



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

Office of the Secretary of Defense

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Military and Security Developments Involving the Democratic People's Republic of Korea 2012

*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, 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) remains one of the United States' most critical security challenges in Northeast Asia. North Korea remains a security threat because of its willingness to undertake provocative and destabilizing behavior, including attacks on the Republic of Korea (ROK), its pursuit of nuclear weapons and long-range ballistic missiles, and its willingness to proliferate weapons in contravention of its international agreements and United Nations Security Council Resolutions.

North Korean aspiration for reunification – attainable in its mind in part by expelling U.S. forces from the Peninsula – and its commitment to perpetuating the Kim family regime are largely unchanged since the nation's founding in 1948, but its strategies to achieve these goals have evolved significantly. Under Kim Jong Il, DPRK strategy had been focused on internal security; coercive diplomacy to compel acceptance of its diplomatic, economic and security interests; development of strategic military capabilities to deter external attack; and challenging the ROK and the U.S.-ROK Alliance. We anticipate these strategic goals will be consistent under North Korea's new leader, Kim Jong Un.

North Korea fields a large, forward-deployed military that retains the capability to inflict serious damage on the ROK, despite significant resource shortfalls and aging hardware. The DPRK continues to be deterred from conducting attacks on the ROK largely because of the strength of the U.S.-ROK Alliance. On a smaller scale, however, the DPRK has demonstrated its willingness to use military provocation to achieve national goals, such as in 2010 when it sank the ROK naval vessel *CHEONAN*, killing 46 ROK Navy sailors, and shelled Yeonpyeong Island, killing two ROK Marines and two civilians.

North Korea's continued pursuit of nuclear technology and capabilities and development of long-range ballistic missile programs, as reflected in the December 2012 Taepo Dong 2 missile launch and April 2012 display of a new road-mobile intercontinental ballistic missile, underscores the threat to regional stability and U.S. national security posed by North Korea. These programs, as well as North Korea's expressed hostility toward the ROK and proliferation of items prohibited under United Nations Security Council Resolutions 1718, 1874, and 2087 make the DPRK a continued security challenge for the United States and its Allies and partners.

North Korea's third nuclear test in February 2013 and its 2010 revelation of a uranium enrichment facility highlight the continued challenge posed by North Korea's nuclear

programs. Both the September 19 Joint Statement of the Six Party Talks and United Nations Security Council Resolutions 1718, 1874, and 2087 call for the complete and verifiable denuclearization of North Korea. Given North Korea's unwillingness to abide by these commitments, the Department of Defense will continue to manage the North Korean security challenge through close coordination and consultation with the international community, particularly with our ROK and Japanese Allies.

The United States remains vigilant in the face of North Korea's continued provocations and steadfast in commitments to Allies in the region, including the security provided by extended deterrence commitments through both the nuclear umbrella and conventional forces.

CHAPTER ONE: ASSESSMENT OF THE SECURITY SITUATION

KEY DEVELOPMENTS IN NORTH KOREAN AND PENINSULAR SECURITY

The Democratic People's Republic of Korea (DPRK or North Korea) has stated that it is entering what it calls "the door in a strong and prosperous nation" in 2012. The transfer of power to Kim Jong Un, after the death of Kim Jong Il in December 2011, has shaped the internal political landscape of North Korea and its international relations. In April 2012, Kim Jong Un assumed top-level positions in the Korean Worker's Party (KWP) and the National Defense Commission, formalizing his role as the North's top leader.

Yet North Korea continues to fall behind the rising national power of its regional neighbors, creating a widening military disparity and fueling its commitment to improving asymmetric and strategic deterrent capabilities as the primary guarantor of regime survival.

Tensions on the Korean Peninsula have grown as relations between the DPRK and the Republic of Korea (ROK) worsened through 2011 and remained uneasy through mid-2012. The DPRK's frustration with the ROK's close policy

coordination with the United States and its linkage of assistance to the North to progress in denuclearization grew over the past five years of President Lee Myung-bak, and is unlikely to change significantly under the tenure of President Park Geun-hye.

NORTH KOREAN SECURITY PERCEPTIONS

North Korean threat perceptions are shaped by a legacy of guerilla warfare dating back to its anti-colonial struggle against the Japanese, political and economic isolation, experience during wartime, and a political culture that is defined by an unending existential struggle with outside forces. North Korea has portrayed the ROK and the United States as constant threats to North Korea's sovereignty, in a probable attempt to legitimize and justify the Kim family rule, its draconian internal control mechanisms, and its existing strategies as the best defense against encroachments on the North's sovereignty.

The regime's greatest security concern is opposition from within, and outside forces – primarily South Korea – taking advantage of internal instability to topple the regime and achieve

unification of the Korean Peninsula. In North Korea's view, the destruction of regimes such as Ceausescu, Hussain, and Qadhafi was not an inevitable

consequence of repressive governments, but rather a failure to secure the necessary capabilities to defend their respective autocratic regime's survival.

CHAPTER TWO:

UNDERSTANDING NORTH KOREA'S STRATEGY

STRATEGIC GOALS

Regime survival in a zero-sum competition for legitimacy on the Peninsula with the South has been the consistent, overarching strategic objective of the Kim regime since 1945, but North Korean goals and supporting strategy have evolved significantly over the years. Throughout the 1960s and 1970s, North Korea boasted a viable economy and military and international relationships that either matched or outclassed those of the ROK. During this period, North Korea had reason to believe its goal of reunification on its terms was a possibility. Since the loss of the Soviet Union as a principal benefactor, devastating famine of the 1990s, and the economic rise and political maturation of the ROK, North Korea has largely abandoned unilaterally enforced reunification as a practical goal. North Korean goals and strategies reflect the reality of political isolation, significant economic deprivation, a deteriorating conventional military, and the increasing political and military power of nearby states. Nevertheless, the North has pursued a military posture that allows it to influence coercively South Korea through provocation and intimidation, and to attempt to have as equal a voice as possible in the future of the Peninsula.

North Korea's pursuit of a "military first policy" demonstrates its view that ultimately the national security of North Korea is disproportionately dependent on military might in the absence of any other notable elements of national power. The DPRK seeks recognition as an equal and legitimate international player and as a recognized nuclear power that is eventually able to normalize its diplomatic relations with the Western world and pursue economic recovery and prosperity. The DPRK's rhetoric suggests the regime at this time is unlikely to pursue this second goal, at the expense of the primary goal of pursuing its nuclear and missile capabilities.

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 diplomatic strategy. Through the use of limited provocations – even those that are kinetic and lethal in nature – North Korea uses small-scale attacks to gain psychological advantage in diplomacy and win limited political and economic concessions, all while likely believing it can control escalation.

Closely tied to this strategy of political coercion are North Korea's nuclear and ballistic missile programs which – absent normalized relations with the international community – it sees as essential to its goals of survival, sovereignty, and relevance.

REGIONAL OBJECTIVES AND REGIONAL BEHAVIOR

North Korea is dependent on China as a key benefactor, both in terms of diplomatic and economic support. North Korea also maintains friendly relations with Russia, although the relationship is not as robust as North Korea's relations with China. In its pursuit of nuclear and missile capabilities, and in its use of limited provocations for diplomatic objectives, North Korea is always conscious of how China and Russia will respond, and likely calculates both are more concerned about limiting U.S. responses than trying to control or dictate North Korea's behavior.

In its approach to the ROK, North Korea seeks to extract aid and investment from

the ROK using a combination of diplomacy and coercion while minimizing any influence or leverage the ROK might try to wield in return. North Korea adopted a largely adversarial posture toward former ROK President Lee Myung Bak and his administration given his insistence on reciprocity and linking of aid to progress in denuclearization, leading to the failure of the North's traditional approach to exact concessions from the ROK and drive a wedge in the U.S.-ROK relationship. North Korea's objectives in delinking inter-Korean relations from denuclearization and minimizing political concessions it makes in response to ROK economic and development assistance are likely to be unchanged in its approach to the new Park Geun-hye administration.

North Korea has a contentious relationship with the Japanese Government. Absent a breakthrough on the issue of North Korean abductions of Japanese citizens, there is little prospect for improvement in relations or for a lifting of Japanese economic sanctions against North Korea.

CHAPTER THREE:

FORCE MODERNIZATION GOALS AND TRENDS

OVERVIEW

North Korea's large, forward-positioned military can initiate an attack against the ROK with little or no warning, even though it suffers from resource shortages and aging equipment. It retains the capability to inflict significant damage on the ROK, especially in the region from the De-militarized Zone (DMZ) to Seoul. Although North Korea is unlikely to attack on a scale that it assesses would risk the survival of its government by inviting overwhelming counterattacks by the ROK or the United States, we do not know how North Korea calculates this threshold of behavior. North Korea's use of small-scale attacks and provocative acts leaves much room for miscalculation that could spiral into a larger conflict.

North Korea is making some efforts to upgrade its 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, we assess that the DPRK's emphasis will be to leverage the perception of a nuclear deterrent to counter technologically superior forces.

We expect that North Korea will seek to continue to test-launch missiles, including

the TD-2 ICBM/ Space Launch Vehicle (SLV). Missile tests and other improvement efforts, including denial and deception, artillery, development of a road-mobile ICBM, and special operations forces, are driven by North Korea's desire to enhance deterrence and defense, and enhance North Korea's ability to conduct limited attacks against the South.

MAINTAINING THE THREAT

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

Two key events demonstrated North Korea's willingness to employ its military as part of a coercive diplomacy strategy. A multinational Joint Civilian-Military Investigation Team concluded that a North Korean midget submarine sank the ROK naval corvette *CHEONAN* on March 26, 2010 near the contentious Northern Limit Line in the Yellow Sea, killing 46 ROK sailors. In November 2010, North Korea shelled Yonpyong Island, killing two ROK Marines and two civilians. The ROK's response to these provocative acts was restrained, but the attacks have

strengthened the ROK's resolve to react more forcefully in the future.

AN AGING FORCE...

The Korean People's Army (KPA) – an umbrella organization comprising ground, air, naval, missile, and special operations forces – ranks in personnel numbers as the fourth largest military in the world. Four to five percent of North Korea's 24 million people serve on active duty, and a further 25-30 percent are assigned to a reserve or paramilitary unit and subject to wartime mobilization. The KPA fields primarily legacy equipment, either produced in, or based on designs of, the Soviet Union and China, dating back to the 1950s, 60s and 70s, though a few systems are based on more modern technology.

...WITH EMERGING CAPABILITIES

During military parades held in Pyongyang in October 2010 and April 2012, a number of new weapon systems were displayed for the first time, highlighting continued efforts to improve the military's conventional capabilities, despite financial hardships.

Ground. The parades featured several newly identified North Korean tanks, artillery, and other armored vehicles. New infantry weapons have been displayed as well. The display of these systems shows that North Korea continues

to produce, or at least upgrade, limited types and numbers of equipment.

Air and Air Defense. The North Korean Air Force (NKAF) operates a fleet of more than 1,300 aircraft, primarily legacy Soviet models. The NKAF's most capable combat aircraft are its MiG-29s, procured from the Soviet Union in the late 1980s. North Korea's most recent aircraft acquisition was in 1999 when it surreptitiously purchased used Kazakh MiG-21s.

As the NKAF's aircraft continue to age, it increasingly relies on its ground-based air defenses and hiding or hardening of assets to counter air attacks. During the 2010 military parade, North Korea introduced a new vertical launched mobile surface-to-air missile launcher and accompanying radar. It bears external resemblance to the Russian S-300 and Chinese HQ-9.

Naval. The North Korean Navy (NKN) has displayed very limited modernization efforts, highlighted by upgrades to select surface ships and a continued program to construct small submarines. The submarine force, unsophisticated but durable, demonstrated its capabilities by covertly attacking and sinking the ROK warship *CHEONAN* with an indigenously produced submarine and torpedo.

Special Operations. In addition to the Special Operations Forces (SOF) wartime mission of deep strike infiltrations in a

combined arms peninsular attack, SOF may also conduct limited asymmetric attacks for political aims.

Ballistic Missile Force. North Korea has an ambitious ballistic missile development program and has deployed mobile theater ballistic missiles (TBM) capable of reaching targets throughout the ROK, Japan, and the Pacific theater. North Korea continues to develop the TD-2, which could reach parts of the United States if configured as an intercontinental ballistic missile (ICBM) capable of carrying a nuclear payload. Developing a 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 re-entry vehicle (RV), without which North Korea cannot deliver a weapon to target from an ICBM. Development also continues on a new solid-propellant short-range ballistic missile (SRBM).

North Korea showcased its TBM force in its October 2010 military parade in honor of the 65th anniversary of the KWP's founding, including two missile systems shown publicly for the first time: an intermediate-range ballistic missile (IRBM) and a version of the No Dong medium-range ballistic missile (MRBM) fitted with a cone-cylinder-flare payload. All of these systems, as well as what appeared to be a new road-mobile ICBM, were paraded in April 2012. This new mobile ICBM has not been flight tested.

These 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 will move closer to this goal, as well as increase the threat it poses to U.S. forces and Allies in the region, if it continues testing and devoting scarce regime resources to these programs. The pace of its progress will depend, in part, on how many resources it can dedicate to these efforts and how often it conducts tests.

Cyberwarfare Capabilities. North Korea probably has a military computer network operations (CNO) capability. Implicated in several cyber attacks ranging from computer network exploitation (CNE) to distributed denial of service (DDoS) attacks since 2009, the North Korean regime may view CNO as an appealing platform from which to collect intelligence.

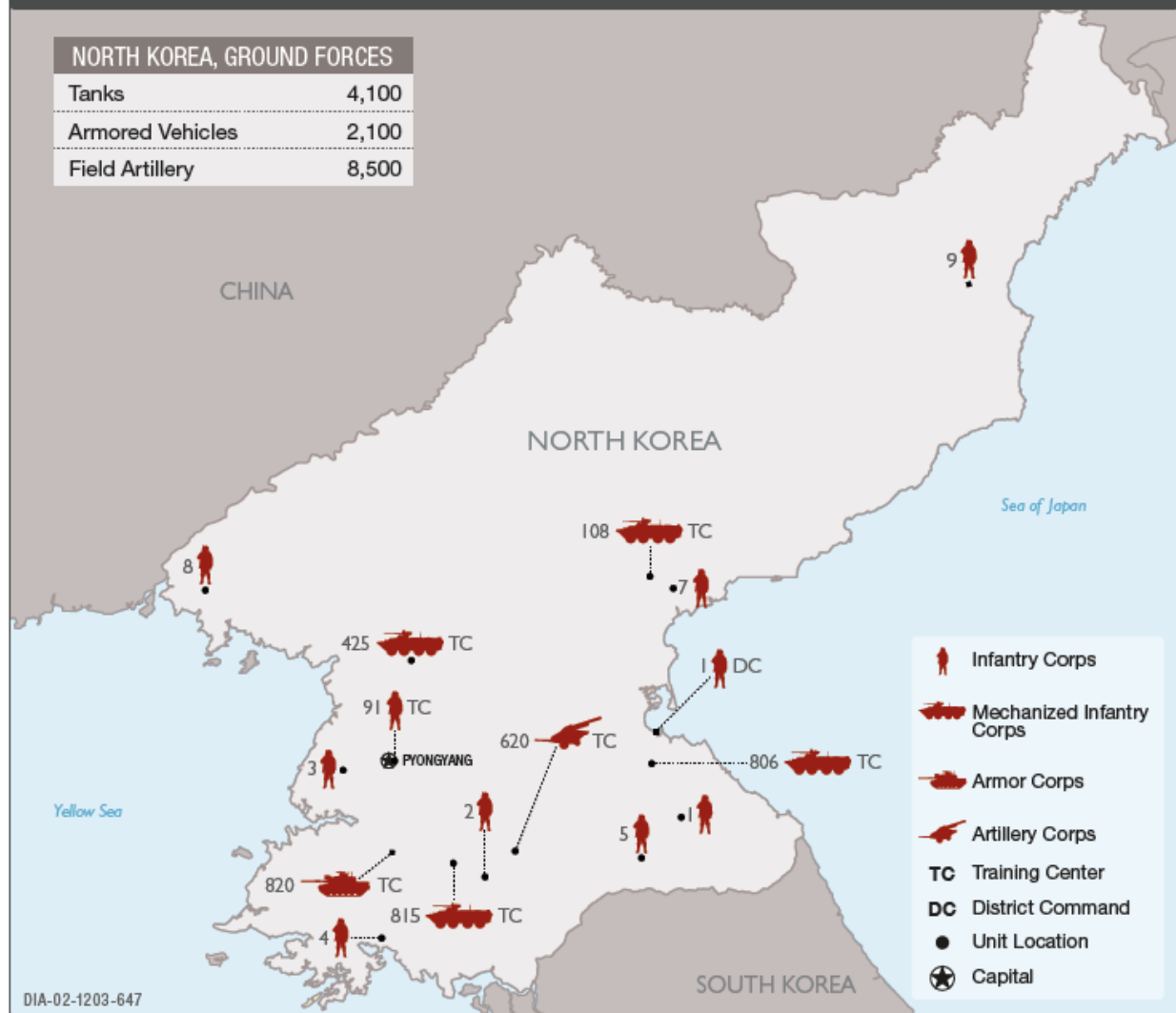
- According to a ROK newspaper, Seoul's Central Prosecutor's office attributed to North Korea a CNO activity on the ROK's National Agricultural Cooperative Federation (Nonghyup Bank) servers in April 2011. Through remote execution, actors

rendered the bank's online services inaccessible and deleted numerous files concerning customer bank accounts while removing all evidence of CNO activity in the bank's servers.

- In the years spanning 2009-2011, North Korea was allegedly responsible for conducting a series of distributed denial of service (DDoS) attacks against ROK commercial, government and military websites, rendering them inaccessible.

Technical attribution of cyberspace operations remains challenging due to the internet's decentralized architecture and inherent anonymity. Given North Korea's bleak economic outlook, CNO may be seen as a cost-effective way to modernize some North Korean military capabilities. As a result of North Korea's historical isolation from outside communications and influence, it is likely to employ Internet infrastructure from third-party nations.

(U) North Korean Ground Forces



North Korea, Ground Forces	
	<i>Total</i>
<i>Tanks</i>	4,100
<i>Armored Vehicles</i>	2,100
<i>Field Artillery</i>	8,500
<i>MRLs</i>	5,100

Note: With a maximum strength of approximately 950,000 personnel, the ground forces comprise the vast majority of North Korea’s military. Most of the conventional weapons systems were developed based on 1960s and 1970s era technology. However, they have attempted to overcome this technological disadvantage by relying on massive numbers of artillery systems while simultaneously increasing its light infantry forces.

(U) North Korean Air Forces

AIR ORDER of BATTLE	
Personnel Strength	92,000
Combat Aircraft	730
Helicopters	300
Transport Aircraft	290



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(U) North Korean Naval Forces

NAVAL ORDER of BATTLE	
Personnel Strength	60,000
Submarines	70
Patrol Combatants	420
Amphibious Landing Craft	260
Mine Warfare Vessels	30
Support/Auxiliary Vessels	30



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North Korea, Ballistic Missile Forces		
<i>System</i>	<i>Launchers</i>	<i>Estimated Range</i>
KN-2	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	Not yet deployed	3,400+ miles

Note: North Korea has an ambitious ballistic missile development program and has exported missile technology to other countries, including Iran and Pakistan. North Korea has produced its own version of the SCUD B, as well as the SCUD C, an extended-range version of the SCUD B. North Korea will continue using and improving the TD-2, which could reach the United States with a nuclear payload if developed as an ICBM. An intermediate-range ballistic missile (IRBM) and a new short-range, solid-propellant ballistic missile are also being developed.

CHAPTER FOUR: *PROLIFERATION*

OVERVIEW

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, and 2087 which prohibit all weapons sales and certain categories of technical training from North Korea, the DPRK continues to proliferate weapons-related goods and technology. Weapons sales are a critical source of foreign currency for North Korea and North Korea is unlikely to cease export activity in spite of UN Security Council sanctions or successful interdictions of its weapons-related exports.

CONVENTIONAL ARMS AND MISSILE SALES

North Korea uses a world-wide network to facilitate arms sales activities and maintains a core group of recipient countries including Burma, Iran, and Syria. 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 surface-to-air missiles.

- In addition to Burma, Iran, and Syria, past clients for North Korea's ballistic missiles and associated technology have included Egypt, Iraq, Libya, Pakistan, and Yemen.

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

One of our gravest concerns about North Korea's activities in the international arena is its demonstrated willingness to proliferate nuclear technology. North Korea provided Libya with uranium hexafluoride, a compound used in the uranium enrichment process that produces fuel for nuclear reactors and nuclear weapons, via the proliferation network of Pakistani nuclear scientist A. Q. Khan. North Korea also provided Syria with nuclear reactor technology until 2007.

NORTH KOREA'S WMD PROGRAMS

Nuclear. North Korea conducted nuclear tests in 2006, 2009, and most recently in February 2013. North Korea could conduct additional nuclear tests at any time. North Korea continues to invest in its nuclear infrastructure. 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.

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

Biological. Open sources have often reported defector allegations of a North Korean biological warfare program. North Korea continues to research bacterial and viral biological agents that could support an offensive Biological Weapons program. Infrastructure, combined with its weapons industry, gives North Korea a potentially robust biological warfare capability.

Chemical. 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.

INTERDICTED TRANSFERS

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

- In June 2011, a 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 surface-to-air missiles.
- In October 2009, the ROK seized North Korean-origin chemical warfare protective suits destined for Syria.

Despite these successes by the international community, North Korea will continue to attempt arms shipments via new and increasingly complex routes.

CHAPTER 5:

SIZE, LOCATION, AND CAPABILITIES OF NORTH KOREAN MILITARY FORCES

The Korean People's Army (KPA) is a large ground-centric military, supported by a large ballistic missile arsenal, extensive special operations forces and limited air and naval forces. With approximately 70 percent of its ground forces and 50 percent of its air and naval forces deployed within 100 km of the demilitarized zone, which has served as the de facto shared border since 1953, the KPA poses a continuous threat to the ROK and deployed U.S. forces. However, after decades under a failed economy and the resulting food shortages, the KPA is a weakened force that suffers from logistical shortages, aging equipment, and poor training.

Ground Forces. The KPA's ground forces are dominated by conventional and light infantry units, supported by armor and mechanized units and heavy concentrations of artillery. These forces are forward deployed, are fortified in several thousand underground facilities, and include long-range cannon and rocket artillery able to fire deep into the ROK from their garrisons.

The ground forces possess light and medium tanks armored personnel carriers, and multiple rocket launchers (MRLs). This large artillery force includes

long-range 170-mm guns and 240-mm MRLs, many of which are deployed along the DMZ and pose a constant threat to northern parts of the ROK, including its capital city of Seoul.

Air Forces. The Air Force is primarily responsible for defending North Korean air space. Its other missions include special operations forces insertion, transportation and logistics support, reconnaissance, and bombing and tactical air support for KPA ground forces. However, due to 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-29 and MiG-23 fighters and its SU-25 ground-attack aircraft. However, the majority of aircraft are less capable MiG-15s, -17s, -19s (F-6), and -21s. The NKAF operates a large fleet of AN-2 COLT aircraft, 1940s vintage single-engine, 10-passenger, bi-planes, which are likely tasked with inserting SOF into the ROK. The air force is rounded out with several hundred helicopters, predominantly Mi-2/HOPLITE and U.S.-

made MD-500 helicopters (obtained by circumventing U.S. export controls in 1985). The rotary-wing fleet is used both for troop transport and ground attack.

North Korea possesses a dense, overlapping air defense system of SA-2/3/5 SAM sites, mobile and fixed AAA, and numerous man-portable air-defense systems (MANPADS), like the SA-7.

Naval Forces. The North Korean Navy (NKN), the smallest of the KPA's three main services. This coastal force is composed primarily of aging, though numerous, small patrol craft that employ 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.

Special Operations Forces. North Korean SOF are likely some of the most highly trained, well-equipped, best-fed, and most motivated forces in the KPA. As North Korea's conventional capabilities decline relative to the ROK and United States, we believe North Korea increasingly regards SOF capabilities as a vital tool 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. SOF operate in specialized units of light infantry, reconnaissance, airborne and seaborne insertion, commandos, and other specialties, all emphasizing speed and surprise. SOF may be airlifted by AN-2 COLT and helicopters (and possibly Civil Air Administration transports), maritime insertion platforms, overland, and via underground, cross-border tunnels to attack high-value targets like command and control nodes or air bases.

Theater Ballistic Missiles. North Korea has several hundred SCUD SRBM and No Dong MRBM missiles available for use against targets on the Korean Peninsula and Japan. On July 3 and 4, 2009 North Korea launched seven SCUD-based missiles into the Sea of Japan, in a display that was similar to the July 2006 series of launches.

2012 Taepo Dong 2 Launches. North Korea successfully launched the TD-2 (called the Unha-3 by North Korea) on December 12, 2012. All three stages of the TD-2 appeared to operate nominally and placed a satellite into orbit. This test was preceded by a launch in April 2012 that failed shortly after lift-off and crashed into the Yellow Sea. Both launches occurred from North Korea's new west coast launch facility. North Korea has pledged to continue using this system to conduct further space launches.

Command and Control. The DPRK National Defense Commission (NDC) is the symbolic nominal authority over the North's military and security services. The Ministry of Peoples Armed Forces (MPAF) is the administrative superior of the KPA, while operational command and control is exercised by its subordinate General Staff Department. The 1992 constitution shifted control from the president to the NDC and Kim Jong Il directly exercised control of the military as chairman of the NDC, and Supreme Commander of the KPA. Kim Jong Un was made the supreme commander of the KPA shortly after his father's death and named to the newly created position of "first chairman" of the NDC in April 2012, when Kim Jong Il was made "eternal chairman" of the NDC. In the same

month, Kim Jong Un was named first secretary of the Korean Worker's Party, after his father was made "eternal general secretary" of the KWP. At the same time, Kim Jong Un also became the chairman of the Central Military Commission of the KWP, having previously been one of two vice chairmen.

Telecommunications. North Korea's nationwide fiber optic network is available to every sector of society, and North Korea has invested in a modern nationwide cellular network. Telecommunication services and access are strictly controlled, and all networks are available for military use, if necessary.

