

Union of Concerned of Concerned Scientists
Press Conference on the North Korean Missile Crisis

April 20, 2017

DAVID WRIGHT: Thanks for joining the call. With me today are two people who are uniquely qualified to talk about this subject and probably need no introduction to this group.

Bill Perry served as Secretary of Defense under President Clinton from 1994 to 1997, during the negotiation of the 1994 Agreed Framework with North Korea. He later served as President Clinton's special envoy to the North and continues to follow this issue very closely.

Sig Hecker is former director of Los Alamos National Laboratory, an expert on plutonium and nuclear weapons. He's visited North Korea seven times since 2004 as one of the few Western scientists to have visited North Korea's Yongbyon Nuclear Center.

The issue that we are addressing today is that North Korea has continued to advance both its nuclear and missile capabilities. The Trump administration at this point seems to understand that there are no good military options for addressing that threat and sanctions alone are unlikely to solve the problem. Recently the administration seems to be showing signs that it's open to pursuing negotiations. And so the purpose of this call is to try and shed some light on the role that diplomacy can, and we think should, play in defusing the crisis and reducing the threat.

So with that let me turn it over to Bill Perry for his opening comments.

BILL PERRY: Thank you David. I want to start off by giving you a very brief history that I've had with the North Korean program. It began in 1994. It was the first crisis I faced as Secretary of Defense and almost led to a war with North Korea. Instead it ended up with something called the Agreed Framework, which was the result of an intense negotiation between the United States and North Korea.

Then in 1999 we had another crisis with North Korea. I was out of office at the time, but President Clinton asked me to come back temporarily to be his envoy to North Korea, which I did. I ended up bringing South Korea and Japan closely into my study, which seemed to be called in South Korea the "Perry Process." When I went to Pyongyang in 1999 and had very detailed meetings, I made a proposal to them which had both incentives and disincentives, but it did require them to give up their nuclear program and their long-range missile program. I think we were within a few months of closing that deal, including North Korea sending their senior military man back to Washington to kind of wrap up the negotiation. But with the change of administrations at that time and President Bush came into office, scuttled the whole process and for two years there was no discussions or negotiations at all with North Korea. And that ended up then, in 2002, with Bush and North Korea both withdrawing from the Agreed Framework.

I went again to North Korea in 2004 and visited the Kaesong plant, which is a joint manufacturing effort between North and South Korea. And again in 2008 I was invited by the North Korean regime to come over to attend the performance of the New York Symphony in Pyongyang, which was a wonderful occasion which I won't talk about today.

That history has led me to a set of beliefs. The first belief is that the North Korean regime is ruthless and reckless, but it is not crazy. And anybody who believes they're crazy is seriously underestimating the regime in dealing with them.

Second, their primary goal is sustaining the Kim dynasty or, to put it another way, keeping their regime in power. And they have subordinated all other goals, including economic goals, in order to achieve that goal.

The demonstration to me that they're not crazy is that, from a very weak hand which they have played very shrewdly for many decades they have in fact kept that regime in power while all the other regimes that were originally supported by the Soviet Union were collapsing.

The next belief is that they have a modest-sized nuclear arsenal of 10-20 nuclear weapons. Dr. Hecker may have more to say about that. And the purpose of that arsenal, in my belief, is to maintain their regime in power. In other words, deterrence.

They also maintain the regime in power through internal threats, through a ruthless secret police. They also have a substantial arsenal of medium-range ballistic missiles, which are now operational, and they're developing an ICBM, which could be operational in several years.

Based on those beliefs I've come to several judgments.

The first judgment is that North Korea will not use their nuclear weapons in a surprise attack against South Korea or the United States because they know that would lead to the devastation of their country and the end of their regime and the death of their leaders. Completely contrary to their goals. That is to say, the nuclear arsenal is useful only if they do not use it. Only for deterrence. If they use it they're done.

The next judgment I have is they will respond militarily into South Korea if they have any preemptive attack. There will be a response if we have a military attack against North Korea. That's not to say that we shouldn't consider a military attack. But as we consider it we should understand it's going to lead to a counter-attack directed primarily at South Korea or perhaps our troops in South Korea as well.

The next judgment is that, I believe there may be a window open for negotiation that was not open in the same way through the last two administrations. The primary reason I believe this window is now open is because, for a decade or two, China has been relatively unconcerned about the North Korean nuclear threat. Now they're beginning to take it much more seriously because they see it as adverse to their core interests. They see the possibility that it could lead to a war on the Korean Peninsula and they also see a possibility it could lead to South Korea and Japan going nuclear. Either of those events would be very detrimental to their core interests, and they are beginning to take this much more seriously.

So I think, because of China's interest, if we could find any way of working together with China, we could put together a negotiating package which adds both carrots and sticks. We have the carrots we can offer, we and South Korea and Japan, and China has the sticks. We have no other sticks really, other than military action, which we're trying to avoid.

My final judgment is that any negotiation, to be successful, would have to be regarded in two phases. The first phase is focused on reducing the nuclear dangers. There are many things we can do there like getting them to stop testing the nukes, stop testing the long-range missiles, better control over their exports. And the second phase then could be focused over a longer term on the reduction of the nuclear arsenal, eventually leading to a nuclear-free peninsula.

Those are my opening comments.

DAVID WRIGHT: Thank you. Let me turn it over to Sig Hecker.

SIG HECKER: Thank you very much David. Dr. Perry has given you a very nice and comprehensive view of the situation since 1994. Let me try to fill in some additional information, based mostly on my own experience and my visits to North Korea. And particularly to try to fill in, let me say, in terms of what does North Korea have, how did they get it, when did they get it, and why did they get it? I happen to think that's actually very important and it's covered rather little in the new media today.

So let me back up and start with, what do they have? The most important aspect that we track is whether they can make the bomb fuel, and that's either plutonium or highly enriched uranium. It turns out we have a very good handle on the plutonium because a number of people have actually been in to see the reactor, we know everything about that reactor, and from overhead satellite imagery you actually know when it's operating. And so we believe, I believe, that North Korea has somewhere between 20 and 40 kilograms of plutonium today, in the neighborhood of four to eight bombs' worth.

With highly enriched uranium, the most important aspect of that is to understand how uncertain our estimates are. It turns out the only view that any outsiders have ever had of the centrifuge facility is when my Stanford colleagues and I were invited to see the new centrifuge facility in November of 2010. My estimate of how much they have produced is based on that visit and also on a lot of other sort of circumstantial evidence, including overhead imagery. But the problem is you can't see inside the building, centrifuge facilities are very easily hidden, and so for the most part, we have to do the best we can with the best methods. And that is just not very good today. So, my current estimate is that they have somewhere between 200 and perhaps 450 kilograms of enriched uranium. You put that together with plutonium, and that would mean they may have enough of the bomb fuel, the fissile materials, for perhaps 20 to 25 nuclear weapons today.

And, as you've already heard, they have a substantial missile capability, especially in the 30-some launches that they've conducted in 2016 and now, although a major fraction of those have actually failed, but nevertheless, they most likely have the ability to reach all of South Korea and Japan.

As far as actually building weapons, we know even less than for the highly enriched uranium, except the bottom line for that is we know they've done five nuclear tests. And the last two or three of those nuclear tests are on the explosive destruction power of a Hiroshima or Nagasaki. And so, again, we must assume they've been able to make enough advances in the five tests over 10 years that they can miniaturize a nuclear warhead sufficiently to go on those missiles that can reach South Korea and Japan.

Now let me turn to how did they get it? And for the most part, even though initially they got some help from the Soviets in terms of the Soviet Atoms for Peace and then they used sort of a leaky international export control system to acquire some of the key materials, especially for centrifuges, but for the most part they've done this themselves. So they've built the facilities, they've built the bombs.

When did they do it? Well, they've had a program for 50 years or so, but what's particularly disconcerting since around 2003, that's when we believe they built the first bombs and then particularly since 2009 or 2010, what they've done is not just build a few bombs, but build what looks to be a considerable nuclear arsenal, one that threatens the Korean Peninsula and all of East Asia.

Now why did they do it? Dr. Perry has already given you reasons for regime survival, for domestic reasons, it's also a matter I'm sure of international prestige. But my biggest concern is that the when and the why are actually closely connected. In other words, they're interdependent. And so my principal concern, and I'm going to address that in the remaining few minutes, is that, because they've been able to make such advances in their nuclear capabilities, that perhaps today they're actually thinking beyond just deterrence, and that particularly, they may be thinking in terms of looking at both military and diplomatic coercion. They may view those nuclear weapons as usable for being able to terminate a conventional conflict.

And then I'm particularly concerned about what happens to the security and safety of those nuclear weapons in case you have turmoil inside of North Korea. So I view the current North Korean situation as being a crisis now. And so my main recommendation to the Trump administration is, of course it's important to have negotiations, but right now the most important element is actually send a presidential envoy, talk to them to reduce the tensions, and make certain that we do everything we can to avoid a nuclear use on the Korean Peninsula.

So whereas previous presidents faced, how do we avoid them getting nuclear weapons, President Trump faces how do we avoid having them use a nuclear weapon? Having those sorts of discussions then may actually lay the ground rules for the type of negotiation that Dr. Perry discussed.

Let me leave it here and of course I'll be happy to follow up on any of those aspects.

DAVID WRIGHT: Thank you. Before we take questions I want to make a few additional comments about North Korea's missile program.

I've been following its program since the early 1990s. What we've seen is that despite sanctions it's continued to improve its missile capability, especially in recent years. The North now has something like eight types of missiles either deployed or in development, as well as a satellite launcher.

Fortunately, it does *not* yet have a long-range missile that can carry a nuclear warhead. But we're seeing it working on pieces that can be useful for developing a long-range missile. And if that continues, I think there's little doubt that it will eventually develop such a missile.

So far, NK's longest-range operational missile is the Nodong, with a range of only about 1,300 km. It's working on the Musudan, which uses more advanced technology than its older Scud-

based missiles, but it's been having technical problems, with only one successful flight test out of about eight so far.

This means there's a window for trying to stop further progress, and I think the US needs to try to take advantage of that window

In particular, NK won't be able to develop new missiles without flight testing. Negotiations that are accompanied by a freeze on flight testing would therefore block its path to these missiles. And a freeze would be completely verifiable by US early-warning satellites.

Obviously, no one knows whether NK would agree to a freeze, but I don't see how else to stop its progress. This window won't last forever, and the US should be trying to find out if a freeze is possible, especially with Chinese help.

A full recording of the press conference is available at: <https://s3.amazonaws.com/ucs-webinars/North+Korea/UCS+press+call+on+NK+4-20-17.mp3>