significantly expand ties with foreign partners.

In August 2015, Kim undertook another coercive campaign against the ROK. Tensions on the Peninsula surged after North Korean landmines severely injured two ROK soldiers inside the Demilitarized Zone (DMZ) on August 4. In response, the ROK resumed the use of loudspeakers across the DMZ for propaganda broadcasts, the first time in over 11 years. In addition, the ROK placed military units on heightened alert, and U.S. Forces Korea adopted an enhanced watch posture. North Korea responded with loudspeaker broadcasts of its own. On August 20, ROK forces reported incoming artillery fire from North Korean units and responded by firing artillery into the DMZ. North Korea then issued an ultimatum demanding South Korea disable the loudspeakers. With tensions remaining high, the two sides met to discuss an end to the crisis. After more than 43 hours of high-level talks, North Korea expressed regret over the August 4 landmine incident, South Korea agreed to stop propaganda broadcasts, and both sides agreed to hold further talks on improving relations.

The two Koreas also agreed to hold family reunions, which took place on October 20-26. It is unlikely, however, that such engagement will prevent North Korea from undertaking another provocation should Kim so choose. Moreover, North Korea could return to confrontational behavior, such as conducting a ballistic missile launch or an unconventional attack on the ROK, at any time.

North Korea continues to advance its nuclear program. In September 2015, the DPRK's Atomic Energy Institute noted that its nuclear facilities in Yongbyon, including the uranium enrichment plant and reactor, have been "adjusted and altered," and that operations have restarted for the purpose of building its nuclear force.

North Korea has also maintained efforts to develop its nascent space program, likely as an attempt to provide a veneer of legitimacy to its ballistic missile program. In mid-September 2015, North Korea's National Aerospace Development Administration announced that it was pressing forward with development of weather and geostationary satellites and that more long-range space launches to place satellites into orbit would occur. North Korea's space-vehicle launches use ballistic missile technology similar to the type used in inter-continental ballistic missiles, which is prohibited by UNSCRs 1874, 2087, and 2094.

NORTH KOREAN SECURITY PERCEPTIONS

North Korean security perceptions have not substantially changed in the past two years. These include the expanding gap in national power compared to South Korea, North Korea's deepening political and economic isolation, the need to eliminate perceived internal threats to the Kim family, and a political culture that is defined by an unending existential struggle with outside forces.

The regime sees threats emanating from inside and outside the country. It does not trust regional actors, including China and Russia, nor does the regime trust its own population. The regime continues to portray a garrison state worldview of imminent threat, which serves to justify draconian internal security controls, vast expenditures on the military, and the continued unchallenged rule by the Kim regime.

Internally, the Kim regime seeks to maintain ideological control over a citizenry that is growing less reliant on the State because it is no longer the primary source of basic goods and services. The regime continues to prioritize ideological indoctrination, intimidation, and preferential treatment of the privileged elite in Pyongyang and of select military units.

CHAPTER TWO: UNDERSTANDING NORTH KOREA'S STRATEGY

STRATEGIC GOALS

North Korea's goals and strategies stem from the regime's political isolation, economic deprivation, and deteriorating conventional military, as well as the increasing political, economic, and military power of nearby states. The strategic goal of the regime is to ensure Kim family rule in perpetuity. The overarching national security objectives to achieve this goal under Kim Jong Un have remained largely consistent over the last two years: international recognition as a nuclear-armed state; maintenance of a viable deterrent capability; the simultaneous development of its economy and nuclear weapons program (i.e., the "byungjin" line); reinforcement of its military-first approach to domestic and foreign affairs ("songun"); tight control over communications, borders, movement, and trade; and reunification of Korea under North Korea's control. North Korea uses reunification with South Korea as a key component of its national identity narrative to validate its strategy and policies, and to justify sacrifices demanded of the populace. However, North Korea's leaders almost certainly recognize that achieving reunification under North Korean control is, for the foreseeable future, unattainable.

Songun (Military-First Ideology)

North Korea's *songun* or military-first ideology, a derivative of its *Juche* (self-reliance) ideology, elevates the Korean People's Army as the ultimate defender of the country's sovereignty and the main force of the revolution. Introduced in the mid-1990s by Kim Jong Il as a way to consolidate power and mitigate the precarious security environment following the death of Kim Il Sung and the dissolution of the Soviet Union, this policy co-opts the military by giving it primacy in the regime's domestic, foreign, economic, and social policy decision-making. The military is viewed as one and the same with the State and party, unified with the working class as the backbone of North Korean socialism. The Korean People's Army participates in all aspects of daily life and is prioritized in resource allocation. The military-first approach, which views military strength as the best way to deter and defend against foreign aggression, also bolsters the centrality of nuclear weapons to the regime's survival.

NATIONAL STRATEGY

Beyond its fundamental role as a guarantor of national and regime security, the North Korean military supports the Kim regime's use of coercive diplomacy as part of its larger foreign policy strategy. North Korea uses limited provocations — even those that are kinetic and lethal in nature, such as military actions and small-scale attacks — to gain psychological advantage in diplomacy and win limited political and economic concessions.

Closely tied to its coercive diplomatic strategy are North Korea's nuclear and ballistic missile programs. DPRK leaders see these programs as necessary for a credible deterrent capability essential to its survival, sovereignty, and relevance, and supportive of its coercive military threats and actions.

REGIONAL OBJECTIVES AND BEHAVIOR

North Korea remains focused on extracting economic aid and diplomatic concessions from the international community while defending against perceived threats to its sovereignty. Since 2013, North Korea has increased diplomatic overtures to other countries in an attempt to secure foreign investment and improve its economy, but such outreach has failed to produce meaningful gains due to international sanctions and stigmatization related to concerns about its nuclear weapons

program and human rights record. North Korea likely believes periodic “charm offensives” will eventually lead to improvements in regional relationships and gradual advancement of its strategic objectives.

In 2015, Kim Jong Un declined invitations to travel abroad to Moscow and Beijing for celebrations marking the 70th anniversary of the end of World War II, instead sending senior government officials. These important events could have afforded North Korea the opportunity to improve relations with its powerful neighbors, though during these visits Kim would have risked criticism of his nuclear program and unflattering comparisons to other world leaders in attendance.

Relations between North and South Korea remained stalled this year until the two sides met in August to resolve the confrontation resulting from the landmine attack. The ROK's responses may have surprised Kim Jong Un and led to the decision to deescalate the situation, but it is unclear whether continued talks will lead to a significant improvement in relations with Seoul.

North Korea remains dependent on China as its key economic benefactor, and North Korea's leaders are conscious that efforts to advance its nuclear and missile capabilities angers China. Nevertheless, the regime likely thinks China prioritizes the preservation of regional stability and will refrain from punishing North Korea too

severely or entirely cutting off diplomatic or economic ties.

North Korea also maintains friendly relations with Russia, though the relationship is less robust than North Korea's relationship with China. Long-stalled plans for the creation of a natural gas pipeline from Russia to South Korea through North Korea — a project that could earn North Korea millions of dollars annually in transit fees — have made little concrete progress in recent years.

North Korean relations with Japan thawed somewhat in 2013 when North Korea accepted a visit by a Japanese delegation and indicated it might be willing to discuss the longstanding issue of Japanese citizens abducted by North Korea in the 1970s and 1980s. In May 2014, the Japanese and North Koreans held official talks in Stockholm, Sweden, which

resulted in North Korea agreeing to re-open its investigation into the fate of the Japanese abductees and provide Japan with a report, in exchange for Japan easing some of its unilateral sanctions against North Korea. To date, however, North Korea has not provided Japan with any new substantive information. In August 2015, North Korea claimed to have a report but that the Japanese refused to receive it, a claim Japan denies. Regardless, Japan continues to seek resolution with North Korea on the abductee issue.

North Korea remains willing to disrupt temporarily relations with regional neighbors, including Russia and China, and absorb the associated cost when it believes coercive actions toward South Korea or the United States will advance its strategic objectives.

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CHAPTER THREE:

THE CAPABILITIES AND MODERNIZATION GOALS OF NORTH KOREA'S MILITARY FORCES

OVERVIEW

The North Korean military poses a serious threat to the ROK, its other neighbors, and U.S. forces in the region despite its many internal challenges and constraints, including deterioration of its conventional capabilities.

North Korea's national military strategy is designed to support its national security strategy by defending the Kim regime's rule and enabling the regime to conduct coercive diplomacy. This strategy relies heavily on deterrence, strategically through its nuclear weapons program and supporting delivery systems and conventionally by maintaining a large, heavily-armed, forward-deployed military that presents a constant threat to South Korea, especially the greater Seoul metropolitan area. These two aspects of its military strategy are meant to be mutually supporting; the threat posed by one is employed to deter an attack on the other.

North Korea's force modernization goals are aimed at maintaining the credibility of its conventional forces through more realistic training and the modest production of new systems; enhancing the credibility of its strategic deterrence by advancing its nuclear and missile

programs; and developing new or improved means to support its coercive diplomacy – most notably via its cyber and missile programs. North Korea directs its limited resources to areas where it sees the potential for localized comparative advantage.

Despite resource shortages and aging equipment, North Korea's large, forward-positioned military can initiate an attack against the ROK with little or no warning, minimizing the logistics strain it would incur if deploying forces from further away. The military retains the capability to inflict significant damage on the ROK, especially in the region from the DMZ to Seoul. Although North Korea is unlikely to attack on a scale that would risk regime survival by inviting overwhelming U.S.-ROK counterattacks, North Korea's threshold for smaller, asymmetric attacks and provocations is unclear. Recent provocations (e.g., the November 2014 cyber attack against Sony Pictures Entertainment and the August 2015 DMZ landmines incident) suggest that North Korea sees some value in such attacks. Indeed, North Korea's special operations forces (SOF), growing artillery, and missile forces provide significant capabilities for

small-scale attacks that could rapidly escalate into a larger scale confrontation.

North Korea is making efforts to upgrade select elements of its large arsenal of mostly outdated conventional weapons. It has reinforced long-range artillery forces near the DMZ and has a substantial number of mobile ballistic missiles that could strike a variety of targets in the ROK and Japan. However, the DPRK's force modernization will likely emphasize defensive and asymmetric attack capabilities to counter technologically superior ROK and U.S. conventional forces.

North Korea will likely continue to develop and test-launch missiles, including the Taepodong (TD)-2 intercontinental ballistic missile (ICBM)/ space-launch vehicle (SLV). North Korea's desire to enhance deterrence and defense and to improve its ability to conduct limited attacks against the ROK drives its road-mobile ICBM development, missile tests, and programs to improve unmanned aerial vehicles (UAV), denial and deception, cyber, electronic warfare, and submarines.

AN AGING FORCE...WITH EMERGING CAPABILITIES

The Korean People's Army (KPA) — a large, ground force-centric organization comprising ground, air, naval, missile, and SOF — has over one million soldiers in its

ranks, making it the fourth largest military in the world. Four to five percent of North Korea's 24 million people serve on active duty, and another 25 to 30 percent are assigned to a reserve or paramilitary unit and would be subject to wartime mobilization. With approximately 70 percent of its ground forces and 50 percent of its air and naval forces deployed within 100 kilometers of the DMZ, the KPA poses a continuous threat to the ROK and U.S. forces stationed there. The general disposition of the KPA has not changed in the last two years.

The KPA primarily fields legacy equipment, either produced in or based on designs from the Soviet Union and China dating back to the 1950s, 1960s, and 1970s. Although a few weapons systems are based on modern technology, the KPA has not kept pace with regional military capability developments. The KPA has not acquired new fighter aircraft in decades, relies on older air defense systems, lacks ballistic missile defense, its Navy does not train for blue water operations, and recently unveiled artillery systems include tractor-towed rocket launchers while most other countries are improving the mobility of such systems.

Kim Jong Un seems to prioritize the development of new weapons systems, as demonstrated by his numerous appearances with military units and research and development organizations. He has personally overseen land- and sea-based ballistic missile and anti-ship cruise

missile testing activity in 2014 and 2015. He has also overseen events designed to demonstrate the proficiency of his conventional military forces.

Ground. The KPA's ground forces are predominantly regular and light infantry units, supported by armor and mechanized units and heavy concentrations of artillery. These forces are forward-deployed, fortified in several thousand underground facilities, and include long-range cannon and rocket artillery forces that are capable of reaching targets in Seoul from their garrisons.

The ground forces possess numerous light and medium tanks, and many armored personnel carriers. The KPA's large artillery force includes long-range 170-mm guns and 240-mm multiple rocket launchers (MRL), many deployed along the DMZ posing a constant threat to northern parts of the ROK.

In October 2015, North Korea paraded what appears to be a large-caliber MRL — larger than its 240-mm MRL — that carries eight tubes on a wheeled chassis. In recent years, North Korea has unveiled other new ground force equipment, including tanks, artillery, armored vehicles, and infantry weapons. The display of these systems shows that North Korea continues to produce, or at least upgrade, limited types and numbers of military equipment.

Air and Air Defense. The North Korean Air Force (NKAF), a fleet of more than 1,300 aircraft that are primarily legacy Soviet models, is primarily responsible for defending North Korean air space. Its other missions include SOF insertion, transportation and logistics support, reconnaissance, and tactical air support for KPA ground forces. However, because of the technological inferiority of most of its aircraft fleet and rigid air defense command and control structure, much of North Korea's air defense is provided by surface-to-air missiles (SAMs) and anti-aircraft artillery (AAA).

The NKAF's most capable combat aircraft are its MiG-29s, procured from the Soviet Union in the late 1980s, its MiG-23, and its SU-25 ground-attack aircraft. However, the majority of its aircraft are less capable MiG-15s, MiG-17s, MiG-19s (F-6), and MiG-21s. The NKAF operates a large fleet of An-2 COLT aircraft, which are 1940s vintage single-engine, 10-passenger biplanes, likely tasked with inserting SOF into the ROK. The Air Force is rounded out with several hundred helicopters that would be used for troop transport and ground attack, including predominantly Mi-2/HOPLITE and some U.S.-made MD-500 helicopters obtained by circumventing U.S. export controls in 1985.

North Korea possesses a dense, overlapping air defense system of SA-2, SA-3, and SA-5 SAM sites, mobile SA-13 SAMs, mobile and fixed AAA, and numerous man-portable air-defense

systems like the SA-7. As the NKAF's aircraft continue to age, it increasingly relies on its ground-based air defenses and on hiding or hardening assets to counter air attacks. During a 2010 military parade, North Korea displayed a new mobile SAM launcher and accompanying radar, which bore external resemblance to the Russian S-300 and Chinese HQ-9.

North Korea publicized a March 2013 military live-fire drill that for the first time featured an unmanned aerial vehicle (UAV) in flight. The UAV appeared to be a North Korean copy of a Raytheon MQM-107 Streaker target drone. North Korean press coverage of the event described the UAV as being capable of precision strike by crashing into the target. The drill also featured the UAV as a cruise-missile simulator, which was then shot down by a mobile SAM.

Naval. The North Korean Navy (NKN) is the smallest of the KPA's three main services. This coastal force is composed primarily of numerous, though aging, small patrol craft that carry a variety of anti-ship cruise missiles, torpedoes, and guns. The NKN maintains one of the world's largest submarine forces, with around 70 attack-, coastal-, and midget-type submarines. In addition, the NKN operates a large fleet of air-cushioned hovercraft and conventional landing craft to support amphibious operations and SOF insertion. The force is divided into East and West Coast Fleets, which each operate a

variety of patrol craft, guided-missile patrol boats, submarines, and landing craft.

The NKN has displayed limited modernization efforts, highlighted by upgrades to select surface ships and a continued program to construct submarines. North Korea unveiled a new submarine in mid-2015, which it claims was developed domestically and can fire a ballistic missile.

Special Operations Forces. North Korean SOF are among the most highly trained, well-equipped, best-fed, and highly motivated forces in the KPA. As North Korea's conventional capabilities decline relative to the ROK and United States, North Korea appears to increasingly regard SOF capabilities as vital for asymmetric coercion.

Strategic SOF units dispersed across North Korea appear designed for rapid offensive operations, internal defense against foreign attacks, or limited attacks against vulnerable targets in the ROK as part of a coercive diplomacy effort. They operate in specialized units, including reconnaissance, airborne and seaborne insertion, commandos, and other specialties. All emphasize speed of movement and surprise attack to accomplish their missions. SOF may be airlifted by An-2 COLT or helicopters (and possibly Civil Air Administration transports), moved by maritime insertion platforms, or travel on foot over land or via suspected underground, cross-DMZ tunnels to attack

high-value targets like command and control nodes or air bases in the ROK.

Ballistic Missile Force. North Korea has several hundred short- and medium-range ballistic missiles (SRBMs and MRBMs) available for use against targets on the Korean Peninsula and Japan. A developmental intermediate-range ballistic missile (IRBM), though untested and unreliable as a weapon, could also be launched at targets in the region.

North Korea has an ambitious ballistic missile development program in addition to its deployed mobile theater ballistic missiles. Since early 2012, North Korea has made efforts to raise the public profile of its ballistic missile command, now called the Strategic Rocket Forces. In 2014, Kim Jong Un personally oversaw several ballistic missile launch exercises, and North Korea launched an unprecedented number of ballistic missiles. The State media covered the usually secretive events, including reporting on two launch cycles in the same week. Kim's public emphasis of the missile force continued into 2015, when he appeared at what North Korea portrayed as the test launch of a submarine-launched ballistic missile (SLBM). In late November 2015, the ROK's Yonhap news agency reported that North Korea appeared to conduct an SLBM test but it ended in failure with no indication that the missile successfully ejected from the vessel.

North Korea is committed to developing a long-range, nuclear-armed missile that is capable of posing a direct threat to the United States. Pyongyang displayed the KN08 ICBM, which it refers to as Hwasong-13, on six road-mobile transporter-erector-launchers (TEL) during military parades in 2012 and 2013. If successfully designed and developed, the KN08 likely would be capable of reaching much of the continental United States, assuming the missiles displayed are generally representative of missiles that will be fielded. However, ICBMs are extremely complex systems that require multiple flight tests to identify and correct design or manufacturing defects. Without flight tests, the KN08's current reliability as a weapon system would be low. In October 2015, North Korea paraded four missiles on KN08 TELs. These missiles are noticeably different from those previously displayed on these TELs.

North Korea also continues to develop the TD-2, which could reach the continental United States if configured as an ICBM. In April and December 2012, North Korea conducted launches of the TD-2 configured as a SLV, which used ballistic missile technology. The April launch failed but the December launch succeeded.

Developing an SLV contributes heavily to North Korea's long-range ballistic missile development, since the two vehicles have many shared technologies. However, a space launch does not test a reentry vehicle (RV). Without an RV capable of

surviving atmospheric reentry, North Korea cannot deliver a weapon to target from an ICBM.

Advances in ballistic missile delivery systems, coupled with developments in nuclear technology discussed in Chapter 4, are in line with North Korea's stated objective of being able to strike the U.S. homeland. North Korea followed its February 12, 2013 nuclear test with a campaign of media releases and authoritative public announcements reaffirming its need to counter perceived U.S. hostility with nuclear-armed ICBMs. North Korea continues to devote scarce resources to these programs, but the pace of its progress will also depend, in part, on how much technology and other aid it can acquire from other countries.

Cyberwarfare Capabilities. North Korea has an offensive cyber operations (OCO) capability. Implicated in malicious cyber activity and cyber effects operations since 2009, North Korea probably views OCO as an appealing platform from which to collect intelligence and cause disruption in South Korea and other adversaries including the United States. North Korea likely views cyber as a cost-effective, asymmetric, deniable tool that it can employ with little risk from reprisal attacks, in part because its networks are largely separated from the Internet and disruption of Internet access would have minimal impact on its economy. On November 24, 2014, North Korean cyberactors using the name "Guardians of Peace" attacked

Sony Pictures Entertainment, shutting down employee access and deleting data. As a result of North Korea's historical isolation from outside communications and influence, it is likely to use Internet infrastructure from third-party nations.

Intelligence Services. North Korean intelligence and security services collect political, military, economic, and technical information through open-source, human intelligence, cyber, and signals intelligence capabilities. North Korea's primary intelligence collection targets remain South Korea, the United States, and Japan.

The Reconnaissance General Bureau (RGB) is North Korea's primary foreign intelligence service, responsible for collection and clandestine operations. The RGB is comprised of six bureaus with compartmented functions including operations, reconnaissance, technology and cyber, overseas intelligence, inter-Korean talks, and service support.

The Ministry of State Security (MSS) is North Korea's primary counterintelligence service and is an autonomous agency of the North Korean government reporting directly to Kim Jong Un. The MSS is responsible for operating North Korean prison camps, investigating cases of domestic espionage, repatriating defectors, and conducting overseas counterespionage activities in North Korea's foreign missions.

The United Front Department (UFD) overtly attempts to establish pro-North Korean groups in South Korea such as the Korean Asia-Pacific Committee and the Ethnic Reconciliation Council. The UFD is also the primary department involved in managing inter-Korean dialogue and North Korea's policy toward South Korea.

The 225th Bureau is responsible for training agents to infiltrate South Korea and establishing underground political parties focused on fomenting unrest and revolution.

Command, Control, and Communications.

North Korea's National Defense Commission (NDC) is the official authority over the North's military and security services. The Ministry of People's Armed Forces (MPAF) is the administrative superior of the KPA, while operational command and control is exercised by the General Staff Department. The 1992 constitution gives control of North Korea's military to the NDC, and Kim Jong Un exercises control of the military as "First Chairman" of the NDC and "Supreme Commander" of the KPA. Kim Jong Un further exercises control as "First Secretary" of the Korean Worker's Party (KWP) and "Chairman" of the KWP's Central Military Commission.

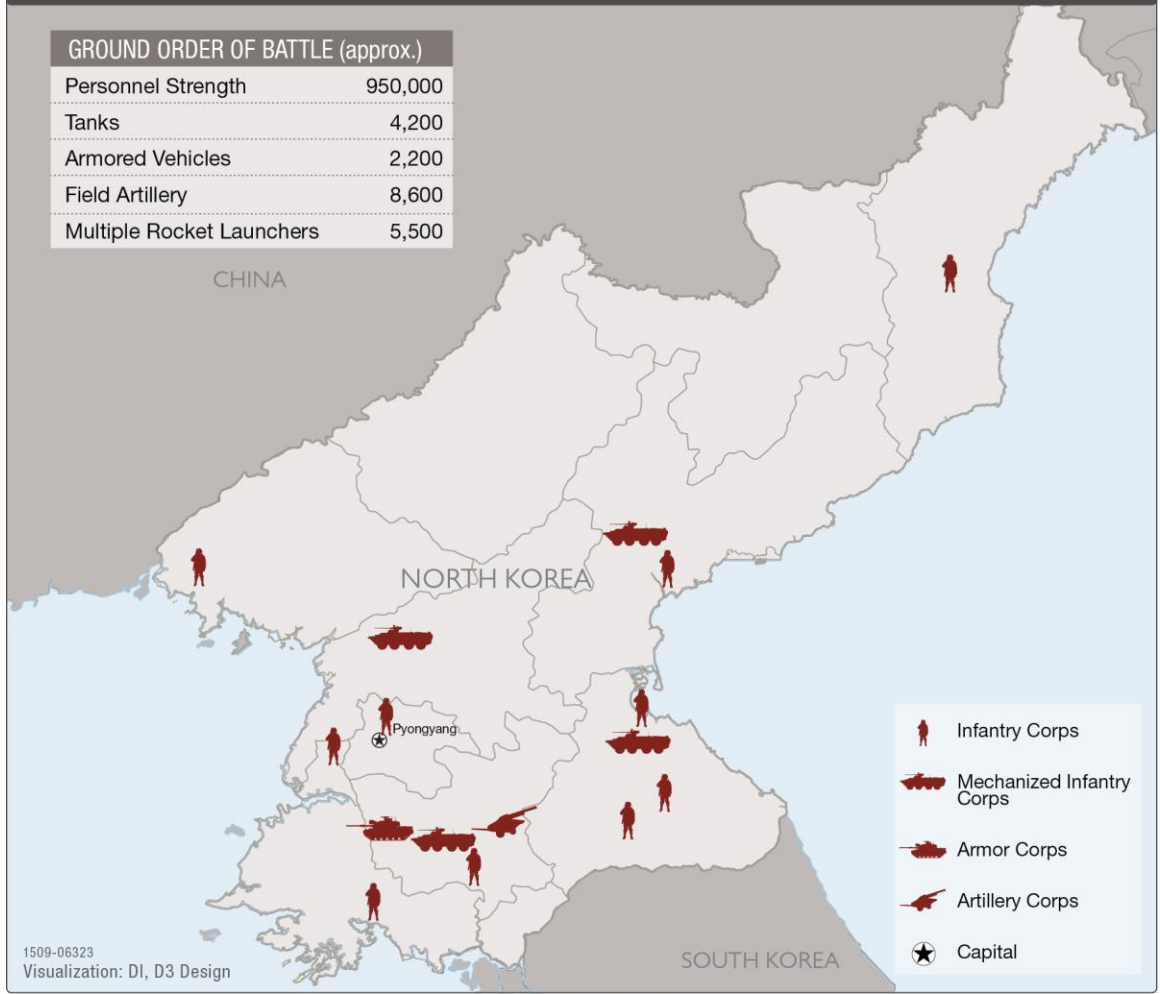
North Korea has a nationwide fiber-optic network, and has invested in a modern

nationwide cellular network. However, telecommunication services and access are strictly controlled and all networks are available for military use, if necessary.

Cell phone subscribership reportedly exceeds three million nationwide with continued growth of Koryolink, a joint venture between Pyongyang and Egypt's Global Telecom Holding. Mobile phone users are concentrated in major cities, with growth in small towns and villages. However, most cell phones cannot access the Internet and can only make domestic calls. In 2014, Orascom suggested the future of Koryolink was uncertain, in part because the North Korean Government had launched a competing cellular network. In addition, Global Telecom cited international sanctions and the absence of a free-floating currency exchange as impediments to the transfer of its profits out of North Korea. This could sour further investment by global investors into North Korea's telecoms sector. The Government restricts most North Koreans from using the Internet, but some are able to access the national intranet, which is insulated from the World Wide Web. The intranet hosts government-approved websites, primarily to support academic research and government businesses.

(U) North Korean Ground Forces

GROUND ORDER OF BATTLE (approx.)	
Personnel Strength	950,000
Tanks	4,200
Armored Vehicles	2,200
Field Artillery	8,600
Multiple Rocket Launchers	5,500



(U) North Korean Air Forces

AIR ORDER OF BATTLE (approx.)	
Personnel Strength	110,000
Combat Aircraft	over 800
Helicopters	300
Transport Aircraft	over 300



(U) North Korean Naval Forces

NAVAL ORDER OF BATTLE (approx.)	
Personnel Strength	60,000
Submarines	70
Patrol Combatants	430
Amphibious Landing Craft	260
Mine Warfare Vessels	20
Support/Auxiliary Vessels	40



1509-06323
 Visualization: DI, D3 Design

North Korean Ballistic Missile Forces		
System	# of Launchers	Estimated Range
Toksa	Fewer than 100	75 miles
SCUD-B		185 miles
SCUD-C		310 miles
SCUD-ER		435-625 miles
No Dong	Fewer than 50	800 miles
IRBM	Fewer than 50	2,000+ miles
TD-2	Unknown*	3,400+ miles**
SLBM	At least 1	Unknown
KN08	At least 6	3,400+ miles**

Note: North Korea has produced its own version of the SCUD B, and the SCUD C, an extended-range version of the SCUD B. North Korea will continue using and improving the TD-2, which has only been used in a space-launch role, but could reach the United States with a nuclear payload if developed as an ICBM. North Korea is also developing the KN08 road-mobile ICBM and has paraded six launchers for the system. The KN08, an IRBM, and an SLBM have not been flight-tested and their current reliability as weapon systems would be low.

* Launches of the TD-2 have been observed from both east and west coast launch facilities.

** ICBM is defined as a ballistic missile (land-based) capable of a range in excess of 5,500 kilometers (or 3,418 miles).

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CHAPTER FOUR: WEAPONS OF MASS DESTRUCTION PROGRAMS AND PROLIFERATION

NORTH KOREA'S WMD PROGRAMS

Nuclear Weapons. North Korea continues to pursue a nuclear weapons program, having conducted nuclear tests in 2006, 2009, and 2013. In April 2013, less than two months after its third nuclear test, North Korea promulgated a domestic "Law on Consolidating Position as a Nuclear Weapons State" to provide a legal basis for its nuclear program and another signal that it does not intend to give up its pursuit of nuclear development. The law states "the nuclear weapons of the DPRK can only be used by a final order of the Supreme Commander of the Korean's People's Army (Kim Jong Un) to repel invasion or attack from a hostile nuclear weapons state and make retaliatory strikes." North Korea continues to invest in its nuclear infrastructure and could conduct additional nuclear tests at any time. In 2010, North Korea revealed a uranium enrichment facility at Yongbyon that it claims is for producing fuel for a light water reactor under construction. In April 2013, North Korea announced its intent to restart and refurbish the nuclear facilities at Yongbyon, including the nuclear reactor that had been shut down since 2007 and the uranium enrichment facility.

The director of the DPRK Atomic Energy Institute confirmed in September 2015 that all of the nuclear facilities in Yongbyon, including the uranium enrichment plant and reactor, were "adjusted and altered" following the April 2013 announcement and restarted for the purpose of building its nuclear force. The director also claimed that scientists and technicians were enhancing the levels of various nuclear weapons in quality and quantity.

These activities violate North Korea's obligations under UNSCRs 1718, 1874, 2087, and 2094, contravene its commitments under the September 19, 2005 Six-Party Talks Joint Statement, and increase the risk of proliferation.

Biological Weapons. DoD assesses that North Korea may consider the use of biological weapons as an option, contrary to its obligations under the Biological and Toxins Weapons Convention (BWC). North Korea continues to develop its biological research and development capabilities, but has yet to declare any relevant developments and has failed to provide a BWC Confidence-Building Measure declaration since 1990.

Chemical Weapons. North Korea probably has had a longstanding chemical weapons (CW) program with the capability to produce nerve, blister, blood, and choking agents and likely possesses a CW stockpile. North Korea probably could employ CW agents by modifying a variety of conventional munitions, including artillery and ballistic missiles. In addition, North Korean forces are prepared to operate in a contaminated environment; they train regularly in chemical defense operations. North Korea is not a party to the Chemical Weapons Convention.

PROLIFERATION

North Korea has been an exporter of conventional arms and ballistic missiles for several decades. Despite the adoption of United Nations Security Council resolutions (UNSCRs) 1718, 1874, 2087, and 2094, which prohibit all weapons sales and the provision of related technical training from North Korea, the DPRK continues to market, sell, and deliver weapons-related goods and services. Weapons sales are a critical source of foreign currency for North Korea, which is unlikely to cease export activity in spite of UN Security Council sanctions; the implementation of Executive Order 13382, under which designated WMD proliferators' access to the U.S. and global financial systems are targeted; or increased international efforts to interdict its weapons-related exports.

CONVENTIONAL ARMS AND MISSILE SALES

North Korea uses a worldwide network to facilitate arms sales activities and maintains a core, but dwindling group of recipient countries including Iran, Syria, and Burma. North Korea has exported conventional and ballistic missile-related equipment, components, materials, and technical assistance to countries in Africa, Asia, and the Middle East. Conventional weapons sales have included ammunition, small arms, artillery, armored vehicles, and SAMs.

In addition to Iran and Syria, past clients for North Korea's ballistic missiles and associated technology have included Egypt, Iraq, Libya, Pakistan, and Yemen. Burma has begun distancing itself from North Korea but concerns remain regarding lingering arms trade ties.

North Korea uses various methods to circumvent UNSCRs, including falsifying end-user certificates, mislabeling crates, sending cargo through multiple front companies and intermediaries, and using air cargo for deliveries of high-value and sensitive arms exports.

NUCLEAR PROLIFERATION

North Korea's demonstrated willingness to proliferate nuclear technology remains one of our gravest concerns. North Korea provided Libya with uranium hexafluoride, the form of uranium used in the uranium

enrichment process to produce fuel for nuclear reactors and nuclear weapons, via the proliferation network of Pakistani nuclear scientist AQ Khan. North Korea also provided Syria with nuclear reactor technology until 2007.

INTERDICTED TRANSFERS

Global concern about North Korea's proliferation activities continues to mount, leading various nations to take action. Notable recent interdiction events pursuant to UNSCRs include:

- In July 2013, Panamanian authorities stopped and inspected the North Korean flagged vessel Chong Chon Gang, finding hidden cargo including two MiG-21 fighter aircraft and associated engines, SA-2 and SA-3 SAM-related equipment, and unspecified missiles. Cuba issued a statement acknowledging ownership of the military equipment and claiming it was being sent to North Korea for overhaul.

- In June 2011, the M/V Light, a merchant vessel bound for Burma suspected of carrying military-related cargo, returned to North Korea after refusing a U.S. Navy inspection request.
- In February 2010, South Africa seized North Korean-origin spare tank parts destined for the Republic of Congo.
- In December 2009, Thai authorities impounded the cargo of a chartered cargo plane containing about 35 metric tons of North Korean weapons, including artillery rockets, rocket-propelled grenades, and SAMs.
- In October 2009, the ROK seized North Korean-origin chemical warfare protective suits destined for Syria.

Although some of its weapons-transfer attempts have been interdicted by the international community, North Korea will continue to attempt arms shipments via new and increasingly complex routes.

