

Stanford University Professor's Report on the Implications of North Korea's Uranium Enrichment Program

Between 2012 and 2014 we posted a number of articles on contemporary affairs without giving them volume and issue numbers or dates. Often the date can be determined from internal evidence in the article, but sometimes not. We have decided retrospectively to list all of them as Volume 10, Issue 54 with a date of 2012 with the understanding that all were published between 2012 and 2014.

Somewhat lost in the current heightened military tensions on the Korean Peninsula, following a quick succession of events that started with a South Korean live-fire drill on an island held by South Korea in the contested sea area near North Korea's coast. This prompted an artillery response by the North that killed four South Koreans (two soldiers and two civilians), and now a major 4-day US-South Korean maritime exercise (including maneuvers by a US aircraft carrier) in waters west of the Korean peninsula that has drawn strong complaints from China and North Korea.

We present a report by Stanford University professor Siegfried S. Hecker on his recent visit with two Stanford colleagues to the North's Yongbyon Nuclear Complex. Hecker, the former director of the Los Alamos National Laboratory, writes about his surprise at being shown "a modern, small industrial-scale uranium enrichment facility with 2,000 centrifuges that was recently completed and said to be producing low enriched uranium (LEU) destined for fuel" for a 25-30 megawatt-electric experimental light-water reactor (LWR), now under construction. In Hecker's view, the LWR and enrichment facility "appear

to be designed primarily for civilian nuclear power, not to boost North Korea's military capability."

- Read Hecker's report, "[A Return Trip to North Korea's Yongbyon Nuclear Complex.](#)" [[via Nautilus Institute](#)]
- Watch [Hecker's lecture on the North Korean nuclear program](#) [[via C-SPAN](#)]

How to put this revelation of the North's newest nuclear capabilities in the context of peace and security in Northeast Asia, where 60 years of military, political and economic clashes, sometimes interrupted by short-lived or fragile diplomacy, between the two Koreas, China, Japan, Russia and the U.S. have weighed on the larger Asian region's attempts to speak to the world with one voice, as the European Union and North America have long managed, is perhaps best explained by Hecker himself:

"It is clear that waiting patiently for Pyongyang to return to the Six-Party talks on terms acceptable to the United States and its allies will exacerbate the problem. A military attack is out of the question. Tightening sanctions further is likewise a dead end, particularly given the advances made in their nuclear program and the economic improvements we saw in general in

Pyongyang. The only hope appears to be engagement. The United States and its partners [*ed. note: Japan and South Korea*] should respond to the latest nuclear developments so as to encourage Pyongyang to finally pursue nuclear electricity in lieu of the bomb. That will require addressing North Korea's underlying insecurity. A high-level North Korean government official told us that the [October 2000 Joint Communiqué](#), which brought Secretary of State Madeleine Albright to Pyongyang, is a good place to start."

- Peter Lee, [High Stakes Gamble as Japan, China and the U.S. Spar in the East and South China Seas](#)

- Seunghun Lee and JJ Suh, [Rush to Judgment: Inconsistencies in South Korea's Cheonan Report](#)

- Tanaka Sakai, [Who Sank the South Korean Warship Cheonan? A New Stage in the US-Korean War and US-China Relations](#)

Asia-Pacific Journal articles that might be read in conjunction with Hecker's report are: