[Interview] The importance of diplomacy in reducing tensions with N. Korea
As signs point more and more to the imminence of North Korea-US working-level talks, Siegfried Hecker – a Stanford University professor emeritus and Center for International Security and Cooperation senior research fellow who is the world’s foremost authority on the North Korean nuclear program – stressed four chief points.

First among them is the importance of diplomacy and negotiation to “reduce tensions.” While he stressed that he is “neither a technical expert nor a diplomat,” he also said research shows that “the rate of North Korea’s nuclear development has slowed when diplomacy is working and sped up with diplomacy is halted.”

Second is the importance of the Yongbyon nuclear facility complex. Referring to Yongbyon the “heart of the North Korean nuclear program,” Hecker noted that its dismantling would signify “a crucial first step toward ending the North Korean nuclear program.”

Third is the importance of combining step-by-step denuclearization with efforts to normalize relations. Describing “action-for-action and gradual, simultaneous exchange” as the “only viable approach,” Hecker emphasized that North Korea’s denuclearization “must take place in conjunction with normalization of US-North Korea relations.”

Fourth is the inherent impossibility of “irreversible” denuclearization. Responding to the US government’s demands for “complete, verifiable, and irreversible dismantlement” (CVID), he said, “Until we’re able to fully erase people’s memories, ‘irreversible denuclearization’ will remain impossible.” Stressing that demilitarization of the nuclear program is the “key thing,” he recommended approaching the matter of North Korea’s right to peaceful use of nuclear capabilities in a flexible manner – arguing that North Korea’s denuclearization will only become possible once the cooperation of North Korea’s nuclear scientists with demilitarization is achieved through an approach that is flexible enough to accommodate the right to use civilian nuclear capabilities in areas such as agriculture and health care.

Moon Chung-in questions Hecker on N. Korea’s denuclearization

Moon Chung-in, South Korea’s special presidential advisor for unification, foreign affairs, and national security, met with Hecker on the afternoon of Sept. 19 at the Plaza Hotel in Seoul during the latter’s visit to attend the DMZ Forum 2019 event organized by Gyeonggi Province. Their lunch and conversation lasted for over two hours and consisted mainly of Hecker’s replies to questions from Moon.
Both men agreed that the calls for South Korea’s nuclear armament coming from some far-right and conservative figures were “dangerous and irresponsible,” with the potential to “undercut the rationale for North Korea’s denuclearization and touch off a Northeast Asian arms race.”

Over the course of seven visits to North Korea between 2004 and 2010, Hecker has surveyed the Yongbyon nuclear facility complex four times, becoming the only outsider known to have personally seen its centrifuges and other infrastructure for its enriched uranium program. No one else has seen the Yongbyon facilities on the ground since his last North Korea visit in November 2010. Born in Poland in 1943, Hecker served from 1986 to 1997 at the director of the Los Alamos National Laboratory, which developed the world’s first atomic weapons. As a nuclear physicist and expert in denuclearization programs, he has been directly involved in the application of a cooperative threat reduction (CTR) program for the denuclearization of former Soviet Socialist Republics such as Kazakhstan and Ukraine. He has also headed the “Comprehensive History of North Korea’s Nuclear Program” project, which tracked the development of the North Korean nuclear issue since the “first North Korean nuclear crisis” in 1992 to confirm the hypothesis that diplomacy – including North Korea-US dialogue – has functioned to lower tensions and slow the rate of North Korea’s nuclear development. In 2009, he was honored by the US president with the Enrico Fermi Award.

Connection between diplomacy and N. Korea’s nuclear development

Moon Chung-in: You’ve noted an interesting correlation between diplomacy and North Korea’s development of nuclear weapons. I’d like it if you could give a synoptic historical perspective from the Bill Clinton administration the Donald Trump administration.

Siegfried Hecker: If you look at the broader framework since 1992, North Korea’s attitude has been, ‘We’d be happy to talk, but we’re also going to continue putting up protections [through nuclear development] in case things don’t work out.”

During the Clinton days, diplomacy was relatively active, with the North Korea-US Agreed Framework (AF) in 1994 and their Joint Communiqué in 2000. Nuclear development was deterred or slowed. The George [W.] Bush administration did not like diplomacy or the agreement the Clinton administration had reached with North Korea. The AF framework ended up being neutralized. As I see it, North Korea truly resolved to push ahead with its nuclear weapons development around 2002–2003, early on in Bush’s term. For a brief period, the rate of nuclear development was slowed with the adoption of the September 19 Joint Statement at the Six-Party Talks [in 2005]. But the overall situation took a turn for the worse, with things like the first nuclear test in 2006.

The Obama administration didn’t make contact with North Korea for any reason whatsoever. There were four nuclear tests during Obama’s eight years in office, and the situation got much worse. That led to the “fire and fury” period early in Trump’s time in office. At the end of 2017, the situation on the Korean peninsula was dangerous, dangerous, dangerous.

Fortunately, dialogue started back up again in 2018. The North Korea-US summit in June 2018 greatly reduced tensions. There were hopes that the two sides would take a big step forward at their second summit, in Hanoi, in Feb. 2019, but that didn’t happen. North Korea hasn’t carried out any nuclear tests for more than two years, since its sixth test in on Sept. 3, 2017. That shows the effectiveness of diplomacy.

Why the Hanoi summit didn’t work out

Moon: Why do you think the Hanoi summit didn’t work out?

Hecker: I don’t think that either North Korea or the US were adequately prepared. Both sides appear to have gone into the negotiations overconfident that the other side would accept their demands. Most significantly, I don’t think there was enough time to determine the significance of the North’s proposal to fully shut down its Yongbyon nuclear complex. Since the Yongbyon proposal was made during the summit itself, rather than the preceding working-level negotiations, lower-level officials unfortunately weren’t able to give that the serious and adequate discussion it deserved. It could have been a very, very important, big deal.

That said, the fact that Trump and Kim are still maintaining an amicable relationship despite the difficult negotiations is good news.

The value of the Yongbyon nuclear complex

Moon: There are conflicting views in South Korea and the US about the value of the Yongbyon nuclear complex. Some people say it’s a worthless pile of scrap metal, while others say it’s the heart of the North’s nuclear program. The fifth clause of the Pyongyang Joint Statement that Moon Jae-in and Kim Jong-un released on Sept. 19, 2018, states that “the North expressed its willingness to
continue to take additional measures, such as the permanent dismantlement of the nuclear facilities in Yongbyon, as the United States takes corresponding measures in accordance with the spirit of the June 12 US-DPRK Joint Statement.” Moon thought that dismantling the Yongbyon complex would constitute the first step — and a quite important step — toward making denuclearization irreversible.

Hecker: The Yongbyon complex is connected to plutonium, highly enriched uranium, and tritium. It’s the heart of North Korea’s nuclear program. To be sure, some of the facilities at Yongbyon are old, but they’re still newer than the facilities at Los Alamos in the US. The US and Russia have a lot of old nuclear facilities, but most of them work well. Most important is the question of how much [production of nuclear materials] is being done at Yongbyon right now, and the answer is, a whole lot. It’s a facility that sets the course of North Korea’s nuclear development. For that reason, the closure of the Yongbyon complex can be regarded as a very significant and decisive first step.

To be sure, shutting down Yongbyon doesn’t do anything to North Korea’s stockpile of nuclear weapons and missiles. Denuclearization had to be performed on all of North Korea’s three nuclear capabilities, namely its nuclear materials, nuclear weapons, and delivery systems [missiles]. Nevertheless, the importance of Yongbyon is obvious and indisputable.

Moon: As an expert, how do you rate North Korea’s current nuclear capability?

Hecker: Factoring in the suspension of North Korea’s nuclear tests and long-range missile launches from December 2017 to September 2019, I estimate that the North’s weapons-grade plutonium hasn’t changed very much, from 20-40kg to 25-48kg. I think there’s been a comparatively greater change in its store of highly enriched uranium, from 250-500kg to 450-700kg. I’ve increased my estimate of its nuclear arsenal from 25-30 devices to a maximum of 37. But I don’t think there’s been a decisive change in the strategic terrain.

Moon: Some people think that North Korea is offering to shut down, but not dismantle, the Yongbyon complex. But during a press conference shortly after the Hanoi summit, North Korean Foreign Minister Ri Yong-ho said that the North intended to completely scrap its production facilities for all nuclear materials, including plutonium and uranium, at the Yongbyon complex, in the presence of American experts, and through the joint work of technicians from both countries. My understanding is that he was talking about the complete, final, and permanent dismantlement and elimination of the nuclear facilities at Yongbyon.

Hecker: For North Korea to claim that it has dismantled Yongbyon, it will have to prove, for example, that it has halted and completely removed the 5MW reactor that produces plutonium. Dismantlement means there’s no possibility of reuse. But for two reasons, I think we should start by focusing on shutting Yongbyon down. Dismantlement takes a long time. We need to be flexible about the idea of converting the experimental light water reactor to civilian use. Based on my experience in the former Soviet Union, that’s the only way to gain the cooperation of North Korea’s nuclear scientists, which will work strongly to our advantage in the inspection and verification of the nuclear facilities. If we rule out the North’s right to the peaceful use of nuclear power, it will be hard to achieve complete denuclearization.
The importance of “tailored sanctions relief

Moon: Even if North Korea and the US hold working-level talks, I don’t think North Korea is going to alter its basic position on trading the dismantlement of the Yongbyon nuclear facility for easing sanctions and providing a security guarantee. Given the outstanding differences between the North Korean and American approaches, what role do you think South Korea will be able to play?

Hecker: The all-in-one deal that the US proposed at Hanoi [denuclearization first and sanctions relief later] didn’t go over with North Korea. The only workable approach is action for action, a “phased and synchronous” transaction. Denuclearization and
normalizing relations have to go together. As far as I can see, the US doesn’t seem ready yet to lift UN sanctions on the North. That’s why I think we need to lift sanctions in areas where inter-Korean cooperation is possible, which I call “tailored sanctions relief.”

**Moon:** The US is preventing South and North Korea from engaging in economic cooperation even if they wanted to.

**Hecker:** The South Korean role is key here. In the end, for North Korea to give up its nuclear weapons, we have to be able to offer it a future that includes economic development that would benefit the North Korean people. The South Korean role is very important here. South and North Korea must be capable of drawing that future together. That’s not something they can leave to the US.

**Moon:** Some groups in South Korea think that Seoul should respond to the North Korean nuclear issue by acquiring its own nuclear arsenal or by sharing the US’ nuclear weapons, as the NATO countries do. But the idea of sharing nuclear weapons is a misconception. Final decisions about the use of nuclear weapons are made by the American president. Nuclear weapons can’t be fired without access codes provided by the president.

**Hecker:** Acquiring nuclear weapons is an irrational and very foolish idea. Under the Non-Proliferation Treaty regime, South Korea has no way to do so. To be sure, South Korea has the technology and the funds to develop nuclear weapons [unlike its poor neighbor to the north]. But it would be unable to avoid sanctions from the international community. That could create severe economic difficulties, and would also require a complete overhaul of South Korea’s military strategy, which is currently focused on conventional weaponry. South Korea’s neighbors would likely be provoked into a military arms race that might actually weaken the deterrence [that the nuclear arsenal was supposed to provide].

By Lee Je-hun, senior staff writer, and Noh Ji-won, staff reporter

Please direct comments or questions to [english@hani.co.kr]

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