Declassified CIA papers cast new light on South Korea’s attempt to develop nuclear weapons in the 1970s and show that the program continued for at least two years after the US thought it had ended. With some in South Korea again discussing a nuclear option, Peter Hayes and Chung-in Moon find lessons for today.
IN RECENT YEARS, many previously classified US diplomatic cables have been released relating to nuclear proliferation in South Korea during the later years of the Park Chung Hee era in the 1970s. They paint a more complete picture of the nation’s attempts to develop nuclear weapons than was previously known, especially in the period between 1976 and 1978.

In light of current discussions in South Korea about developing nuclear weapons, it is important to look back and realize that Park’s aggressive nuclear behavior was largely triggered by eroding or ambiguous security assurances from Washington, especially the end of the Vietnam War and President Jimmy Carter’s decision to withdraw key American forces in South Korea, including tactical nuclear weapons. The uncertainty of the period left Park wanting the country to have its own nuclear deterrent.

Declassified US State Department cables are the foundation of an important study published in 2011 by Sung Gil Hong on Park’s attempts to make a nuclear weapon, including in the post-1975 period when the United States threatened to rupture the security alliance if the Republic of Korea (ROK) proceeded down this path.1 But, as Hong concluded, far from making South Korea more secure, Park’s toying with the nuclear option made him an unpredictable and even dangerous client who needed restraint in US policy-makers’ eyes.

Global Asia has studied a recently declassified set of documents posted by the CIA that provides important new information on Park’s efforts, and on the US response. The documents show that considerably greater proliferation of missiles and fissile materials and related technology was going on even after 1976 and up to 1978 than was previously known. Most accounts have the proliferation activity ending in 1976.

The most important of the CIA documents is South Korea: Nuclear Developments and Strategic Decisionmaking (sic), issued in June 1978 and released in 2005 under a routine 25-year declassification program.2 The document has languished largely unnoticed on the Web since it was released, so in this essay, we review the insights provided by the report.

Given the public debate in Seoul about nuclear weapons, we believe that there are lessons to be learned from Park’s failed proliferation strategy. It was a misguided effort but it was triggered by real security concerns. What mattered then, and what matters today, is the ability of South Korea and the United States to respond to North Korean military aggression. In that light, the North Koreans know they would lose a military confrontation, but nothing could justify North Korean nuclear weapons more than South Korea reactivating its nuclear weapons program. South Korea paid a high price for Park’s nuclear program. We see no reason to repeat this history.

KEY FINDINGS

In late 1974, Park — a former army general who took power in 1961 and ruled the ROK until his death in 1979 — authorized a program to develop nuclear weapons technology. In January 1976, he ended negotiations with France to obtain reprocessing technology, and by December 1976 he suspended the nuclear weapons program under immense pressure from the United States. What is less well known, though, is the proliferation activity that continued after 1976, partly in response to the withdrawal of US nuclear weapons included in the pullout of the 2nd Infantry Division, Hong has shown.

With Park fearing that the United States would abandon South Korea after the Vietnam War, despite the ROK having sent troops to that conflict, North Korean aggression seemed particularly menacing. A commando raid on the Blue House in January 1968, followed three days later by the seizure of the USS Pueblo, created a climate of fear. In addition, Nixon and Kissinger’s opening to China without prior consultation with South Korea left Park wondering if Washington would also open a channel to the North behind the South’s back. North Korean infiltration tunnels were discovered under the DMZ in 1974-75, and Park also witnessed the murder of his wife by a pro-North Korean assassin in 1974.

Another key factor was the unilateral withdrawal of the US 7th Infantry Division in 1971, and ongoing discussion of further withdrawals.

American politicians and journalists also increased their criticism of Park’s dictatorial regime after he institutionalized his rule. His sense of abandonment by the United States was acute.

Far from making South Korea more secure, Park’s toying with the nuclear option made him an unpredictable and even dangerous client who needed restraint in the eyes of US policymakers.

South Korea’s confidence in the US declined still further after Jan. 26, 1977, when incoming President Jimmy Carter ordered the withdrawal of nuclear weapons from the ROK along with the 2nd infantry division.

South Korean nuclear researchers believed that “while bowing to US preferences on the line of work they pursue, certain activities can and should be undertaken to keep Seoul’s nuclear option open,” the report said. A program was undertaken to acquire a missile that could threaten Pyongyang, while long-term nuclear fuel cycle technology was sought to keep the bomb option open.

In the 1978 report, the CIA found:

• “No evidence that any nuclear weapons design work is under way at present.
• “No evidence that the South Koreans are trying to acquire a uranium enrichment capability.
• “No evidence of any current activity related to the acquisition of a reprocessing capability.
• “No evidence of stockpiling of fissile material.
• “No evidence of work on weapons fabrication.”

But, the CIA concluded, South Koreans were facing decisions in the 1978-80 period that could affect the lead time to acquire nuclear weapons later. “Among the decisions that are likely to arise are those concerning whether or not to assem-

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South Korea that the CIA might have orchestrat-
ed his assassination on Oct. 26, 1979, in order to
stop his nuclear ambitions.3

PHASE 1: NUCLEAR MISSILE PROGRAM

The missile program (called Baekgom, or White
Bear) was initiated on May 14, 1974, at Park’s in-
struction.4 By 1975, a dedicated nuclear weapons
program had emerged, code-named Project 890,
the CIA report says, with three teams working on
missile design, nuclear and chemical warheads
under the Agency for Defense Development
(ADD). Korean scientists recruited from abroad
by mid-1975 were working on warheads, high
explosives fabrication, and computer codes. The
warhead design effort involved about fifty scien-
tists and technicians; the chemical warhead team
was smaller, but by mid-1976, the missile team
numbered more than 250. “This focus on missile
systems,” the CIA noted, “implies an interest in
acquiring a number of nuclear devices,” although
exactly which type was not clear to it. Moreover,
“It is clear that Seoul has not addressed the ques-
tion of physical and chain-of-command control of
nuclear weapons,” the report said.

By December 1976, the ADD completed its mis-
sile research and development site, Hong wrote,
where work focused on modifying the US Nike-
Hercules missile as a surface-to-surface weap-
on. Even without modification, the CIA added, it
could already hit Pyongyang. South Korean modi-
fications aimed to extend its reach to hit command
centers and equipment within a 350 km range.5

Not surprisingly, the attempts to obtain
American missile technology met with strong
American opposition in 1975 and 1976, which
forced the ADD to agree to limit the range of the
missiles to 180 km and the warhead to 440 kg. As
of May 1976, an initial design was nearly complete.
The CIA was able to obtain detailed technical pa-
rameters for the ADD’s research: “The rocket mo-
tors, airframe, control system, and onboard guid-
ance system would be dramatically upgraded or
entirely redesigned,” the CIA report said. “Using
French assistance for both propellant and produc-
tion technology, the ADD succeeded in casting a
reduced-scale motor.” ADD also circumvented US
opposition to its acquisition of a Lockheed propel-
lant plant from California by buying the manufac-
turing technology from a French company.6

The ADD decided not to modify the standard
Nike-Hercules tracking radar with technology ob-
tained from US firms because the ADD viewed
it as running “too high a risk of exposing the
program,” the report notes. Instead, it opted for
the “use of solid-state electronics rather than the
vacuum-tube technology of the standard Nike-
Hercules.” By December 1976, the ADD had not
produced a prototype missile when the program
was suspended, and it remained in suspension
until September 1977 when it received a green
light to proceed anew.

FUEL-CYCLE LINKAGE

By 1974, South Korea also had undertaken a
massive nuclear power program and had already
moved toward advanced fuel fabrication and
reprocessing facilities that entailed separating
enough plutonium for about one weapon per
year. South Korea attempted to buy pilot repro-
cessing plants from Belgium, but the United States
and Canada pushed the Korea Atomic Energy
Research Institute (KAERI) to drop those plans.
The United States was particularly concerned
about KAERI’s negotiations to buy a Canadian
NRX heavy water research reactor that would
provide a pathway to plutonium. In 1975, KAERI
negotiated a loan with Belgium to purchase a
small mixed (plutonium-uranium) nuclear fab-
crication facility. “The Belgian facility would have
given Korea the last key of the back end of the nu-
clear fuel cycle,” the report said.

3 This speculative theory is based on prior contact between Park’s
assassin, then head of the Korean CIA Kim Jae-kyu, and the CIA.
4 Byung-jin Park, “Story on South Korea’s Weapons Development-
The Case of Baekgom Guided Missile, a Signal Of Military Self-
5 US Central Intelligence Agency National Foreign Assessment
Center, op cit, p. 4. Hong provides a detailed account of the missile
and propellant research and acquisition activities that entailed
subterfuge and multiple purchasing strategies to evade US
surveillance and controls, op cit, pp. 494-495.
6 S.G. Hong, op cit, p. 495.
The plans formulated when Canada suspended its talks about supplying the NRX to South Korea — this being the same reactor from which India had recently diverted plutonium for its 1974 nuclear test. Both the United States and Canada then used their financing leverage over nuclear power plants on order to force KAERI to drop its plans for both reprocessing and for a mixed oxide research plants. “Planners at the Blue House,” stated the CIA, “viewed [these facilities] as a necessary component of a covert program within the military to develop a nuclear weapons capability.”

Park suspended this effort in December 1976 after strong US diplomatic intervention. But, noted the CIA, “His willingness to suspend 890 was strongly conditioned by the poor performance of the ADD ... and by the lack of any immediate need for nuclear weapons development.”

Park’s willingness was due primarily to demonstrations of American resolve in 1975 and 1976. US Defense Secretary James Schlesinger met with Park on Aug. 27, 1975, at which time the two men agreed that whatever might be said publicly about nuclear weapons to reinforce morale, in fact Seoul was more vulnerable to nuclear attack than Pyongyang, and US-ROK forces could be put on high alert, an armada of warships were put on high alert, an armada of warships within the military to develop a nuclear weapons program. “The CIA, “viewed [these facilities] as a necessary component of a covert program within the military to develop a nuclear weapons capability.”

“UGUINED ROCKETS”
The CIA report also cast new light on the interna- 

10 "Secure Telephone Conversation with Secretary Harold Brown on Wednesday, January 26, 1977," p. 1, marked Carter Library. Declassified 5/0: 12958, Sec.3.5 PER 1/8/98 NS/S H RE NV 96-134, copy kindly provided by Sung Gil Hong.

Park must have realized that nuclear weapons would only increase the South’s vulnerability to Soviet attack. In essence, he strove for symbolic nuclear status rather than a meaningful nuclear force, and the effort backfired badly.

Only in late 1975, the CIA stated, did an informal group of Korean officials who had previously passively accepted the nuclear weapons program emerge as bureaucratic foes. The clinching argument was the threat to the alliance with the United States. However, the CIA’s portrayal of an emerging set of opponents may not be correct. Others have argued that rather than resisting, these officials may have been protecting the missile and nuclear activities from challenge by other actors. On this score history remains murky.

PHASE 2: REACTIVATING ELEMENTS OF PROJECT 890
Jimmy Carter’s election confirmed Park’s worst fears of a precipitous withdrawal of US ground forces and nuclear weapons from Korea. Indeed, within a week of taking office, Carter ordered that a plan be developed to withdraw US nuclear weapons, even before a formal review was initiated on Jan. 29, 1977, including consideration of “ROK nuclear intentions and efforts to acquire advanced missile technology.”

The government-controlled South Korean media soon began discussing a nuclear option start-


moving US nuclear weapons was in accord with the North’s strategic goals, but its leaders would still know that the United States could deliver them at any moment or reintroduce them to the Peninsula itself. South Korea, however, got a different message. “Seoul will read the total withdrawal of nuclear weapons, and the effort backfired badly.

The government-controlled South Korean media soon began discussing a nuclear option start-

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in the alliance could threaten arms sales from the United States, could worsen trade relations, and could even accelerate the rate of US withdrawal and lead to the resumption of Park’s nuclear weapons program. “The withdrawal of all US nuclear weapons,” it concluded, “will clearly strengthen Park’s determination to move toward military self-reliance.”

The Carter Administration withdrew 1,000 American troops in September 1977 and another 500 in November 1978, before he reversed the withdrawal policy in 1979.

As of June 1978, by the time the Strategic Decisionmaking report was published, the ADD nuclear weapons designers had been redirected from Project 890 to high explosives and chemical warfare work. Of course, the line between nuclear and non-nuclear remained problematic because, as the CIA analysts explained, “an established high-explosives capability would also be advantageous to Korea if a nuclear weapons program were resumed.”

For their part, the missile engineers were back at work by September 1977 when the ADD was given the go-ahead to resume work on extending the range of the modified Nike-Hercules. As of June 1978, the CIA reported that the ADD’s missile researchers were distributed across three of the six directorates of its Advanced Weapons Center at Taejon.

The ADD began to test-fire the modified Nike-Hercules in April 1978 “to demonstrate — or give the illusion of — its ability to develop a long-range surface-to-surface missile,” the analysts wrote, and thereby win Park’s approval for a missile with a 3,500 km range to be available by about 1985.

The CIA analysts admitted that they had no specific information on the type of nuclear warhead that ADD might develop for such a missile. “Refinement in weapons design requires extensive testing of high explosives at a site that consists of a firing pad and bunker, along with elaborate instrumentation, for example, ultra high-speed cameras, flash X-ray systems, and oscilloscopes. Seoul has acquired some of this instrumentation, but we are not certain where the equipment is installed.”

The CIA analysts inferred that the size and type of nuclear warhead would be strongly influenced by the missile. They anticipated that a South Korean warhead would be limited to a nuclear implosion system of 300-350 kilograms. They believed that South Korea could meet the constraints with a “simple conservative design” with a yield from a few to up to twenty kilotons.

KEEPS THE OPTION OPEN

According to the CIA, Park had not decided to actually build bombs in late 1974, only to acquire the capacity to do so as a “precautionary measure carrying a tolerable level of risk.” Similarly, in spite of the Carter attempt to withdraw US nuclear weapons from Korea in 1977-78, they found “there is no perception of immediate needs or opportunities for acquiring nuclear weapons.”

The CIA recognized that by 1978, South Korea was heavily invested in light water reactors, largely financed by the US Eximbank. They noted that spent fuel from these reactors was an easier, faster route to obtaining fissile material than uranium enrichment. This was because until 1974, it was perfectly legal to stockpile reprocessed plutonium, provided the International Atomic Energy Agency safeguarded supplies.

By 1978 the only way to get a reprocessing plant was to build one, and the United States had already blocked supplier nations from providing such plants to Korea. The American low-enriched and Canadian natural uranium that ended up as spent fuel in Korea after the fission process in earlier reactors also was subject to US and Canadian
vetoes against it being reprocessed. Moreover, whether taken from a light water or a heavy wa-
ter reactor, diverting even a few assemblies ran a
high risk of detection, the CIA concluded.
As the CIA observed: “Planners at KAERI in the
early 1970s recognized the importance of repro-
cessing to a nuclear weapons program, but they
were primarily interested in reprocessing as it re-
lated to long-term nuclear power development.”
Still, even in 1978, many Korean planners believed
that not only was South Korea obliged to assume
more responsibility for its own defense, but “that
such self defense” may eventually require nuclear
weapons development, “the CIA concluded.
Furthermore, the agency said, on-going dual-
use research work on missiles, high explosives,
and heavy water routes to power reactor devel-
opment sustained these incremental attempts to
obtain technology, not least due to institutional
momentum. “Given the sophisticated technology
requirements set by the type of nuclear weapons
system Seoul has considered developing, some
planners believe that their country should do
more than rely on advances in nuclear technol-
yogy to shorten the lead time to a bomb,” the re-
port stated. “The strongest pressures in this re-
gard arise quite naturally from the nuclear re-
search community.”
The CIA concluded that Seoul would be great-
ly influenced by whether ground troop with-
drawal by the United States would be complet-
ed and what impact that would have on the risk
of a North Korean attack. “Irrespective of the
ground troop question, however, South Korea
will continue to question whether the United
States would employ nuclear weapons on its be-
half,” the report states. “Waning confidence in
the US nuclear umbrella, particularly if accompa-
nied by a decline of US influence in Seoul, would
strengthen the hand of those who want to pursue
a nuclear weapons option.”

ENTER CHUN
South Korea’s desire to become a missile power
apparently continued into 1979, after the CIA’s
June 1978 Strategic Decisionmaking report was
produced. On Aug. 29, 1979, Congressman
Anthony Beilenson wrote to then US Secretary
of State Cyrus Vance that the ROK government
had obtained from US firms in the Los Angeles
area “the specifications, engineering draw-
ings, instructions and designs, blueprints and
certain assembly equipment employed in the
United States Atlas Centaur [missile] program.”
“Further,” wrote Beilenson, “I am told that nose
cone materials, alloys and certain guidance sys-
tems have also been acquired … the Republic
of Korea is now engaged in the procurement of
associated computer equipment and software
packages that would substantially upgrade and
complement their current abilities to continue in
this endeavor.”
What action was taken on this letter is unknown.

In the end, Seoul’s nuclear ambitions and mis-
sile aspirations were reined in by political rather
than geopolitical considerations. Park was now
dead from an assassin’s bullet, and after General
Chun Doo-hwan seized power in a 1980 military
coup, he was desperate to win support from the
Reagan Administration. Chun downsized KAERI
in 1981, in the course of which it was renamed
the Korea Energy Research Institute and he
scrapped the residual nuclear weapons and mis-
sile programs.

LESSONS FOR TODAY
This fascinating CIA narrative is not merely of his-
torical interest but provides important lessons on
how the South might respond to North Korea’s
current nuclear capability.
First, it shows that even Park’s iron-listed dic-
tatorship could not conduct a clandestine nucle-
ar weapons program without the United States
quickly realizing what was going on. Given to-
day’s democracy and openness, a clandestine nu-
clear weapons program is even less possible than
it was in 1978.
Of course, current domestic advocates of South
Korean nuclear armament know this and wel-
come disclosure, precisely because this puts maxi-
mum pressure on the United States to either re-
introduce its own nuclear weapons or coerce the
North to denuclearize and co-operate with South
Korea and the international community. This po-
position arguably mirrors the evolution of Park’s
position from the early effort to develop nuclear
weapons to using the nuclear option as a bargain-
ing chip with the Americans.
Park was a military man, and he must have re-

Second, Park’s strategy failed both militarily
and politically. South Korea gained little actual
weapons technology, and his threats undermined
trust and confidence from Washington even as
US officials were already attempting to reverse
Carter’s withdrawal policy for fundamental stra-
tegic reasons.
Similarly today, South Korea proliferating nu-
clear weapons would harm the alliance and could
lead to international sanctions, trade losses, the
undermining of Japan’s non-nuclear commit-
ments and strategic threats including the possi-
tible targeting of South Korean cities by China or
Russia. Outside Korea, the current rhetoric ap-
ppears irresponsible and demeaning to Korea’s dig-
nity in light of its planned hosting of the Global

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Nuclear Summit in March 2012 and the efforts to
renew and amend the US-ROK nuclear coopera-
tion agreement in 2014.
Third, the outcome of the military crisis of
August 1976 over North Korean aggression sug-
gests that the massive mobilization of convention-
al force is what mattered, not the relatively dis-
tant threat of nuclear attack. The same lesson ap-
pplies today. What matters at the DMZ is the ability
of South Korea and the United States to respond to North Korean military aggression. North Korea knows it would lose and the South’s superior conventional forces backed by the US are almost certainly sufficient to deter or respond to a North Korean attack, whether nuclear or conventional.

An important factor in Park backing off his proliferation program was the creation in 1978 of the ROK-US Combined Forces Command, which had both wartime and peacetime operational control over South Korean forces. This meant that the US military would become automatically involved in a war in Korea at the outset and was a reassuring trip-wire for Park. Likewise, after Reagan reasserted the US security commitment to South Korea upon his election in 1979, Chun dropped all nuclear and missile programs, demonstrating that nuclear weapons tend to create stress on the alliance. This is as true today as it was when the CIA wrote its report.

Fourth, the CIA report wrongly concludes that unilateral withdrawal by the US could lead to the resumption of South Korea’s nuclear weapons program. In fact, the eventual unilateral withdrawal more than a decade later, in 1991-92, left lethal US conventional forces in place and did not lead either to war or to South Korean proliferation. Indeed, it arguably prepared the way for engagement with the North in a way that slowed Pyongyang’s nuclear proliferation by a decade, and led to its current isolation.

In the mid-1970s, the North Koreans were assuredly also intensely aware of the South’s nuclear drive, and this knowledge likely accelerated the North’s own early program. 15 South Korean proliferation today would make it far more difficult to negotiate the denuclearization of North Korea. An inter-Korean nuclear arms race would almost certainly lead to a new Cold War in the region involving China and Japan.

The North’s continuing perception of a threat after nuclear weapons have been removed from the Peninsula for nearly two decades indicates the depth of North Korean distrust and fear of the United States. The mere possibility of nuclear retaliation by the United States is a great motivator in Pyongyang.

Finally, it is remarkable to us that during periods of improved inter-Korean and US-North Korea relations, dialogue and engagement have led to progress in stopping the North from gaining more nuclear weapons capacity. The opposite is also true — the North accelerated its proliferation activity during the height of the Cold War when Reagan confronted the former Soviet Union in the region, and again when President George W. Bush downgraded and degraded relations with Pyongyang.

The lesson for politicians and strategists today is obvious.

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