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# Policy Forum 09-044: Winning, not Playing the Nuclear Game with North Korea



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# Winning, not Playing the Nuclear Game with North Korea

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By Peter Hayes and Scott Bruce

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## I. Introduction

Peter Hayes, Executive Director of the Nautilus Institute, and Scott Bruce, Director of the Institute's San Francisco office, write, "it is time to win the game, not play it forever. This is within President Obama's reach, but only if he rises above emotional and unrealistic talk of punishing North Korea and focuses on the big picture changes to the strategic landscape that would be necessary to strike a deal with Kim Jong Il worth having."

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## **II. Article by Peter Hayes and Scott Bruce**

- "Winning, not Playing the Nuclear Game with North Korea"

By Peter Hayes and Scott Bruce

The second North Korean nuclear test followed an earlier missile launch and subsequent UN Security Council condemnation of that launch in April. North Koreans have explained their intentions to visitors since February, so there were no surprises in the steps or the timing to anyone who was paying attention. As the North Koreans stated on April 29th (KCNA), "the DPRK will be compelled to take additional self-defensive measures in order to defend its supreme interests... The measures will include nuclear tests and test-firings of intercontinental ballistic missiles."

The May 25 nuclear test is also not the last step by North in this escalation of tension. We expect additional nuclear tests to follow. Over the next four to six months the North Koreans can expect to extract enough plutonium from reprocessing the spent fuel they currently have in storage for two new nuclear bombs. This means that they can conduct a third nuclear test over the same period with no net loss in their inventory of weaponized plutonium before the test last week.

What did the North Koreans aim to achieve by the second nuclear test? We argued in 2006 that a second test is necessary for the DPRK to overcome the strategic incredibility that came from the failure of their first test, which made them the only declared nuclear weapons state to have demonstrated that they were not really a nuclear weapons state. Thus, the second test likely used more plutonium so that the North Koreans could be highly confident that they would get a significant explosion. Reports from seismic monitors suggest that they achieved this goal although precise estimates of the kilotonnage of the second test are not yet available in the public domain. This second, successful detonation underscores the perception that they are now a nuclear weapons state, and can engage the United States and other powers from a position of increasing relative strength, rather than from a weaker position of ambiguous nuclear capability.

From a military perspective, however, the effect of the second test is undermined by the DPRK's lack of an effective medium or long range delivery system combined with a small warhead. The North Koreans have had two missile tests in the last ten years and both have failed. Given that it takes twenty to thirty tests to make a missile system operationally reliable, the DPRK will take another ten to fifteen years to develop this capability at their current missile testing rate.

Furthermore, even if the missile gap was overcome, the North is unlikely to be able to miniaturize their nuclear devices into small warheads that can be loaded into a long or medium range missile. Moreover, they have yet to test re-entry vehicles that unlike satellites which are simply hurled into space and stay there or burn up in the atmosphere, have to survive the extreme cold of space, then within seconds, the extreme heat of reentry, plus enormous physical forces from buffeting and smashing vertically into the atmosphere and across wind shears at 20,000 km per hour. A small warhead in an untested re-entry vehicle on an unreliable rocket adds to a near-certain probability of system failure in a war. In short, unless they buy some other country's design and materials, the DPRK will not be able to integrate a miniaturized nuclear warhead with an operationally effective long range missile system for another ten to fifteen years.

For this reason, the second North Korean nuclear test should be understood not as a projection of military power and threat, as it has been cast in mass media, but rather as a symbolic assertion of

power and intention to compel external powers to respond to the DPRK's demands. A policy of malign neglect or punishment in response to the test by the great powers will impel the DPRK to further raise the stakes. The DPRK's obvious escalation options are further nuclear and rocket tests, maritime skirmishes with South Korea, and selling their nuclear weapons know-how and fissile material abroad.

We anticipate that having demonstrated that their device works, the DPRK's next test will aim to miniaturize the warhead (also preserving precious and scarce plutonium in the DPRK). More long-range rocket tests may also be in the offing. This will not overcome the fundamental flaws in the nuclear program in terms of threat projection. After all, what leader in his right mind would ever fire a missile with as high a probability of failing catastrophically over his own territory and exploding a nuclear weapon as hitting a distant target. But it would make an impression that North Korea is gaining capacity.

North Korea may also seek a nuclear alliance with Iran. North Korea is a natural complement to Iran in nuclear terms. The North can provide Iran with the design and test data for nuclear weapons and, once the Yongbyon reactor is back up and running and they have more plutonium production capability, they could potentially supply Iran with fissile material from the one bomb per year that this reactor can generate.

In return, Iran can supply the North with uranium enrichment designs and technology. This official nuclear trade between states is not something that the Proliferation Security Initiative or other such programs meant to stop the transfer of nuclear technology could stop. Once created, such an alliance would be far harder to halt than the proliferation drive of the separate nuclear programs of the two states.

The failure of the United States to stop these developments may eventually drive Japan and South Korea to develop their own nuclear weapons. Since the North's second nuclear test, articles have appeared in South Korean newspapers proposing that the South develop its own nuclear deterrent force.

At the other end of the threat spectrum from the DPRK as a nuclear weapons state is the prospect that it may collapse. Collapse is always possible although we judge it to be of low probability. A collapsed North Korea could lead to civil war and chaos, and loss of state control over nuclear weapons, fissile material, and nuclear-capable scientists that could lead to leakage of these capacities to other state or non-state actors; or to actual nuclear usage in a Korean conflict. Thus, those who advocate squeezing North Korea to deal with its nuclear threat projection should be concerned of the risks associated with the possibility, however faint, that their prescription works.

A priority for the Obama Administration is to develop a game-plan to deal with North Korea's nuclear challenge. Until Obama engages directly with Kim Jong Il, we see little prospect for a shift from the current escalatory cycle. Even then, it's unknowable in advance whether the DPRK would spurn direct talks at the leadership level, as it did with low ranking diplomatic overtures earlier this year.

But nothing is lost from trying a direct overture from President Obama. This would not be a reward Kim Jong Il nor lend kudos to the DPRK. It would simply indicate an open mind and willingness to talk tough about the issues that drive policy in both countries rather than making threats that are not realistic for either side to act upon.

In short, it is time to win the game, not play it forever. This is within President Obama's reach, but only if he rises above emotional and unrealistic talk of punishing North Korea and focuses on the big

picture changes to the strategic landscape that would be necessary to strike a deal with Kim Jong Il worth having.

### **III. Nautilus invites your responses**

The Northeast Asia Peace and Security Network invites your responses to this essay. Please send responses to: [napsnet-reply@nautilus.org](mailto:napsnet-reply@nautilus.org) . Responses will be considered for redistribution to the network only if they include the author's name, affiliation, and explicit consent.

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