

Chapter 3

The Korean Peninsula: North Korea's Advanced Nuclear and Missile Capabilities, and South Korea's Response

On January 6, 2016, the Democratic People's Republic of Korea (DPRK, or North Korea) announced that it had been successful in its testing of a hydrogen bomb, and on February 7, it also launched a ballistic missile, professing it to be a "satellite." The country is thus aiming to improve its nuclear and missile capabilities. From the latter part of February 2014 to the early part of September 2014, North Korea repeatedly launched ballistic missiles and rocket artillery. Similarly, in 2015 as well, it launched various types of missiles since February in reaction to the joint military exercises held by the United States and the Republic of Korea (ROK, or South Korea). Additionally, in May 2015, it announced that it had successfully test-launched a submarine-launched ballistic missile (SLBM), and demonstrated a position indicating that it would launch a long-distance ballistic missile—which it professed to be a "satellite"—and would conduct its fourth nuclear bomb test, both in commemoration of the seventieth founding anniversary of the Workers' Party of Korea (WPK) in October. As far as relations between the two Koreas were concerned, the crisis situation stemming from the explosion of a land mine in the demilitarized zone (DMZ) was defused after an agreement between the two sides, and official reunions of separated family members were held. However, since January 2016, with the North's forcing through of its fourth nuclear test, North-South relations are once again heading toward a worsening. Meanwhile, North Korea's relations with China, which some had pointed out as having cooled down through 2014, saw signs of improvement, owing to the fact that Liu Yunshan, fifth-ranking member of the Standing Committee of the Political Bureau (Politburo) of the Communist Party of China, attended the ceremony marking the aforementioned seventieth founding anniversary of the WPK, at which he conferred with Kim Jong Un, first chairman of the National Defense Commission. However, the Sino-North Korean relationship is growing somewhat more difficult in the wake of North Korea's nuclear tests. Moreover, the progress made in North Korea's relationship with Russia, which had advanced remarkably in 2014, turned darker, with Kim Jong Un failing to make a visit to Russia during 2015 that had been expected at the outset.

As for the internal politics of North Korea, while the so-called "unitary leadership system" of the Party (i.e., the WPK) was being firmly maintained, in fact, a reign of terror through purges, mainly by Kim Jong Un, and a system of dictatorship were gradually coming to be reinforced. In particular, Kim stepped

up moves toward taking greater control, actively carrying out such things as giving direct guidance in military exercises, military facilities, and other venues.

While the Park Geun-hye government in South Korea, ever since its inauguration in February 2013, has continued conducting a foreign policy that emphasizing both the United States and China, it has struggled to make a response in issues where those two countries differ—such as in the area of international norms—not knowing which side it should support. Also, the differences in South Korea's and China's stances toward North Korea became evident once again after that country's carrying out of the nuclear test. In its relations with Japan, Seoul had put priority on historical problems, taking the stance of not holding summit meetings, for example, but in 2015, South Korea gradually restarted dialogue and cooperation with Japan in several areas, including security. In the area of national defense, South Korea attempted to quash various threats coming from North Korea based on its alliance with the United States, endeavoring to reinforce its own strike and defense means, including the development of ballistic missiles, in response to North Korea's improvement of its nuclear and missile capabilities.

1. Acceleration of Nuclear and Missile Development

(1) The Threat of SLBMs and Special Operations Capabilities

On January 6, 2016, North Korea announced that it had successfully carried out its first hydrogen test, and on February 7, it said that it had launched a ballistic missile, professing it to be a “satellite.” The country's words and actions in 2015 demonstrated that it has been solidifying its policy of improving its nuclear and missile capabilities through such nuclear tests. Since the latter part of February 2014, North Korea had reacted to the US-ROK Joint Military Exercises by daily launchings of ballistic missiles, and continued intermittent launchings thereafter. Similarly, in 2015 as well, it launched new antiship missiles, new tactical missiles, Scud missiles, and others since the month of February.

What is particularly noteworthy was the SLBM test launch announced by the Korean Central News Agency (KCNA) on May 9, said to have taken place under the direct guidance of First Chairman of the National Defense Commission Kim Jong Un. Also, it was pointed out that a 2,000-ton-class submarine was believed to have been used. The news agency said that the chairman had assessed it as being “an astounding success, no less than that of the launch of a satellite,

demonstrating that we can launch ballistic missiles from attack submarines.” At the same time, KCNA reported that he had said, “Once SLBMs enter the production line and are able to be fully deployed, it will be equivalent to placing a time bomb—the timing of the explosion of which nobody knows—on the backs of enemy forces.”¹⁾ Moreover, the criticism of the test launch of the SLBM by the United States, Japan, and South Korea led to a spokesman of North Korea’s National Defense Commission releasing a statement on May 20 condemning those three countries, adding that the SLBM test launch was a mechanism to strengthen the country’s self-defense, as part of the new strategic line on carrying out economic construction and building nuclear armed forces simultaneously, positioning it as a new high stage in the development of strategic strike means.²⁾

Although many things still remain unclear about North Korea’s ability to load nuclear warheads onto missiles, some have pointed out that it has already reached the point of being able to make miniaturized nuclear warheads. In light of that, some feel that there is the increased danger of the boosted survivability of North Korea’s nuclear force, once—in combination with the improvement of its current ground-based mobile-launched missiles—it improves both its submarine technology and sea-based launch capability, eventually deploying an SLBM system with nuclear warhead capability in the future. For instance, Dr. Van Jackson of the US Asia-Pacific Center for Security Studies has made the analysis that even in the “minimum scenario” placing the number of nuclear bombs possessed by North Korea at no more than twenty, its nuclear force survivability will be sufficiently guaranteed depending on the delivery means.³⁾

At the military parade commemorating the WPK’s seventieth founding anniversary, held on October 10, 2015, a new model of a 300-millimeter multiple-launch rocket was shown in public for the first time. In addition, the KN-08, believed to be a new type of intercontinental ballistic missile, and which had earlier appeared in the 2012 and 2013 military parades, also appeared in the 2015 parade with its warhead portion shaped differently from earlier versions. North Korea also put on display existing Scud missiles, which are short-distance and medium-distance ballistic missiles, as well as the Musudan missile, which has Guam within its firing range, and the Rodong missile, which is capable of striking Japan. However, there was no sign of the SLBM that North Korea had said it “successfully” tested in May. In addition, it is reported that North Korea test-launched an SLBM into the Sea of Japan on November 28, but seems to have failed.⁴⁾

Furthermore, on September 14, 2015, the head of North Korea's National Aerospace Development Administration said, "We will see a satellite flying high, its time and place determined by the WPK Central Committee," indicating the possibility of an actual long-distance ballistic missile, ostensibly a "satellite launch," in conjunction with the WPK's seventieth founding anniversary on October 10.⁵⁾ Also, on the following day, September 15, the head of North Korea's Atomic Energy Institute, during an interview with a reporter from the KCNA, said that if the United States and other enemy forces continued their "indiscriminate hostile policy," North Korea would be ready to respond with nuclear weapons, suggesting the possibility of a fourth nuclear test. In addition to that, in line with the new strategic line of carrying out economic construction and building nuclear armed forces simultaneously, it announced that all the nuclear facilities at Nyongbyon, including the uranium enrichment plant as well as the 5-megawatt graphite-moderated nuclear reactor, had been restored to condition and were working normally.⁶⁾ Additionally, the newspaper *Rodong Sinmun* reported in its December 10 issue that First Chairman Kim Jong Un had made a statement suggesting that North Korea had the hydrogen bomb.⁷⁾ On January 6, 2016, Korean Central Television announced "especially important news," reporting that North Korea had successfully carried out the testing of a hydrogen bomb.⁸⁾ The following day, on January 7, the *Rodong Sinmun* contained a statement from the government with the same contents, saying that "*Juche* Korea had completely succeeded in making its first hydrogen bomb test."⁹⁾

According to that statement, the latest test had used a miniaturized hydrogen bomb based on 100-percent local technology, and that North Korea, as a

responsible nuclear-weapons state, would not be the first to use nuclear weapons as long as its sovereignty was not violated by “enemy forces,” revealing that it would not transfer means or technologies of nuclear weapons under any circumstances. The same statement also mentioned that the latest test was a self-defense mechanism against the United States and other “enemy forces,” and that it would not renounce the development of nuclear weapons as long as the United States continued its hostile policy toward North Korea, asserting that its nuclear deterrent force would be unflaggingly strengthened both in terms of quality and quantity. While some cast doubts on the “success” of the “hydrogen bomb” test, there is no change in North Korea’s determination to boost its nuclear deterrence.

Meanwhile, looking at conventional forces, North Korea is believed to be gradually deploying stealth and high-speed vessels, also known as “very slender vessels” (VSVs), amidst a situation of being unable to resolve such problems as chronic financial difficulties and fuel shortages. In the assessment of national affairs performed by the South Korean National Assembly in September 2015, South Korean naval officials revealed that North Korea was developing around ten VSVs, the vessels of which are equipped with multiple-launch rocket systems and torpedo launching tubes. There are also reports that the VSVs are enabling North Korea to further strengthen its special operations capability, including surprise landing attacks.¹⁰⁾ As will be explained later, judging from the style of Kim Jong Un’s frequent on-site guidance given to military troops and at military facilities, he can be seen to be highly interested in boosting not only naval power but also air and anti-air force capabilities (hereinafter, “air power”). If North Korea takes organic advantage of such special-operations capability, such as utilizing VSVs, along with naval and air power, the threat of its asymmetric war-fighting capabilities capacity would increase that much further. Also, according to First Chairman Kim’s statements during such on-site guidance, it is believed the trend is toward an emphasis on the necessity of improving quality-related aspects of the Korean People’s Army (KPA), such as the way officers are trained, the maintenance of morale, and discipline in lifestyle-related matters.

As for other areas, there are many unclear points about North Korea’s operational capabilities in that cyberspace. Even according to a research report by the US Center for Strategic and International Studies (CSIS) on North Korea’s cyber-strategy, although little is known about the actual operational condition of North Korea’s asymmetric war-fighting capabilities, centered on the General

Reconnaissance Bureau under the Ministry of the People's Armed Forces, they are indeed being reinforced.¹¹⁾ The South Korean government revealed on March 17, 2015, that North Korea had launched a cyberattack on South Korean nuclear power plant operators in December 2014. Also, there may have been a massive cyberattack on the Seoul Metro system in July 2014, according to a report entitled "Results of a Survey on Hacking Accidents," presented on October 4 by the Seoul Metro to Ha Tae-kyong, parliamentarian and member of the South Korean National Assembly Land and Transport Committee. Additionally, it reported that there were 184,578 cyberattacks in 2013, 370,713 in 2014, and 350,188 from January through September 2015.¹²⁾ In March 2013, major media organizations and financial institutions in South Korea underwent a massive cyberattack, demonstrating that while such moves by North Korea are relatively new, they represent a severe security problem.

Meanwhile, looking at North Korea's cyberattacks on the United States, the US Federal Bureau of Investigation announced in December 2014 that there was sufficient evidence to put the blame on the North Korean government for the attacks made in November and December of that year on the US movie distribution company Sony Pictures Entertainment. Furthermore, it is reported that the US National Security Agency had succeeded much earlier than that cyberattack incident to infiltrate the North Korean computer network.¹³⁾ On June 18, 2015, the KCNA reported that North Korea had held the First Reconnoitering Officers' Conference in charge of the cyberwar operations of the KPA against South Korea and other foreign countries.¹⁴⁾ North Korea is thus believed to be endeavoring to enhance its foreign espionage and offensive cyber capabilities.

In addition, on October 16, the United States and South Korea agreed to reinforce the existing framework of cyber policy consultations between the US and South Korean militaries as well as consultations among those doing the actual work of cyber cooperation.¹⁵⁾ Also, in response to North Korea's stepped-up cyberattacks, it is reported that meetings were held of the Cyber Cooperation Working Group in July and October, at which table-top exercises were carried out, led by US Forces Korea and the ROK Joint Chiefs of Staff.¹⁶⁾

While still not resolving its chronic financial difficulties and fuel shortages, among other matters, North Korea is believed to be improving its nuclear and missile capabilities, based on the strategic line of carrying out economic construction and building nuclear armed forces simultaneously, while at the same

time also building up its conventional forces by boosting military power through an enhancement of its asymmetric war-fighting capabilities, including special operations capabilities.

(2) Continuation of Hard-Soft Diplomatic Tactics

Besides the strengthening of its deterrence against the United States through nuclear weapons and missiles, North Korea has repeatedly made hardline statements diplomatically, as it firmly maintains its basic strategy of stopping the “hostile policy toward North Korea” by the United States, using that as a diplomatic card.

As for its relations with South Korea, several problems persist in the economic area, such as the issue of the Kaesong Industrial Complex. In August 2015, military tensions rose on account of the incident of a land mine explosion. On February 24, the issue of wages arose, with North Korea unilaterally informing South Korea that the minimum wage of North Korean laborers at the Kaesong Industrial Complex was to be raised by 5.18 percent, while South Korea rejected that demand, leading to consultations beginning between the two sides. Thereafter, negotiations continued until August 18, when South Korea’s Kaesong Industrial District Management Committee eventually agreed with North Korea’s Central Special Zone Development Guidance General Bureau to effect a 5-percent wage increase.¹⁷⁾

In addition, on August 4, an incident occurred in which two South Korean soldiers were seriously injured by the explosion of a mine that North Korea allegedly had placed inside a wooden box buried on the South Korean side of the DMZ. South Korea responded by restarting its psychological warfare against the North through broadcasts made by giant loudspeakers. In reaction to that, North Korea fired artillery at Yeoncheon in Gyeonggi Province of South Korea, with the South Korean side returning fire. At one blow, then, those events heightened military tensions between the two Koreas. On August 22, emergency talks between high-ranking officers of both sides began in Panmunjom in the DMZ, with the two sides agreeing three days later, on August 25 to make a joint six-item document for the press, thus leading to an avoidance of a military clash breaking out between the two sides.

At the high-level emergency talks between the North and South held from August 22 to 24, North Korea was represented by Hwang Pyong So, director of the General Political Bureau of the KPA, and Kim Yang Gon, director of the United Front Department of the WPK, while South Korea was represented by

Kim Kwan-jin, chief of the National Security Office, and Hong Yong-pyo, minister of unification. According to the joint text that was released, the two Koreas agreed on the following items, among others: (1) The north and the south agreed to hold talks between their authorities in Pyongyang or Seoul at an early date to improve north-south ties and have multi-faceted dialogue and negotiations in the future; (2) The north side expressed regret over the recent mine explosion that occurred in the south side's area of the Demilitarized Zone (DMZ) along the Military Demarcation Line (MDL), wounding soldiers of the south side; (3) The south side will stop all loudspeaker propaganda broadcasts across the MDL from 12:00, August 25, unless an abnormal case occurs, (4) The north side will lift the semi-war state at that time; (5) The north and the south agreed to arrange reunions of separated families on the occasion of the Harvest Moon Day this year (September 27 in 2015) and continuing to hold such reunions in the future, too, and to have a Red Cross working contact for it early in September. Still, North Korea continued to deny that it had planted the land mine, and vehemently opposed South Korea's interpretation of the phrase "expressed regret" as having "apologized." It also expressed dissatisfaction with the holding of joint artillery exercises by the South Korean and American militaries after the agreement.

In light of that agreement, documents were exchanged between the two sides at Panmunjom on September 15 requesting the confirmation of the survival or deaths of separated family members. On October 5, it was confirmed that North Korea would report on the results of its confirmation of such survival or deaths. Subsequently, from October 20 to 26, separated South Korean family members, split into two groups, visited North Korea. On October 24, it was reported that the South Korean military had fired warning shots on a North Korean patrol ship that had crossed the Northern Limit Line (NLL). Working-level talks took place between the two sides on November 26, at which it was agreed to hold a vice-ministerial-level meeting on December 11. While it is possible that progress the issue of separated families will be made in the future, it is difficult to expect that such progress would greatly alleviate the military tensions and structural conflict that exist between the two sides.

As for North Korea's relations with China, which some have pointed out as having cooled down in recent years, there had been some indication of a halt in the worsening of relations at one time, but with North Korea's fourth nuclear test, ties between the two have grown somewhat more unclear. Some had predicted

that ties with China would worsen after North Korea announced in May 2015 that it had succeeded in launching an SLBM, but the fact that China sent the fifth-ranking member of the Politburo, Liu Yunshan, as representative to the ceremonies marking the seventieth founding anniversary of the WPK shows that a further cooling down of ties has been avoided for the time being. At that juncture, although Liu did confer with First Chairman Kim Jong Un and stand along with him on the reviewing platform of the military parade, it remains unclear whether that will lead to concrete improvements in ties between the two countries in the future. However, as will be stated later, China accounts for around 90 percent of all imports into North Korea, and North Korea's one-sided dependence on the Chinese economy is only intensifying. Furthermore, aside from publicized statistics, it is unclear how much and what sort of economic assistance is being received from China. The Sino-North Korean relationship will likely continue to see both aspects coexist into the future: economically, a unilateral dependence of North Korea on China, will persist, while politically and diplomatically, there remain uncertainties.

As far as North Korea's relationship with Russia was concerned, the year 2014 had seen conspicuous progress, including military exchanges, but that decelerated somewhat in 2015, with Kim Jong Un deciding not to attend Russia's seventieth anniversary ceremony marking its victory over Germany, among other things. On May 8, 2015, Kim Yong Nam, President of the Presidium of the Supreme People's Assembly (SPA), was sent to the ceremony in Moscow in place of Kim Jong Un, where it was reported that he met with Russian President Vladimir Putin and directly handed him a personal letter from First Chairman Kim. Nonetheless, aside from some progress in the cultural sphere, there has been no conspicuous development indicating significant progress in the Russian-North Korean relationship in both the political and military fields.¹⁸⁾

Regarding North Korea's relationship with Japan, the major point of dispute has remained North Korea's response to the issue of Japanese nationals abducted by North Korea. On July 2, 2015, one year after the establishment of a special investigatory committee by the North, Pyongyang told the Japanese government that it would postpone its investigation and report.¹⁹⁾ With North Korea reportedly hardening its attitude about the abductee issue at an early stage, there were growing calls in Japan domestically to strengthen sanctions against that country in terms of the coming and going of people between the two countries, as well as

in terms of trade and money.²⁰⁾ Specifically, those included, among other things: (1) An expansion of the list of foreign nationals prohibited from reentering Japan after travel to North Korea to include members of the Central Standing Committee and the Central Committee of the General Association of Korean Residents of Japan, as well as nuclear and missile engineers; (2) total prohibition of money transfers to North Korea, except for humanitarian purposes; and (3) guidance to be given to those local municipalities providing subsidies to North Korea-related schools in Japan so as to completely halt them. In such circumstances, Japan will continue to maintain its existing policy of “dialogue and pressure,” while pressuring North Korea to continue to swiftly investigate and report on the abductee issue. At the same time, Japan will firmly maintain its attitude of not allowing nuclear and missile development, and will focus on strengthening the trilateral coordination with the United States and South Korea.

In such a fashion, no improvement has been seen in North Korea’s relationships with major countries, further isolating the country from the international community. North Korea is maintaining its current hardline stance against the United States, South Korea and Japan, while also holding on to its policy line of strengthening its military capabilities. While some progress had been seen in its relationship with South Korea, aimed at slowly expanding limited contacts between the two sides, North Korea’s fourth nuclear test in January 2016 once again put the damper on North-South relations.

2. Reinforcing the Dictatorship System under the Strategic Line on Carrying Out Economic Construction and Building Nuclear Armed Forces Simultaneously

(1) Continuation of a Reign of Terror through Purges

Since the purges of Ri Yong Ho, chief of the General Staff of the KPA in July 2012 and of Jang Song Thaek, vice chairman of the National Defense Commission, in December 2013, North Korea has continued to conduct a series of purges, mainly in the military and the government. According to the South Korean National Intelligence Service, Pyon In Son, director of the General Staff Operations Bureau, was purged in January 2015 simply because he opposed First Chairman Kim’s directive regarding cooperation with foreign militaries.²¹⁾ In February, the vice chairman of the State Planning Commissions was also purged because he

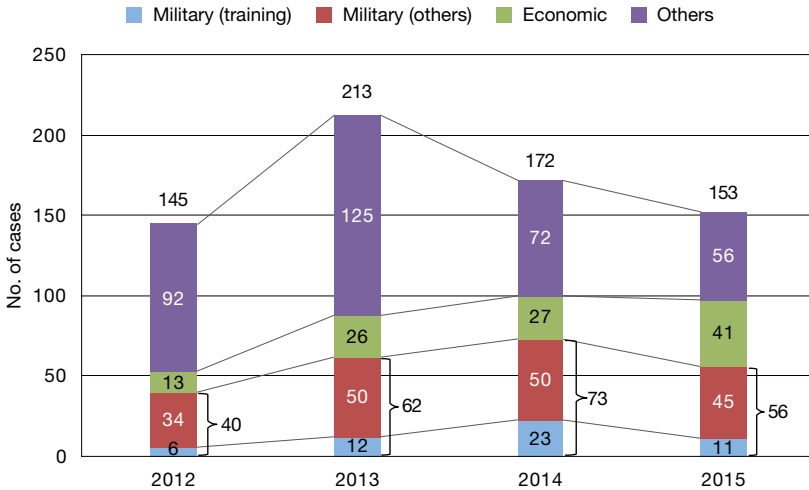
opposed Kim Jong Un's directive about the design specifications of a science and technology hall. It was also reported that Minister of the People's Armed Forces Hyon Yong Chol was purged at the end of April because he had taken a nap at an official event and because he had spoken back to and expressed dissatisfaction with Kim, among other reasons.²²⁾ Besides those, it was reported that the vice minister of the Forestry Ministry had been purged in January for having expressed dissatisfaction over the country's afforestation policy. According to the South Korean National Intelligence Service, the total annual number of officials purged under the Kim Jong Un regime was reported to be three in 2012, around thirty in 2013, and thirty-one in 2014,²³⁾ thus indicating the possibility that purges are being carried out on a broad scale.

Simultaneously with those purges, it is also reported that generational turnover is progressing among leaders of the WPK and military. According to the Radio Free Asia (RFA), First Chairman Kim Jong Un has ordered the "rejuvenation of working-level officials within a five-year span," based upon which the top officials in their fifties to seventies from every North Korean city and county are being replaced by those in their forties. In the KPA's General Staff and the General Reconnaissance Bureau, major generals and lieutenant generals in their forties are being appointed, demonstrating that the generational turnover is being carried out in the officer corps as well.²⁴⁾

Additionally, First Chairman Kim has made conspicuous moves to tighten discipline in and reinforce control of the military, delivering face-to-face instruction at military training and exercises, as well as at military and military-related facilities. The annual frequency of his on-site visits for such instruction to the military was seventy-three times in 2014 (twenty-three of which were during training and exercises), and fifty-six times in 2015 (eleven of which were during training and exercises; see Figure 3.1). Although the pace of such face-to-face instruction fell from 2014 to 2015, there is also undeniably a growing emphasis on improving the quality (of such visits), as illustrated by Kim's instructions given during the May 2015 SLBM launch test. At any rate, Kim is believed to have a strong interest in boosting actual war-making capabilities.

Furthermore, out of Kim's instances of military-related field guidance, the number of those made to air force-related sites expanded from five and three times in 2012 and 2013, respectively, to twelve times in 2014 and seven times in 2015. One can thus conclude that First Chairman Kim is placing emphasis on not only

Figure 3.1. First Chairman Kim Jong Un's movements, by sector (2012-15)



Sources: Compiled from figures and articles published in various issues of the Korea News Service *Gekkanroncho*.

Note: "Military (training)" includes direct instruction given at attack tactical exercises, artillery training, flight training, mobile-force training, launch tests, and the like, while "Military (others)" includes troop inspections, etc. "Economic" includes inspection visits made to factories and farms, etc., while "Others" includes attendance at national events and audiences with foreigners, and so forth.

naval power, as typified by the SLBM launch, but air power as well.

Judging from the above, Kim has markedly stepped up the frequency of face-to-face instruction made at military training and exercises. That trend can also be interpreted as indicating that North Korea's military provocations made toward other countries are not merely some independent action by the KPA or some segment of that, but rather are the direct orders of First Chairman Kim Jong Un himself.

On the surface, the slogan of the "unitary leadership system" emphasized by North Korea refers to the unitary leadership system of the Party, but judging from the series of purges and Kim's direct instructions to the military, as shown above, the sense of a "unitary leadership system under the first chairman" is actually coming ever more to the fore, carried out through a reign of terror and other means. In other words, it is believed that the Kim Jong Un regime in North Korea is increasingly becoming a dictatorship.

(2) Management of the Economy under the Strategic Line

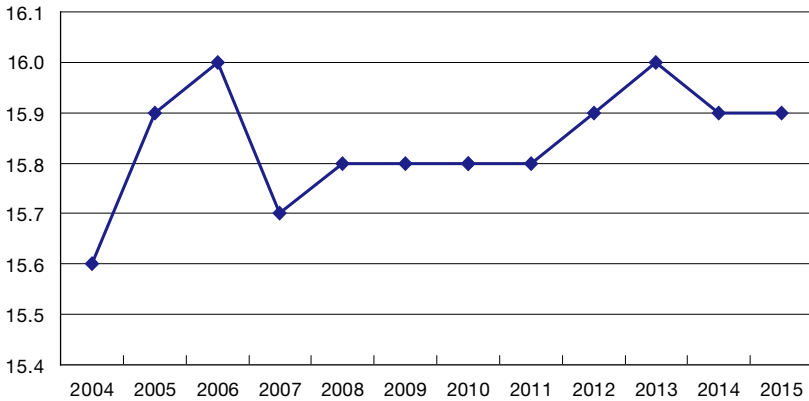
Ever since 2013, when the strategic line began that aims at carrying out economic construction and building nuclear armed forces simultaneously, First Chairman Kim Jong Un's consistent emphasis on that policy has been seen in North Korea's continuation of nuclear development—demonstrated by the aforementioned fourth nuclear test and the operation of nuclear-related facilities—and in Kim's almost regular field guidance visits to facilities related to the economy. In 2012, he had made thirteen visits for on-site face-to-face instruction in the economic sector, but after the new strategic line began, that frequency has increased, with forty-one such visits made in 2015, a new record since his regime began (Figure 3.1).

As far as the domestic economy is concerned, according to reports on the actual national expenditures for 2014 and the planned national budget for 2015, delivered at the third session of the Thirteenth Supreme People's Assembly held on April 9, 2015, national revenue increased 6 percent year-on-year, with 46.7 percent of total expenditures going toward the improvement of the people's economy (detailed itemization not made clear, however). The scale of the total budget was expected to increase 3.7 percent from 2014 as well, with a 3.6-percent increase in revenue expected from the Rason Economic and Trade Zone as well.²⁵⁾ The economic-related budget of North Korea is thus expected to increase, suggesting that the domestic economy is on an upward trend. Moreover, expenditures on defense are slated to account for 15.9 percent of the national budget in 2015, similar to the year before (Figure 3.2), but no reason was given for the same ratio to be used in both years. North Korea may be incorporating nuclear-related and missile-related expenditures in those for science and technology, so caution is needed. North Korea has increased investments in its 2015 science and technology sector by 5 percent.

Under the leadership of First Chairman Kim Jong Un, efforts are being encouraged to raise production in each sector, and a certain amount of success seems to have been made in improving the people's economy and in raising the revenue of the Rason Economic and Trade Zone. However, North Korea's gross national income (GNI) in 2014 was estimated at only one-forty-fourth that of South Korea, with the level of per-capita GNI estimated at just one-twenty-first,²⁶⁾ leading one to believe that the overall level of North Korea's economy is still at an extremely inferior stage.

As regards North Korea's foreign trade, estimates made by the Korea Trade-

Figure 3.2. The ratio of defense expenditures in North Korea's annual expenditures (%)



Sources: Compiled from Korea News Service, *Gekkanroncho*.

Note: Actual results for 2004-14, planned budget for 2015.

Investment Promotion Agency (KOTRA) show that North Korea's exports declined 1.7 percent in 2014 to 3.16 billion dollars, with imports up 7.8 percent to 4.45 billion dollars, resulting in a 41 percent increase in the trade deficit to 1.28 billion dollars.²⁷⁾ Looking at major imported items, imports of mineral fuels declined 4.7 percent from the year before, indicating persistent and chronic fuel shortages resulting from various economic sanctions imposed against North Korea, combined with the trend by foreign countries to support the North Korean economy more passively.

In the same way, North Korea's exports to China decreased 2.5 percent in 2014 to 2.84 billion dollars, with imports up 10.7 percent to 4.02 billion dollars, showing a prominent rise in imports. The ratio of North Korea's trade with the world in 2014 (totaling 7.61 billion dollars) that was accounted for by its trade with China (totaling 6.88 billion dollars) was 90.1 percent (compared with 89.1 percent in 2013), suggesting that North Korea's economic dependence on China is deepening further.

3. Discretion toward China while Deterring North Korea— South Korea's Diplomatic and Security Policies

(1) Efforts to Prop Up Relations with the United States and China at the Same Time, and a Rebooting of Relations with Japan

After taking office in February 2013, the administration of South Korea's President Park Geun-hye has sidled up to China almost more closely than any preceding administration, while holding firm to the security foundation within the US-ROK alliance. However, at the summit meeting held between the leaders of the two countries in October 2015 in Washington, she was called upon by US President Barack Obama to take cooperative action against China's "violation of international norms." Also, a difference in position between South Korea with China was confirmed regarding North Korea's nuclear test of January 2016. As for her stance toward Japan, President Park had continued placing priority on a resolution of the so-called "comfort women" issue, but that position softened in 2015, with the November summit between the Japanese and South Korean leaders being the first in the two years and nine months since her administration was inaugurated. Also, Tokyo and Seoul agreed in November on a final and irreversible resolution of the comfort women issue. That has led to expectations for more bilateral cooperation between Japan and South Korea, as well as among Japan, South Korea, and the United States, on security issues.

On October 16, 2015, President Park met with President Obama in Washington. The summit had been scheduled for June, but was postponed owing to the outbreak of Middle East respiratory syndrome (MERS) in South Korea. After the summit meeting, both presidents released a joint statement focusing on policies toward North Korea, calling upon that country to halt its nuclear development and provocations, while also stating that the US-South Korean alliance would continue to deter and manage North Korea's nuclear weapons and ballistic missiles. At the same time, both leaders said that coordination would be made with China to bring North Korea back to the negotiating table. South Korea's aim during the summit was to dispel concerns arising in the United States that South Korea was tilting toward China, on account of such moves as President Park's appearance at a Chinese military parade (to be mentioned below). During a press conference held after the summit, President Obama demonstrated a position agreeing with South Korea's strengthening of its relationship with China, so that aim was realized to a

certain degree. But President Obama also called upon South Korea to raise its voice and criticize China whenever it violates international norms and international law, just as the United States does,²⁸⁾ reminding South Korea in no uncertain terms that it should take a pro-US position in such matters.

In April 2015, six months before the summit, negotiations were concluded to revise the US-ROK Civil Nuclear Cooperation Agreement (becoming effective in November). South Korea insisted that it wanted to reprocess spent nuclear fuel from nuclear power plants, as it has increasingly fewer areas available for storage, whereas the United States was not so receptive to South Korean reprocessing out of concern for nuclear nonproliferation. Talks had continued for four years and six months on the issue. The fact that the latest revision allows South Korea to research a new reprocessing method, albeit at a stage before plutonium is separated, reflects that overall relations between South Korea and the United States are good.²⁹⁾

Meanwhile, the two sides were unable to iron out differences regarding the problem of Terminal High Altitude Area Defense (THAAD) missiles. High-ranking US officials have often spoken of the need for THAAD to be deployed in US military bases located in South Korea to deal with North Korean nuclear weapons and missiles. In May 2015, for example, US Secretary of State John Kerry visited a US base in Seoul, where he mentioned that the United States was considering the deployment of THAAD.³⁰⁾ However, the South Korean government has taken the public stance that “as neither requests nor consultations from the United States have been made, no decisions can be made.”³¹⁾ While that thinking reflects consideration of China, which opposes the deployment of THAAD in South Korea (to be mentioned below), Seoul may end up having to accept Washington’s request in order to realize a stable US military presence in South Korea amidst the growing seriousness of the North Korean nuclear and missile threat.

In 2015, Seoul made pro-China decisions about two matters despite the concerns of Washington. The first was its decision to participate in the Asia Infrastructure Investment Bank (AIIB) in March, and its signing of the agreement establishing the bank in June. As far as the AIIB is concerned, President Xi Jinping of China had called upon President Park at a July 2014 summit in Seoul to join the bank, but South Korea postponed its decision at that time. That was in consideration of doubts raised by the United States about the AIIB’s governance. However, when such US allies as Great Britain and Germany announced their

participation, South Korea joined them. The potential scale that the AIIB could create is attractive to South Korean corporations, and it ought to be seen that South Korea was calculating that it could demand gratitude from China through its participation.³²⁾

The second pro-China decision was made in September 2015, with South Korea's deciding to participate in ceremonies held in Beijing marking the seventieth anniversary of victory over Japan. In order to view the parade, President Park stood next to such leaders as President Xi and Russian President Vladimir Putin on the viewing platform on Tiananmen Gate. One South Korean newspaper boldly proclaimed the scene as showing President Park "standing at the center of the new order."³³⁾ What was President Park's aim in attending the ceremony even though the leaders of major Western democracies avoided it? It had to do with Seoul's policies vis-à-vis Pyongyang in the area of security. South Korea is pinning its expectations on China to wield influence on North Korea and quell its provocations of force and nuclear development. Also, in the event of the future unification of the Korean Peninsula, South Korea hopes that China will consent or at least not stymie a unification in which South Korea would take the initiative. For that reason, it believes that it needs to build, ahead of time, a cooperative relationship with China in normal, peaceful circumstances.

At her meeting with Xi Jinping on September 2, President Park said she appreciated the role China had played in lessening military tensions between the North and South during the land mine explosion incident that had just happened (mentioned above). Also, on her way back from Beijing, she revealed that she "had deep talks about Korean unification" with Xi, and explained the fruits of the talks by saying, "discussions about unification will begin any day with China."³⁴⁾ Indeed, in contrast to the VIP treatment given to President Park at the ceremony, the North Korean representative, Secretary Choe Ryong Hae of the WPK had been pushed to the side, partially because he was not a head of state. Judging just from that, one

could interpret that the distance between China and South Korea was overwhelmingly closer than that between China and North Korea. However, it is probably too soon to conclude that China has come to support South Korea over North Korea on every policy issue. For instance, after the summit between Park and Xi, China announced the statement that “the Chinese side supported the peaceful unification of the Korean Peninsula by the Korean people,” which is simply its rehashing of principles it had always held, so would be hard to describe it as an acceptance of South Korean-led unification. Meanwhile, at the Chinese-South Korean summit meeting held at that time, President Park secured a definite promise from President Xi to hold a trilateral summit among the Japanese, Chinese and South Korean leaders at the end of October 2015 or the beginning of November. Considering that Xi had been reluctant until then to hold a summit with Japanese Prime Minister Shinzo Abe, the South Korean government trumpeted it as a success of South Korean diplomacy.³⁵⁾

In February 2015, preceding the Chinese-South Korean summit meeting, Chang Wanquan, Chinese minister of national defense made the third-ever visit of a Chinese defense minister to South Korea, after a hiatus of some nine years.³⁶⁾ He reached an agreement with Han Min-koo, South Korean minister of national defense, to enhance the strategic cooperative partnership between China and South Korea, not just in the political, economic, social, and cultural areas, but also in the area of national defense. Meanwhile, according to announcement by South Korea, Defense Minister Chang expressed reservations about introducing THAAD into the Korean Peninsula.³⁷⁾ China has been exerting pressure at various occasions on the South Korean government, aside from that meeting, not to let the US military deploy THAAD. That is because China strongly senses that THAAD is one link in America’s plan to encircle China. Also, it probably has the aim of using the THAAD issue as way to insert a wedge in the US-South Korean alliance. Facing such pressure, South Korea is trying to evade it by using such means, stated above, as explaining that there has been no explicit request from the United States yet.

On December 31, 2015, the Chinese and South Korean defense ministries finally established a direct telephone line (hotline) that had been agreed upon in the July 2012 Defense Strategic Dialogue.³⁸⁾ Even so, the Chinese Ministry of National Defense did not respond to a request from Seoul for phone consultations right after North Korea’s nuclear test in January 2016.³⁹⁾ That is believed to result

from Beijing's thinking that it wants to avoid the tightening of sanctions and other means to destabilize Pyongyang. As those developments show, although South Korea and China have grown closer quite rapidly, there still remain large differences between the two in strategic issues, such as with North Korea or the status of the US forces in South Korea.

As far as Japanese-South Korean relations were concerned, President Park, while still pointing out the existence of a history issue with Japan, started using softer language in 2015 than before. In an interview in the *Washington Post* in June, she replied that while there were "history issues that need to be dealt with," at the same time "[South] Korea's relationship with Japan or coordination on the security front should not be adversely impacted by those issues." She thus shifted her policy to a "two-track approach," maintaining the stance of restraining Japan on the history issue while pursuing cooperation on other fronts. That was in response to calls from within South Korea and the United States to improve its relationship with Japan.⁴⁰⁾ Meanwhile, Prime Minister Abe continued to take the position that precisely because Japan and ROK were facing serious challenges, the two sides should speak their minds frankly without establishing any preconditions.

Amidst such developments, President Park and Prime Minister Abe met for their first bilateral summit on November 2, 2015, in Seoul (one day after a trilateral summit was held among the leaders of Japan, China, and South Korea). It was the first summit between the leaders of Japan and South Korea in three and a half years, ever since that which took place between Prime Minister Yoshihiko Noda and President Lee Myung-bak in May 2012. At the November 2 meeting, Abe and Park discussed such pending issues between the two countries as the so-called "comfort women" issue, and agreed to reinforce cooperation in the areas of security and the economy, among others. On December 28, 2015, Japanese Foreign Minister Fumio Kishida met South Korean Foreign Minister Yun Byung-se in Seoul. Kishida relayed the apologies of Prime Minister Abe, and announced that Japan would provide around 1 billion yen to a foundation set up by the South Korean government for the purpose of aiding the former comfort women. The two foreign ministers then affirmed that this issue has been finally and irreversibly resolved.⁴¹⁾

In 2015, cooperation and exchange between Japanese and South Korean defense officials also started up again. In May, Japanese Defense Minister Gen Nakatani conferred with South Korean Defense Minister Han Min-koo in Singapore, and in

October, Nakatani visited Seoul and again met with Han. The first meeting had represented the first time the defense ministers of the two countries had met since June 2011, and the second meeting represented the first visit by a Japanese defense minister to South Korea since January 2011. At the two meetings this time, the two sides confirmed that they shared many of the same strategic values in the region and in the world, agreeing to boost defense-related exchanges and to pursue cooperation in such areas as United Nations peacekeeping operations, efforts to deal with pirates off Somalia and in the Gulf of Aden, as well as in the areas of humanitarian assistance and disaster relief activities, etc.⁴²⁾ In May, there was also a trilateral meeting held in Singapore among the Japanese, South Korean, and US defense ministers, including US Defense Secretary Ashton Carter, at which they affirmed that the “Trilateral Information Sharing Agreement,” signed by the three countries in December 2014, had contributed to their cooperation in dealing with the threat of nuclear weapons and missiles from North Korea.⁴³⁾ In addition, in April 2015, Japan and South Korea held their first security dialogue involving foreign-policy and defense officials in some five years. Also, in October, a warship from the South Korean Navy participated in the Japan Self-Defense Forces (SDF) Fleet Review, held in Sagami Bay, for the first time in thirteen years, and in November, the South Korean military band participated in the SDF Music Festival held in Tokyo for the first time in eight years. In addition to such developments, consultations are continuing among defense bureau chiefs and section chiefs within the trilateral framework of Tokyo, Washington, and Seoul.⁴⁴⁾

Although defense-related cooperation between Tokyo and Seoul has begun to

grow in this way, it will be necessary to gain the understanding of South Korean public opinion before it can deepen further. Even today, more than seventy years after the Korean Peninsula was liberated from Japanese rule, many people in South Korea still oppose cooperating with Japan in military matters. Some in that country believe that the recent move by the Japanese government to enable the



Japanese Defense Minister Gen Nakatani and South Korean Defense Minister Han Min-koo before their meeting on October 20, 2015, in Seoul.
(Japan Ministry of Defense)

exercise of the limited right of collective self-defense is advantageous for South Korea in terms of defense against North Korea, but opinions against it are also strong, based on the misunderstanding that believes something to the effect that the Japan SDF will “re-invade” the Korean Peninsula.⁴⁵⁾ With such public opinion in the background, Seoul has expressed the position that any moves by Tokyo to exercise the right of collective self-defense “in matters related to the security of the Korean Peninsula and the interests of the ROK will not be accepted or tolerated without a request or the agreement of the ROK side.”⁴⁶⁾ More specifically, it says that Japan must consult with the South Korean government beforehand, getting its assent before entering South Korea, North Korea, and the Korean Theater of Operation (KTO).⁴⁷⁾ The reference to North Korea is based on the wording of the ROK Constitution that says that North Korea ostensibly belongs to the Republic of Korea. The KTO is to be designated by the ROK-US combined forces commander during contingencies, and is assumed to extend beyond the land and sea boundaries of South Korea and North Korea and include areas beyond. While it goes without saying that the consent of the South Korean government would be necessary for actions within its own territory, it is also likely important for there to be “coordination” and “mutual understanding” achieved between Tokyo and Seoul bilaterally, as well as among Tokyo, Seoul, and Washington trilaterally, insofar as activities in other areas are concerned.

As of February 2016, the term of President Park Geun-hye had two more years to go. Once the April 2016 National Assembly general election is over, the competition will gradually start to heat up among South Korea’s various political parties for the spot of candidate to be the next president, meaning that the influence of the incumbent president will start to wane. One of the main issues in the presidential election scheduled for December 2017 will be whether or not to keep the position of the Park administration of being discreet toward China even amidst

Table 3.1. Major items on the South Korean political agenda

Year and Month	Scheduled Event
April 2016	National Assembly General Election
Summer and Early Fall 2017	Primary Elections for President by Each Party
December 2017	Presidential Election
February 2018	Inauguration of New President

Source: Compiled by the authors.

an emphasis on both the United States and China, or to return to an emphasis on the US-South Korean alliance.

(2) The Improvement of Detection Capabilities as an Issue—The Defense Policies of South Korea

In the area of national defense, the Park administration is pressing ahead with the inevitable reduction in troop numbers on account of the decline in the younger population, while also continuing policies to maintain and strengthen its deterrence against North Korea and others through the introduction of new equipment and systems. In particular, even before the nuclear test of January 2016, South Korea has regarded the threat of North Korea's nuclear weapons and missiles as growing more serious, and is working to reinforce its ability to deal with that on its own as well as through its alliance with the United States.

Ever since 2005, when the Roh Moo-hyun administration was in power, the South Korean Ministry of National Defense has been pursuing reforms in defense by reducing the number of troops in the ROK Army while also strengthening the war-making capabilities of the Army, Navy, and Air Force through the introduction of state-of-the-art technology. According to the Defense Reform Basic Plan 2014-2030 released in March 2014, the number of troops in the Army is slated to be reduced from 498,000 in 2014 to 387,000 in 2022.

While reducing its troop numbers, the ROK Army has also continued to reinforce its firepower and transport capabilities, as well as its command, control, communications, computers and intelligence (C4I) capacity, along with increasing the number of career soldiers, so as to boost its deterrence against North Korea. In terms of firepower, it began the deployment of a new multiple-launch rocket system (MLRS) known as Cheonmu to artillery brigades in August 2015. With a maximum range of 80 kilometers, the Cheonmu is believed to be capable of launching 130- and 227-millimeter unguided rockets and 239-millimeter guided missiles,⁴⁸⁾ giving rise to expectations that it will serve as a powerful strike means in the kill chain (to be mentioned below).

The air corps of the ROK Army has begun the Light Armed Helicopter (LAH) Project, with the goal of replacing the currently-used AH-1S and 500MD. It will be pursued in an integrated manner with the Light Civil Helicopter (LCH) Project being pursued under the jurisdiction of the Ministry of Trade, Industry and Energy. In June 2015, Korea Aerospace Industries (KAI) officially signed the

contract for the project, based on the H155 (formerly the EC155) of Airbus Helicopters, with the target of completing development by 2022. It is reported that the size of the total demand for the helicopter, including private-sector use, is expected to be 400 units domestically and 600 units for export.⁴⁹⁾

Ever since the late 1990s, the ROK Navy has shed its role as just a coastal navy, and has pushed forward with the introduction of surface vessels, submarines, and aircraft capable of operating on the open ocean. In February 2015, it newly established a Submarine Command in Jinhae, Changwon City, for the integrated control of the operation, training, maintenance, and supply of the country's growing submarine fleet. One characteristic of South Korean submarines is that not only do they have capabilities against ships and submarines, but also are increasingly gaining the capacity to attack ground-based targets, allowing them to play a responsible role in the kill chain. The latest *Son Wonil*-class submarines (1,800 tons), featuring air-independent propulsion (AIP) systems that use fuel cells, can be submerged for more than half a month according to news reports,⁵⁰⁾ and can launch the Cheonryong sea-to-surface cruise missile. As of December 2015, five such submarines have been put into service,⁵¹⁾ and the plan is to complete a total of nine by 2019. The KSS-III, a 3,000-ton class submarine currently under construction, is believed to come with a vertical launching system that can launch ballistic missiles against land-based targets. By the 2020s there will be a total of nine such submarines, with the plan to replace the current nine-vessel fleet of *Chang Bogo*-class submarines (1,200 tons).

As for new equipment in the ROK Air Force, sixty new locally-made FA-50 light attack aircraft are currently in the process of being introduced. Meanwhile, forty F-35A fighters are slated to be imported from the United States between 2018 and 2021. Additionally, development of the stealth fighter aircraft known as the "Korean next-generation fighter" (KF-X) is to be finished by 2026, after which 120 such aircraft are to be produced by 2032.⁵²⁾ The winning bidder to become the developer of the project was chosen in February 2015, with two teams having bid: KAI, teamed with Lockheed Martin, and Korean Air, with the cooperation of Airbus D&S. In March, KAI was chosen as the priority negotiating partner. It is reported that the company was given high ratings on account of its experience in developing the FA-50 and the utility helicopter Surion.⁵³⁾ However, in September, the US government decided not to allow the transfer of Lockheed's technologies to South Korea, including the active electronically-scanned array (AESA) radar, which is

considered crucial to the success of the KF-X. Also, it was learned that collaboration was being pursued in those technologies with European corporations, leading many to believe that development would be delayed.⁵⁴⁾ Meanwhile, an agreement was made with Indonesia in October 2014 for the project's joint development, with Indonesia to fund 1.7 trillion won (approximately 1.5 billion dollars) of the total development costs of 8.7 trillion won. Indonesia will also take charge of some of the design and parts production.⁵⁵⁾

As for the F-15K and KF-16 fighter jets that currently make up the mainstay of the ROK Air Force, South Korea is reinforcing its long-distance air-to-surface attack capability as part of the preparation of its kill chain. The plan is to install the Taurus KEPD 350—a German air-to-ground cruise missile with a range of 500 kilometers—on those fighter jets, and it is reported that they will be ready for combat deployment in 2016. Also, Israeli-made SPICE 2000 precision guided bombs, with a maximum glide distance of fifty kilometers or more, will be imported for installation on the KF-16 starting in 2016.⁵⁶⁾

Introducing air refueling tankers has been a long-held dream of the South Korean Air Force, and after competitive bidding among three parties—the Boeing KC-46A (based on the Boeing 767), the modified 767-300ER plan by Israel Aerospace Industries (IAI), and the Airbus D&S A-330MRTT—the third party was chosen in June 2015.⁵⁷⁾ Four aircraft are to be introduced between 2017 and 2019. As a result, the operational radius of fighter jets and the weapon payload weight are both expected to be greatly expanded.



Concept model of the Korean next-generation fighter (KF-X), seen in October 2015 at the biennial International Aerospace and Defense Exhibition in Seongnam City, Gyeonggi Province (author)

In July 2015, the ROK Air Force established a Space Operations Center to gain knowledge about such things as the status of satellites traversing above the Korean Peninsula, in cooperation with the US Air Force, along with such related domestic institutions as the Korea Aerospace Research Institute and the Korea Astronomy and Space Science Institute.⁵⁸⁾

Seoul is attempting to deter and manage Pyongyang's weapons of

mass destruction and missiles through a tailored deterrence strategy developed jointly with the United States, and adopted in October 2013. The strategy not only includes nonmilitary efforts by both countries in the areas of diplomacy, economics and intelligence, but also appears to include the nuclear umbrella, strike capabilities with conventional weapons and the missile defense capacity of the United States, along with the kill chain, the Korea Air and Missile Defense (KAMD), and others of South Korea.⁵⁹⁾ In October 2014, the United States and South Korea, based on the “Concepts of ROK-US Alliance Comprehensive Counter-Missile Operations,” decided upon the joint application of the “4D Operational Concept” against North Korean missiles, namely, to detect, disrupt, destroy, and defend. At the ROK-US Security Consultative Meeting held in November 2015, with the participation of the defense ministers of both countries, the operational guidelines of the strategic concept were approved, and efforts are currently thought to be progressing toward the drawing up of the strategic plan. Also, in April 2015, the ROK-US Extended Deterrence and Policy Committee was merged with the ROK-US Counter-Missile Capability Committee to create the ROK-US Deterrence Strategy Committee (DSC). That is probably a reflection of the integration of what had been discussed separately before—extended deterrence and missile defense—and folding them into the tailored deterrence strategy, treating them as one.

Under the ROK-US tailored deterrence strategy, the kill chain and the KAMD system are treated as South Korea’s independent competency. The kill chain refers

Table 3.2. Major ballistic and cruise missiles of the South Korean military

	Ballistic				Cruise		
Name	Hyeonmu 1	Hyeonmu 2	Hyeonmu 2B (upgraded version)	Unknown Name	Hyeonmu 3A	Hyeonmu 3B	Hyeonmu 3C
Range (km)	180	300	500+	800	500	1,000	1,500
Warhead weight (kg)		500	1,000	500			
Deployment status	Deployed	Deployed	Unknown	2017 target	Deployed	Deployed	Deployed

Sources: Compiled from the November 23, 2012, October 1, 2015, and other articles from the Yonhap News.

to the system that aims to strike and destroy any North Korean nuclear weapons, missiles, or long-range artillery over North Korean territory once any sign of their launch has been detected. The strike means include the new MLRS, as well as air-to-ground missiles loaded onto fighter jets and guided missiles, etc., all mentioned earlier, as well as various ballistic and cruise missiles now possessed or under development (see Table 3.2). Of those, an upgraded version of the ballistic missile Hyeonmu 2B, with a range exceeding 500 kilometers and a warhead capacity of one ton, was test-launched successfully in June 2015, with President Park watching, and was scheduled for combat deployment in the same year.⁶⁰⁾ A ballistic missile with a range of 800 kilometers is also being developed; when deployed in 2017, it will make it possible to target the northernmost point of North Korea from the southern part of the South Korean mainland.

The KAMD, meanwhile, aims to shoot down enemy missiles at low altitudes using Patriot PAC-2 and Patriot PAC-3 surface-to-air guided missiles, the first having already been deployed and the second whose introduction has already been decided upon. In addition, a project is being advanced to upgrade the medium-range surface-to-air missile (M-SAM) Cheongung into an antimissile projectile. The Cheongung, which has a maximum range of forty kilometers and is said to be able to intercept enemy aircraft at an altitude of fifteen kilometers or so, began to be deployed to troops in 2015.⁶¹⁾ In addition, development is being pursued domestically of a long-range surface-to-air missile (L-SAM), with plans for deployment in 2023, that can intercept missiles at an even higher altitude (fifty to sixty kilometers) than the PAC-3. Until now, South Korea had avoided joining the US-led ballistic missile defense system, owing to such reasons as North Korea's geographical proximity and the heavy cost burden, as well as out of fear of provoking China. However, there is a plan by the South Korean and US militaries to build a system during 2016 that would share real-time information gained from US early-warning satellites and South Korean land-based radars, etc., so as to support the aforementioned 4D operational concept from the information side.⁶²⁾ In effect, then, the integration of the two systems is taking place.

Both the kill chain and the KAMD require South Korea to expand and enhance its independent detection capabilities. To that end, the South Korean military plans to deploy four RQ-4 Global Hawk unmanned surveillance aircraft and five reconnaissance satellites, the first to be introduced in 2018–19,⁶³⁾ and the second with a target operational year of 2023. While it is believed that the installation of

both would enable South Korea to conduct monitoring of launch sites and the state of mobile launching devices across the entire territory of North Korea, there still remains the problem of how to keep tabs on the actions of North Korean launch sites built underground.

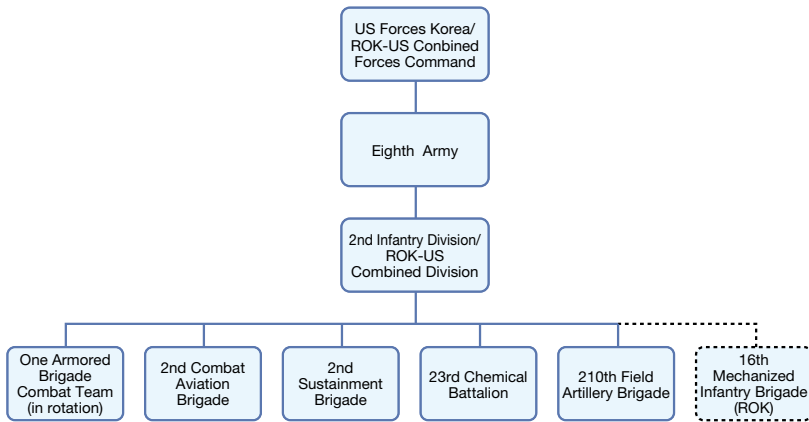
It has been reported that during times of emergency, the ROK-US Combined Division (to be mentioned later) and one brigade of the ROK Army Special Warfare Command will be assigned the tasks of securing North Korean nuclear weapons and missiles and destroying their launch facilities.⁶⁴⁾ According to reports in South Korean newspapers in August, the US and ROK militaries signed a new plan in June known as Operation Plan 5015, containing the preemptive strike concept of immediately striking back at attacks started by North Korea and taking out that country's nuclear weapons and missiles.⁶⁵⁾

In October 2014, Washington and Seoul agreed to postpone the transfer of wartime operational control (OPCON), which had been scheduled for December 2015, until a time when the conditions were ready. The transfer plan was finally inked at the ROK-US Security Consultative Meeting held in November 2015. The OPCON is directed at the combat troops of the ROK military, and during times of all-out war it will be exercised by the commander of the ROK-US Combined Forces Command (CFC), a four-star US Army general. The conditions of the OPCON transfer are said to include the completion of the aforementioned kill chain and KAMD, and the capacity of the South Korean military to play the leadership role in the ROK-US alliance framework once the transfer is made. According to the ROK Defense White Paper of 2014, the new forces commander after the transfer will be a South Korean general, with an American general as deputy commander.

US Army forces in South Korea have moved to both maintain and strengthen war-fighting capacity while also maintaining flexibility. In June 2015, the ROK-US Combined Division was formally launched, commanded by a major general of the US Army, with a South Korean Army brigadier general as deputy division commander. In times of peace, it has a mixed US-South Korean staff, and in times of war, it will be composed of troops from the US 2nd Infantry Division (2nd ID) and the ROK Army's 16th Mechanized Infantry Brigade. The 2nd ID had just one Armored Brigade Combat Team (BCT) as its main force, so from the standpoint of the United States, it was advantageous to add one brigade from the South Korean military in terms of enabling the division to show its war-making capacity.

Meanwhile, from the South Korean viewpoint, the aim is believed to have been to consolidate the commitment of the US military. Incidentally, the 1st Armored BCT of the 2nd ID was inactivated in July and replaced with another BCT sent from the US mainland on a nine-month rotational basis (the first troops sent over were the 2nd Armored BCT, 1st Cavalry Division).⁶⁶⁾ In the same month, one MLRS battalion (2nd Battalion, 20th Field Artillery Regiment) was dispatched from the US mainland to reinforce the 210th Field Artillery Brigade of the 2nd ID, also on a rotational basis. In such a fashion, the US Army has been reducing the number of units stationed permanently in South Korea, so as to maintain flexibility within its overall program of reducing troop levels, while also trying to maintain and reinforce its war-making ability, probably on account of how serious the threat of North Korean nuclear weapons, missiles, and long-range artillery has become.

Figure 3.3. Positioning and composition of the US 2nd Infantry Division and the ROK-US Combined Division



Source: Compiled from the US 2nd Infantry Division's website.

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Chapter 3 authors: Tetsuo Murooka (lead author, Section 3),
Hiroyasu Akutsu (Sections 1 and 2)