38 North Press Briefing: April 18, 2017

JHU/SAIS
THE U.S.-KOREA INSTITUTE
38 NORTH PRESS BRIEFING

VERBATIM TRANSCRIPT OF
A 38 NORTH PRESS BRIEFING
"NEWLY REVEALED MISSILES AND A FAILED TEST"

GUESTS:
JOSEPH BERMUDEZ
STRATEGIC ADVISOR OF ALLSOURCE ANALYSIS, INC

MICHAEL ELLEMAN (ABSENT)
IISS SENIOR FELLOW FOR MISSILE DEFENCE

JOHN SCHILLING
AEROSPACE ENGINEER, 38 NORTH ANALYST

MODERATOR:
JOEL S. WIT
SENIOR FELLOW AT THE US-KOREA INSTITUTE AT SAIS, CO-FOUNDER OF 38 NORTH

FACILITATOR:
CAMPBELL HJ MOON
COMMUNICATIONS SPECIALIST AT 38 NORTH (US-KOREA INSTITUTE AT SAIS)

TRANSCRIPTIONIST:
RICHARD BOYD

All eyes are on North Korea and its WMD program with new ballistic missiles revealed during a military parade and a failed test over the weekend, in addition to the announcement by their vice foreign minister Monday of weekly tests in the future. 38 North experts will give opening remarks, followed by a Q&A session moderated by Joel Wit.

*****

38 North Press Briefing: April 18, 2017

P R O C E E D I N G S

MOON: For today's session we're going to start with some opening remarks from Joe, John, and – sorry, one second. (Echo and feedback on the audio.)

We're going to get started right now. Joel, do you want to go ahead and start?

WIT: Thanks. Thanks, Campbell. So, let me start with a few comments and then we'll get very quickly to our speakers. And I've asked them to speak very briefly, about some of the most important things they've observed over the weekend, at the parade, and also the test that occurred – I guess it was on Sunday.

So, that's what we want to focus on in this call. We've had the benefit of a few days, to do analysis and to do some thinking about what happened and what we were seeing, and I think that's very helpful in the case of these types of events, because initial reactions are not always right.

And then secondly, I know a number of you are interested in these reports about a US cyber campaign that, at least by appearance, seemed to be affecting the success rate of North Korean missile tests. Let me say up front that none of us, neither I nor the speakers, know anything about exactly what the US government is or is not doing. We rely solely on press reports.

But, you know, John and to some degree Joe are – they are very knowledgeable about missile programs and, of course, John builds missiles. So, I think they are able to comment, in a technically knowledgeable way, about those reports.

So, let me turn – I'm going to turn to John first and then to Joe second. And what I've asked each of them to do is to highlight the three most important things they would like to highlight, that come out of the past weekend's events. And I want – I would appreciate it if both of you would keep it brief. Maybe five minutes, a little bit more than five minutes. And also please remember that all of the people on the line are not rocket scientists, and so therefore let's kind of keep it in a way that's understandable for everyone.

So, why don't we start with – let's start with John, John Schilling, first. Okay, John?

SCHILLING: Okay. Can you all hear me?

WIT: Yeah, I hear you. Go ahead.

SCHILLING: Okay. In that case, I have, as Joe recommended, three points. First, we saw a lot of activity at the parade, but most of that was in the field of ground vehicles. We saw TELs ["transporter-erector-launcher"] carrying, in some cases, the same missile on a different TEL, or a canister. We only saw one new missile in all of that activity, and a new reentry vehicle, on an existing missile. So let's not over-estimate the amount of new missile activity.

The second thing, we saw a lot of emphasis on solid rocketry. We saw both the PK-1 and the PK-2 solid missiles that have recently been tested, on prominent display. We saw canisters that I'm guessing, at this point, were probably empty but are the type that would in the future be used for large, solid rockets.

We did not see North Korea's heritage liquid propellant missile systems, the Scud and the Nodong, that usually show up in parades like this. So I think they are trying to send the message, and in the case of some of the more impressive solid rockets, the big canisters they showed. They sent a message -- "ahead of reality" -- but that they are transitioning to a highly-mobile, highly-responsive, solid propellant force.

And finally, on the subject of cyber warfare, I would expect, and to some extent hope, that the United States government is exploring the opportunity to use its cyber capabilities against North Korean missiles in the event that they are used against us, but understand that the missile itself is a very hard target for a cyber attack. It is very strongly isolated from the rest of the world; there are very few opportunities for attack.

More plausible opportunities would be to attack the manufacturing process or perhaps activities supporting the test campaign, the tracking radars, maybe the computer used to program a guidance system for a test. All of these offer fruitful opportunity for attack. Very few of them would result in a missile exploding on the launch pad or crashing very early in flight, as we've seen. And that's not even something that a prudent cyber attacker would want to do, because that would cause the failures to occur when the adversary can see exactly what's happening and easily correct it.

So, while we may suspect that cyber attacks are going on, I do not think it is likely that the specific test failure we saw last Sunday, or others like it in recent months, are the result of cyber attacks.

And I think I'll leave my opening remarks there.

WIT: Okay, thanks John. Joe, how about you? The three most important things you've observed over the weekend.

BERMUDEZ: Okay. Well, thank you, and I appreciate the opportunity to speak with everyone. And I concur with everything that John has said. And I just wanted to add a different flavor to what John has said.

What we saw over the weekend was not unexpected. We understand, and we've known for a long time, that North Korea's ballistic missile program has forked at a number of occasions. We also understand that there are different design bureaus that are competing against one another and also competing for the favor of the leadership.

We also know that these design bureaus and the missile program, overall, have a number of concurrent goals. We have short range, medium, intermediate, intercontinental ballistic missiles. We also have a desire to be able to penetrate missile defenses. Things of that nature.

What we saw on the parade are logical developments of what we have seen in the program already. And there are several others, going forward, that we expect to see.

With what I just said, I also want everyone to keep in mind that North Korea, as John implied, practices a great deal of deception. It shows us, quite often, what we want to see, and in that regard we have to be careful jumping to wild conclusions.

You know, they have repeatedly talked about being able to go long distances, and yet we haven't seen it. We haven't seen a lot of things, in the missiles that they've tested. So, let's just be careful, moving

forward.

One of the things I found interesting is the use of the tracked TELs, transporter-erector-launchers. I view this as a symptom of China cracking down on the sale of wheeled – large, heavy duty, wheeled vehicles that can be used as TELs, to North Korea. Let's be clear here, that a tracked TEL is not an optimal TEL for North Korea to have for its missiles. They don't move fast, they have excessive vibrations, and ballistic missiles don't like vibrations, and they have limited range. This poses challenges in the operational sense for ballistic missiles, mounting them.

The fact that they're using an old chassis, in several modified forms – they're using what appears to be a T-62 tank chassis. If anybody ever had an opportunity to ride in a T-62, you'll understand it's not a very smooth ride.

Finally, moving to the cyber warfare component that has been of concern to a number of people, I agree once again with what John had said, and I would add to what he has mentioned, is that we know from documents that were classified and legally released that the US has engaged in cyber warfare against the United States. [ed's note: means the US against the DPRK.] We also know, from public statements from numerous governments that the North Koreans engage in it against the United States and its allies.

For a program such as this, that's using older technology, as John has said, it's difficult to affect the missile itself using cyber warfare. We'd be better off attacking the manufacturing process, of components, or if you could identify how North Korea is importing components and you could intercept those and modify those, that would be a better means of affecting the ballistic missile program.

It should also be noticed that North Korea's latest operating system precludes the use of USB thumb drives, which was a major vector in other attacks in the past 10 years. Probably one of the reasons for this is because of that. North Korea's operating systems tend to be very locked down, and I believe recently that 38North actually published a report on this aspect of North Korea's computing system.

And I will leave it at that.

WIT: Thanks. Thanks, Joe. Just a point of clarification, for people who aren't old Soviet hands. A T-62 tank was build when? It's a Soviet tank, old Soviet tank design. When was it fielded?

BERMUDEZ: Early 60s I believe.

WIT: Early sixties, okay. The second question I'll ask, and then I'm going to shut up, John, one of the things that I've seen hinted at is that the failure rate of North Korean tests is high, and the linkage is sometimes made, in part, to these cyber attacks. So I wonder if you could talk a little bit about "Is the failure rate high? Is it more than you would expect, in this kind of program?" And I think we need to get our facts straight on that.

Please, John.

SCHILLING: Yes. The general rule for North Korean missile tests is that they always explode the first time and eventually they reach the point of 80 to 90 percent operational reliability. And the bit where they always explode the first time, that goes back all the way to the Nodong tests in the early 1990s, which cannot plausibly have been the result of cyber attacks. I don't think there were any computers involved in

those early Nodong tests.

So, if we see a very new North Korean missile design and it fails, that's par for the course; there's no reason to suspect anything nefarious going on, on either side. If we see a long string of tests failing, like we saw with the Musudan, then we start to look at what might have caused that. But in that case we see a very rushed test program, which would likely cause failure, even without an external agent, and we also see, again, tests failing very early, on the pad or in the first few seconds of flight, which is the least likely point for a cyber attack to manifest.

So, I don't think we've seen anything yet that would point specifically to a cyber attack as the reason for an early test failure; simply that rocketry is hard and unless you're bringing the resources of NASA to the table, your early tests will usually fail.

WIT: And, John, maybe the comparison is not accurate, but I know there were very high failure rates in the early US and Soviet rocket programs.

SCHILLING: Yes.

WIT: I'm not sure about other countries like Pakistan and India, but it's typical to have high failure rates.

SCHILLING: Yes. And particularly, there's a very apt comparison because the early US and Soviet rocket programs, because of the Cold War era missile race, did essentially the same thing the Musudan has been seen doing, testing every month, desperately trying to get it right, which is just an invitation for a large number of failures.

It's when you slow down and test maybe once or twice a year that you see the failure rate tapering off fairly early. The desperate policy of testing every month – it may eventually lead to success, but with a lot of failures along the way.

WIT: Okay. Well, let me step back. And Campbell, do you want to take over?

MOON: Yes, I had a quick question for John. Did you say that – were you talking about a tracked TEL earlier, and if you were could you explain what that is?

WIT: That was Joe.

MOON: Oh. Sorry Joe, go ahead.

BERMUDEZ: This is Joe Bermudez. North Korea possesses three types of TELs that have been publicly displayed. There may be others. The first is a wheeled TEL, a large vehicle that is a transporter-erector-launcher. Large wheels, very mobile, able to go a significant distance at relatively high speed.

A tracked TEL uses tracks, like a tractor does. It has links and they're long tracks that go around rollers. This has the ability of going on terrain that a wheeled TEL can't go. However, you normally don't want to move a ballistic missile on that type of terrain too often.

They have the disadvantage of having lower top speed, a lower range, and also of heavy vibrations.

The actual design of the chassis they're using is not necessarily one to mitigate vibrations.

And the third is not a "TEL," but it's a "MEL," mobile-erector-launcher. And we've known that they have been producing these and using these since the eighties, and we mostly recently saw one in the parade just a few days ago, where it carried a canister which has the appearance of being for an ICBM.

MOON: Okay. Thanks very much for that, Joe.

WIT: Okay. So I'll turn it over to Campbell. Campbell, you can start taking questions or comments from people.

MOON: Sure, that sounds good. So, if you have questions – first of all, I just wanted to note that many of us on the line today aren't technical experts, so don't be afraid, if you have a question that's more towards clarification or more of a foundational question – I know that we'd be happy to answer that for you.

So, we'll go ahead and wait for some questions now. (Pause.) Okay, so we have a question from Steve Herman, who is asking "Can we get an update on what the latest imagery shows at Punggye-ri? So, would somebody like to answer that? Maybe Joe?

BERMUDEZ: Again? (Laughs.)

MOON: I don't know how much you can say, but – (laughs) –

BERMUDEZ: This is Joe Bermudez. We will be publishing the latest imagery, either later today or tomorrow, and what we've seen is somewhat unusual. We see that, at three locations in the facility, at the main administrative area, at the support area, at the command center, and at the guard barracks near the command center, that they have volleyball games going on. And this is unusual. (Light laugh.)

It suggests that the facility might be going into a standby mode. It also suggests that these volleyball games are being conducted with the North Koreans knowing that we'll be looking and reporting on it. They are either sending us a message that they've put the facility on standby, or they are trying to deceive us. We really [don't know]. (Audio dropout.)

In addition to that, those features we just described, we've noticed that, at the north portal there's a track, a mine or railroad track that comes out of the entrance, and has – moves up to the spoil pile. We noticed several mine ore carts and what appears to be some minor dumping on the spoil pile.

We also noticed that there is no more active pumping of water out of the tunnel and there are no vehicles, so trailers near the portal entrance – still the support building nearby. And that's about it, and this should be, like I said, published probably by tomorrow.

MOON: Okay, thanks very much for that, Joe.

WIT: I wanted to add a point.

MOON: Go ahead.

WIT: I just want to emphasize that, based on imagery alone, we cannot predict the timing of a North Korean nuclear test. We can see preparations. We can comment on them. But we cannot predict the timing. And I think this is a broader point also, that some people may be speculating that the North Koreans put off the test, that they were going to have it on Saturday and then they decided to put it off because of whatever was going on externally, whether it was President Trump's threats or the Chinese taking steps.

There's no evidence to link the two, and certainly nothing we do says that a test will occur on such and such a day. So, I think we need to be very careful about linking what we see in satellite photos with predictions about when a test will take place. And, in turn, speculating about, "Well, why did it, or didn't it take place?" There may be other factors here.

Please, Campbell, go ahead.

MOON: Okay. Sure, thanks very much for that, Joel. So, we'll go to our next question, which is from Jay Solomon. And he asks, "Do you see much evidence of foreign support for North Korea's missile advancements?"

WIT: Well, who's going to answer it? Do you want to start, Joe? And then John can chime in.

BERMUDEZ: Okay. Do you hear me now?

WIT: Yes.

MOON: Yes, we hear you.

BERMUDEZ: Okay, good. From my standpoint of view, the ballistic missile programs are progressing along a natural arc to requirements that we believe the North Koreans have set for the program. Now, we see additional types of warheads, we see additional types of designs, but this all fits an overall pattern which is expected and is reasonable for their level of technology.

And I'll pass it to John at this point.

WIT: Well, wait a second. (Light laugh.) But what are the signs – are there any foreign – is there any foreign components coming into North Korea that contribute to its program?

BERMUDEZ: I'm sorry, I didn't hear that part of the original question.

WIT: Yeah. That was the question.

BERMUDEZ: I'm sorry, I didn't hear that. We have no concrete proof of major subsystems coming in. There is some evidence that components, small components – you know, resistors, valves, tubing, things of that nature – are coming into the program. There is very strong suspicion that technology is coming into the program from abroad. Details of that, I don't have at the moment.

WIT: But, do you – I don't mean to put you on the spot, Joe, but what countries do we think these parts are coming from?

BERMUDEZ: I don't want to answer that specifically, but it's actually a wide range of countries. The North Koreans have been quite astute and creative at acquiring – once again, I want to make sure you understand, I'm talking about smaller components, things that any of us could go down to the local electronics store and purchase, or I could purchase from a manufacturer here in the United States quite easily. They're coming from a variety of sources.

And, just because I say that, it doesn't mean that we can trace back, all the time, [to] the original manufacturer of the components. A lot of times these go through multiple cut-outs, because of the sanctions that are in place, and concern by countries about being used as an intermediate [intermediary] for the trans-shipment of components, to North Korea.

WIT: John, maybe you could answer that, but also keep in mind that the recovery of parts from the Yunha tests – and I think some of those were identified as coming from other countries, and –

SCHILLING: Yes. As Joel mentions, we recovered the first stage of a North Korean space launch vehicle, which in this case probably uses the same technology as their missiles, and much of the guidance and control hardware used foreign, commercial, electronics components, stuff that you would get from, say, an auto parts wholesaler – for all I know, dismantled videogame consoles, smartphones, probably getting [them] at the wholesale level rather than actually dismantling consumer goods, but trying to track these things to the original manufacturers is probably impossible and pointless. Consumer electronics are a commodity. So, there are probably North Korean agents working across the Chinese border, just buying from whoever they can find.

Things that are specific to missiles, we've seen no evidence of hardware sales. And Joe pointed out the evidence in the opposite direction earlier; the Chinese seem to have stopped selling them the wheeled transporters that North Korea was converting to missile uses.

At the level of raw technology, we've known for many years the North Koreans try to find, basically, unemployed, disaffected, engineers, wherever they can find them -- Yeltsin-era Russia, maybe Ukraine, maybe Pakistan, maybe even China – and persuade them to either sell technology or even come to Pyongyang and teach technology to the North Koreans.

We haven't seen any "smoking guns" along those lines recently. Everything that we've seen in North Korea's programs is within the range of what they could have been expected to develop wholly indigenously, from where they are 10 years ago.

Is it possible that they were getting some help from someone in Pakistan, and China, and Russia? Yes, but we can't prove that one way or another.

WIT: Okay, Campbell, over to you again.

MOON: Okay, thanks very much for that. So, we're going to take a question from someone on the phone, whose phone number ends in 7587. Go ahead. And please introduce yourself.

QUESTION: Hi. This is Tom O'Connor, at Newsweek. Thanks again for having me here. Just a quick question. I was just wondering – and I don't want to get too speculative about this – but maybe more on a technical level – what sort of – based on our knowledge, or your collective knowledge, what sort of tactical response do you think that you would see, from North Korea, if the US were to conduct a sort of

preemptive missile strike, just like they did in Syria? Let's just take that exact same scenario, where you have destroyers shooting Tomahawk missiles at a strategic site or multiple strategic sites.

WIT: Why don't I take that, and then the other guys can respond? I think it's true, you know, you're hinting at, "Well, if it was an extremely limited attack…"

QUESTION: Sure.

WIT: Such as what happened in Syria, which was an attack on one airfield –

QUESTION: Exactly.

WIT: -- and – I mean, we could – it depends on the extent of the attack. Whatever we do, there's going to be a response, there's going to be a military response. I can't say for sure, but I'm like 99 percent sure. So, if you're attacking one specific site – you know, I don't know – the North Koreans would probably be more likely to keep their response limited. But I'm not sure what one specific site we would attack, except if we wanted to try to seal off tunnels at their nuclear test site. But I'm not sure what utility that would have.

So, you know, the problem with thinking about preemptive attacks against North Korea is you're rapidly forced to think about attacking more and more targets, and the bigger your attack the larger the chance that you're going to create a situation that will lead to the second Korean War.

So Joe, why don't you – Joe knows a lot about North Korean military doctrine. So Joe, why don't you chime in?

BERMUDEZ: It's a reasonable question that you ask. There is no simple answer, and I think Joel outlined the basic dimensions of it. If we look at what the North Koreans say and what their doctrine and training calls for, is that if there is an attack there is an immediate or close to immediate response. Part of that response will be an artillery attack on Seoul. How extensive it is, that's a good question.

There is a big question as to whether North Korea can actually respond in a limited fashion. You know, technically they can. But the system and the doctrine might not permit it. And, given the current state of tension on the Peninsula, even if they did respond in a limited manner, the South Koreans, or the US, or maybe even the Japanese, might then respond again, and what we see is a gradual escalation to a second Korean War, as Joel had mentioned.

And I'll leave that answer at that.

WIT: John, did you want to add something?

SCHILLING: Yeah. The thing I would like to add is that we know that North Korea – or strongly suspect that North Korea – has on the order of a thousand ballistic missiles, and maybe on the order of 20 nuclear warheads. So, we shouldn't expect that any response from North Korea is inherently going to be a nuclear response.

Probably their first response will not be nuclear. It might not even involve missiles. It might involve, as Joel mentioned, artillery attacks on Seoul or elsewhere along the demilitarized zone. It might

involve covert operations. But they have several levels of escalation to go, before they get to nuclear or even chemical weapons.

WIT: Okay, great.

QUESTION: Thank you very much.

WIT: Campbell?

BERMUDEZ: Could I add something to that?

MOON: Sure, if you've got something.

WIT: I think we need to move on a little, Joe. We're running out of time. But very quickly, go ahead.

BERMUDEZ: It's – no, let's move on, please.

MOON: Okay, sure. Thanks for that, Joe. So, our next question is also from the phone, ending in 1800. So, I'm going to go ahead and – could you introduce yourself, please?

QUESTION: Hi. This is Nick Wadhams from Bloomberg. I just want to, sort of, follow up on the idea of what the Trump administration is thinking, and how worried they need to be. I mean, by your estimate, how close is North Korea to developing the capability of hitting the continental US with a nuclear-tipped ICBM? I mean, do you have a month, or a year, range for when they will be able to achieve that? I mean, just in terms of being able to clarify, when Trump says "That won't happen," what timeframe do you estimate North Korea will need, to obtain that capability?

WIT: John?

SCHILLING: John Schilling here. Yeah. We don't estimate them having a realistic capability to launch an ICBM at the United States until sometime around 2020 or thereafter. And, in any event, not until many months, and probably a year or two, after their first ICBM test. So, this isn't an imminent crisis.

The imminent threat is to South Korea and Japan.

WIT: But John, when do you think – I mean, this is all speculation – but when do you think they might conduct their first test?

SCHILLING: They've talked about conducting their first test this year. That's not an unreasonable ambition. But they don't have the resources to conduct very many different programs in parallel, and it's looking like this year their focus is on the shorter range, the solid propellant, tactical systems. So, I would now bet on next year as maybe the first ICBM test. But I could be wrong about that.

WIT: Joe, did you want to add anything?

BERMUDEZ: Yes. To answer the question, you know, John mentions the estimate for an ICBM capable of reaching the United States. But there is a second component: producing a reliable nuclear

warhead for a system like that requires additional time and development.

And, while the North Koreans, from what we can tell, accept a lower level of reliability than we would, still that presents a great challenge. They really have no real experience with reentry vehicles, which would be required for a system such as that.

WIT: Right. So, when people talk about whether they can put a warhead on top of a missile, they sort of – people lump together all different kinds of missiles, and I think that's wrong. I think the majority of people now believe they can put a warhead on top of a missile that can hit targets in Northeast Asia. But when you get to the much longer ranges they need, such as hitting the United States, I think – while we don't know for sure – but most people would believe that's a work in progress.

MOON: Okay. Thanks very much for that. For our next question, it's on chat, from Nico Pandi of Jiji Press. He said, "What are your thoughts on the new missile design which some have labeled the KN-17, that features fins on its nosecone? Do you agree that it's an anti-ship ballistic missile, as some have surmised?"

WIT: John, go ahead.

SCHILLING: Okay. I doubt that it is an anti-ship missile, because I do not believe North Korea has the targeting capability for that. It certainly appears to be a maneuvering warhead. There are a number of reasons for building a maneuver warhead, including more precise attacks on ground targets, including conducting evasive maneuvers to avoid missile defenses.

In order to target a ship at sea, you need not only the maneuvering reentry vehicle; you need to know where a ship is, in maybe a million square kilometers of ocean, and then you need to be able to track that ship as the missile is approaching. Both of those are very difficult problems that we don't see North Korea as having a real capability to address at this time.

WIT: Joe?

BERMUDEZ: I would agree with that one hundred percent. And I just want to be the skeptic here, if I might. Just because we see the fins on this warhead does not mean that it is actually an operational system. We have not seen them actually test this system. And they know from what the press speculates about that we are anticipating – [2-3 second audio dropout] – this might be a case of them showing us what we want to see. I'm not saying that it isn't a maneuvering warhead, but we need to be careful.

WIT: Okay. Campbell, the next question.

MOON: Okay. Thanks very much for that. The next question is from David Brunnstrom of Reuters, and he asks – this is for Joe Bermudez – "What [is] the date of the images in which you saw the volleyball games?" And also, "Can I ask both when they think the Chinese may have stopped selling wheeled transporters?"

BERMUDEZ: The date of the image, I believe, is the 16th. And [I] don't know the – I can't put a date to when the Chinese have stopped. But this is an indicator that they have. And when you count up the number of wheeled TELs that we've seen at parades and we've seen in imagery, they never exceed the amount that we've seen currently, in this parade.

WIT: But Joe, do you remember, there was an earlier sort of brouhaha over – at an earlier parade, when one of these Chinese vehicles was seen? And that was a few years ago, wasn't it?

BERMUDEZ: I think it was before 2015.

SCHILLING: Yeah, I'm sure…

BERMUDEZ: I'm sorry, John? Say that?

SCHILLING: Yeah, John Schilling here. After the 2012 parade, which was the first appearance of the largest wheeled TEL carrying the ballistic – the intercontinental ballistic missile prototypes – the Chinese – we don't know whether they stopped selling them to North Korea, but we know that they publicly discontinued and disavowed any knowledge of that entire product line. They stopped selling that model of TELs to anybody else, apparently to make certain that it couldn't be diverted secondhand, to North Korea.

So, I would estimate that 2012 is when the cutoff occurred.

WIT: Thanks. Thanks, John.

BERMUDEZ: And, since that time, we know that North Korea has imported tractor-trailers from abroad. And that's why we're seeing them…

WIT: Okay, Campbell?

MOON: Okay. Is there anything that you wanted to add there?

WIT: No, let's move on. Campbell, next question?

MOON: Bill Broad from the New York Times asks, "What do you think the explosion was on Sunday?"

WIT: So, John, do you want to start, then Joe can chime in?

SCHILLING: Yeah. We're still looking for information on that ourselves. We haven't been able to find any imagery that – and Joel can – yeah, Joe can address that more in detail. But, we haven't found any imagery to pin it down. Numerous reports say that it was a medium-range missile, and unfortunately that leaves us with too many candidates to narrow down.

But, as I've said, early tests have a high failure rate under any circumstances, so it's not surprising that a test intended to bookmark this event results in an explosion instead.

BERMUDEZ: This is Joe Bermudez. I looked at an image taken a day afterward. I think it covered close to 62 square kilometers. And I looked at it in 400 square meter segments. And I didn't see anything that was conclusive of ground scarring from an explosion. So, we've just – we're still looking. We still are examining public reports, comments from private individuals, and additional imagery when we acquire it.

MOON: Okay, great.

WIT: So, this photo covered the area, reported area, of the test, and was that the same area as the last one, where we actually found ground scarring?

BERMUDEZ: The area that I looked at most recently was around Sinpo, the port of Sinpo, in the northeast corner. It's where the Gorae – ballistic, experimental, ballistic missile, submarine – is based. The explosion that that we identified earlier, in a report, took place at the Kalma Air Base, which is at Wonsan.

WIT: Oh, okay. But the point is that if there had been an explosion in the area where the test was reported, we might have picked it up, the ground scarring. We might have picked it up on satellite imagery.

BERMUDEZ: That's correct. However, it would have – the explosion would have had to happen close to the ground, for us to see scarring. And we don't know how high it was. So – this is imprecise detail.

And, once again, I only looked – and "only," I'm putting in quotes – 62 square kilometers. It might have been in the 65th square kilometer.

WIT: Yeah. Okay. Any other questions?

MOON: We do, yeah. We have three questions now. So, we'll do one from chat. It's from Lily Newman of WIRED, and she asks, "Hey, thanks for doing this. What do you think about the degree of tension on the geopolitical stage leading into the holiday on Saturday? Was that unusual?"

Joel, do you want to speak to that?

WIT: Oh-h-h. Yeah. It was unusual in the sense that I think the temperature rose a lot because of comments by the United States and the reported sending of a carrier task force to the Peninsula. Although, since then, we've discovered it hasn't arrived yet. But I think the North Korean response was very – and Joe can add whatever he wants – but the North Korean response, I think, was pretty typical – pretty typical belligerent response.

But I think the point that's very important to understand is that while there was a lot of this verbal interaction, there was a lot of media attention, in fact, if you were on the Peninsula, either in South Korea or North Korea, you wouldn't have seen any signs of tension. You wouldn't have seen Pyongyang being evacuated, you wouldn't have seen border closings in North Korea, you wouldn't have seen South Koreans running to the stores to stockpile food and other goods. And you certainly didn't see anyone heading for the airport in large numbers, in South Korea, any foreigners, to get out of harm's way.

So, I think we have to be very careful in how we characterize the situation last weekend.

I don't know, Joe, do you want to add something to that?

BERMUDEZ: I think you summed it up quite nicely.

MOON: Okay, thanks very much. We'll move on to our next question. This is from Giuseppe Sarcina of Corriere Della Sera and I believe that you're on – can you hear us? Okay. Actually, he went ahead and typed his question in. So, I'll go ahead and read it now. He asked, "What do you think about US military steps in the area? The New York Times is writing that the military ships are not approaching South Korea as it was announced some days ago."

WIT: Yeah, well I'll let others chime in too, if they want. I'm a little bit perplexed by all this. (Laughs.) I mean, if you're – you know, if we were in graduate school studying the use of coercive diplomacy, this would probably be a textbook case of how not to do it. I mean, if you're saying that you're sending – as President Trump said – "an armada" to the region, and you're making these – you're saying things publicly that sound threatening, and then we discover that, in fact, the armada didn't go to the region, although I guess it's supposed to go there – I don't know, I forgot the exact date – by the end of the month – it's very perplexing.

I don't know how to explain it, honestly. And I don't know if either Joe or John want to chime into that.

BERMUDEZ: Well, I would just add one small things, from the North Korean perspective. The actions that the US has taken, as Joel has outlined, troll into the North Koreans' belief that the United States lacks backbone, that the United States is morally and spiritually corrupt, and that they have an upper hand when it comes to brinkmanship. This is the way they view it.

WIT: Yeah, you know, I think that's absolutely – I totally agree with that. If you're going to threaten the North Koreans, you'd better make sure that your threat is credible. If you threaten them and your threat is not credible, it's only going to undermine whatever your policy toward them is. And that could be a logical conclusion, from what's just happened.

Campbell, go ahead.

MOON: All right. Thanks very much for that. So, we do have two follow-up questions, from Tom and David. But first we have a question from Twitter. "Is the DPRK thought to be pursuing non-missile-based nuclear weapons systems, e.g. artillery-launched nukes?"

BERMUDEZ: Hmm. That's a good question. I don't think we have the answer to that.

SCHILLING: I'm still in here. Yeah, I think it's unlikely. It's difficult to prove. But artillery-launched nuclear weapons have never had a real reason to exist. It's a very inefficient way to deliver nuclear weapons. Scaling nuclear weapons down to the point of artillery delivery requires excessive quantities of fissile materials, which we know North Korea has in limited supply. So, I wouldn't expect to see that, and we certainly haven't seen any artillery weapons that seem optimized for delivering nuclear weapons.

Other options, nuclear torpedoes for North Korean submarines, nuclear demolition charges for special operations delivery, are possible, but we haven't seen any evidence of that. I think I'll just leave it at that.

WIT: Yeah. Let me – Joe, let me ask you a question that's related to that. Given what you see in terms of developments in North Korean strategy and doctrine, particularly their nuclear strategy and

doctrine, would tactical nuclear weapons make sense for them?

BERMUDEZ: That's an excellent question. If we look at what the North Koreans have actually said, and it's changed somewhat in the past five years, they've started to use terms that mimic our Cold War usage of the terms. So they now discuss the usage and division of nuclear weapons into strategic, operational – which they call "battlefield" and "tactical," they actually use those terms.

Whether this is an indication of where they are going to take their nuclear weapons program when they acquire more fissile material is something we just don't understand at this point.

I don't think, as John pointed out, they have the technology or even the desire to produce artillery rounds. They might consider some sort of nuclear device for covert deployment. But even that would be a stretch at this point in time.

WIT: Okay. Campbell?

MOON: Great. Thanks. So we're just – let's do two more very quick follow-up questions. This one is from Tom O'Connor. He said, "North Korean officials reportedly promised weekly missile tests to the BBC. Would they be able to handle this and, if not, how could they explain not going through with it?"

WIT: Okay, Joe?

SCHILLING: John Schilling here. They can certainly launch a Scud, or a Nodong, or something like that every week, just firing out of inventory. I don't think that they can profitably, or even possibly, launch new missiles every week. By which I mean new designs or examples of their developmental missiles. I don't think they have the production capability for that.

Whether it would be worth their while to launch, essentially, outdated missiles, once a week, just to meet a bombastic schedule claim, we'll wait and see.

WIT: Joe?

BERMUDEZ: I agree with that completely.

WIT: Let me add, yeah, technically it's probably not wise, but I think, you know, leaving aside the exaggeration, I think the point is that they can launch frequent tests, maybe not every week, but I think 2016 proved they can do a lot of different things, and they can either launch tests of regional-range missiles, they can conduct rocket motor tests, they can conduct other activities, they can publicize them. And, don't forget, beneath the surface, North Korea continues to produce nuclear weapons. I mean, nothing we've done is stopping them from producing fissile material to build nuclear weapons, and they're probably doing that, maybe at the rate of about one weapon a month.

So I think the broader point that whoever it is said that is trying to make is that "Your threat to us," the American threat to the North Koreans, "is hollow, and we'll prove it, that it's hollow." So I think that's really what they're trying to say to us, in their own – you know, in their inimitable way.

Campbell?

MOON: Okay. Thanks very much for that. The last follow-up question we have is from David. This is a follow-up for John Schilling. And he said "You mentioned that there was evidence North Korea had imported tracked transporters after China appeared to stop supplying the wheeled ones. Where would these have come from?"

SCHILLING: I'll let Joe Bermudez answer the question on the tracked transporters. That's more in his area of expertise. I just noted the lack of the wheeled transports coming from China.

BERMUDEZ: This is Joe Bermudez. I just wanted to make clear that when I spoke about the tracked TELs I did not say they came from China. If I did, I misspoke. They appear to be produced inside North Korea, at one of their armored vehicle production facilities, tank production facilities, and they appear to be modifications of the T-62 tank chassis, which they produced for a number of years.

They have produced, from what we can tell, at least three different variants of this chassis, a much extended one and several smaller ones, both of which – all three of which – are extended versions of the T-62 tank chassis.

WIT: Let me ask a quick question. Joe, do we see any sign that they've used whatever Chinese technology and they've sort of reverse engineered or adopted it or somehow produced their own versions of it?

BERMUDEZ: Are you talking about TELs or are you talking about overall?

WIT: I'm talking about TELs.

BERMUDEZ: They've certainly taken lessons from what the Chinese have produced, and they've watched it, and they've learned from it, and applied their own thoughts and production capabilities to it.

WIT: Okay. Thank you. Okay, Campbell, I don't know, do we have any more questions?

MOON: No, I believe we're at the end of our questions. So, thanks very much, everyone, for joining today. And thank you, also, to our speakers.

WIT: Okay. Thanks a lot, everyone.

END

Transcripton by Richard Boyd
richardlboyd@gmail.com

38 North is a program of the US-Korea Institute at the Johns Hopkins School of Advanced International Studies devoted to high-quality research, analysis, and commentary on a broad range of topics related to North Korea. It is managed by Joel S. Wit, USKI Senior Fellow and former US State Department official, and Jenny Town, USKI Assistant Director.

Inquiries may be directed to thirtyeightnorth@gmail.com

38NORTH.ORG