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The Case for Redeploying Non-Strategic Nuclear Weapons to South Korea

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KEY TAKEAWAYS

The United States and South Korea face increasingly dangerous threats in China and North Korea.

Support for an independent nuclear weapons capability is growing in South Korea.

The United States should return non-strategic nuclear weapons to South Korea to stave off proliferation and strengthen deterrence.

Since the mid-1950s, the United States has recognized that a credible regional deterrence posture—particularly in regard to an adversary armed with tactical or non-strategic nuclear weapons (NSNW)—includes a robust conventional capability and a credible set of capable and diverse strategic and non-strategic nuclear weapons.

At the end of the Cold War, however, the United States divested itself of the vast majority of its NSNWs.[1]

As a result, the United States' existing inventories of low-yield NSNWs are now insufficient for the threats posed by China, Russia, and North Korea. America's NSNWs are also concentrated in the European theater and would be logistically challenging and politically difficult to redeploy quickly to other theaters. Even if they could be redeployed quickly, the United States would have very limited numbers and types of NSNWs

at its disposal relative to its adversaries, given that virtually all of America's operationally deployed NSNWs are air-delivered gravity bombs.[2]

Consequently, if the United States finds itself in a nuclear escalation crisis in any one theater, it will very likely minimize the United States' ability to employ NSNWs in other theaters. This paucity of both numbers and types of NSNWs and the lack of forward deployed nuclear options during peacetime undermines the United States' ability to deter nuclear use or manage escalation in multiple theaters simultaneously or in regions other than the European theater. Such a development could impact America's ability to respond effectively if, for instance, Pyongyang or Beijing initiated theater nuclear use for operational or coercive effect.

A Deteriorating Security Environment

The United States and its allies in Northeast Asia—Japan and South Korea—face a deteriorating security environment due to Beijing and Pyongyang and their conventional and nuclear capabilities.[3] This is driving anxiety in Tokyo and Seoul—and therefore causing the United States to reexamine force postures within the region.[4]

Indeed, in addition to protecting the U.S. homeland against North Korean nuclear attack, America has a strong interest in deterring Pyongyang from attacking South Korea and Japan due to Washington's treaty obligations to defend both allies. Failure to do so would damage U.S. relations with South Korea and Japan, both of which are critical force multipliers to the United States' ability to project power across the Indo–Pacific. Further, not only do South Korea and Japan support U.S. goals of maintaining a free and open Indo–Pacific, but they also provide important access for U.S. military forces.

For these reasons, the United States has a compelling strategic interest in deterring aggression from Pyongyang and Beijing and in assuring Seoul and Tokyo of America's defense commitments to them.

The Threat from North Korea. For three decades, North Korea has been a "rogue" state that threatens regional stability. It has a sizable military, albeit one that fields exceedingly old equipment. It does, however, maintain a sizable and increasingly capable ballistic and cruise missile inventory.[5] In addition, North Korea's nuclear arsenal has expanded for nearly two decades.[6] It should also not be forgotten that North Korea maintains an active chemical and biological weapons program to supplement its conventional shortcomings.[7]

Over that period, North Korea's ruling Kim family has threatened the United States, South Korea, and Japan with nuclear strikes.[8] While such

threats have been dismissed in years past, the maturation and expansion of North Korea's missile program and the increasing sophistication of North Korea's nuclear warheads mean that the United States and its allies cannot dismiss the threat. It must be taken as a credible capability that could inflict significant and unacceptable damage on all three nations—and Kim Jong-Un's 2024 pronouncement that the North Korean military should use all instruments of its power to "thoroughly annihilate" the United States and South Korea with its nuclear weapons should not be ignored.[9]

Despite three decades of dialogues, six-party talks, and presidential-level direct engagement, there is zero evidence that North Korea is willing to abandon its nuclear weapons program.[10] In many ways, the Kim family has made it clear that North Korea's nuclear arsenal is its most important commodity.[11] Given this—and the failure of every American Administration since President Bill Clinton to get North Korea to denuclearize—it is clear that North Korea will remain a nuclear challenge at least until the Kim regime collapses.

At the same time, North Korea is expanding and modernizing its ballistic and cruise missile capabilities.[12]

North Korea has been advancing its intercontinental ballistic missile (ICBM) force in recent years. In 2023, it tested the Hwasong-18, a solid-fuel, road-mobile ballistic missile capable of hitting targets in North America. It is a three-stage missile and large enough to carry multiple independent reentry vehicles, including nuclear warheads.[13] Over the past several months, it is clear that the Hwasong-18 is a capable delivery vehicle, one that—if North Korea can put miniaturized nuclear warheads on it—would create real dilemmas for the United States and South Korea. This is because a road-mobile, solid-fueled missile gives North Korea a second-strike capability that can be launched with little warning and few support vehicles, making it easy to conceal and highly reliable. It is a significant step and may become the backbone of North Korea's strategic deterrent.

The North Koreans also tested the Hwasal-2 in 2023, which it described as being capable of carrying "tactical nuclear weapons."[14] The Hwasal-2 is a land-attack cruise missile that is capable of carrying small nuclear warheads and can maneuver at low altitudes. Such capabilities augment North Korea's ability to target South Korea and the United States with ballistic missiles.

The Threat from China. China is America's primary strategic challenge.[15] Not only does it have hegemonic ambitions, but it is the only nation that has the resources, economy, and industrial base to overturn the position of the United States on the world stage.[16]

In addition, China's newfound confidence and increasingly brazen behavior, coupled with its increasingly capable and growing conventional

capabilities, are threats to U.S. allies in the region.[17] Such systems include a large and increasingly capable blue-water navy, hypersonic missiles, a large and increasingly capable fifth-generation fighter and bomber force, and an enormous cruise and ballistic missile force that can threaten targets from Japan to northern Australia.[18]

As disconcerting as these capabilities are, the most serious development of China's military capabilities is its nuclear arsenal. China is the world's fastest-growing nuclear power and, as noted in the U.S. Defense Department's 2023 China Military Power Report, "possessed more than 500 operational nuclear warheads as of May 2023—on track to exceed previous projections."[19] In addition, it "will probably have over 1,000 operational nuclear warheads by 2030, much of which will be deployed at higher readiness levels and will continue growing its force to 2035." As disclosed in 2021, China is building hundreds of missile silos in its western desert, nuclear-capable bombers, and dual-capable cruise and ballistic missile systems that can strike targets from Japan to Guam to northern Australia with nuclear or conventional weapons. In addition, it is very possible or even likely that China is exploring asymmetric nuclear capabilities, potentially to include anti-ship nuclear capabilities, hypersonic weapons that carry nuclear warheads, and fractional orbital bombardment systems that are loaded with nuclear munitions.

Given that the United States removed its theater nuclear capabilities from Asia and the Western Pacific following the Cold War, China today almost certainly enjoys a theater nuclear advantage over the United States. Such expansion will swell as China continues to develop and deploy new warheads capable of being delivered to targets across the Western Pacific from dual-capable missiles.

Additionally, despite maintaining a nominal "No First Use" doctrine when it comes to nuclear employment—as it has maintained since it became a nuclear power—statements by Chinese political and military leaders, as well as nuclear posture changes, suggest that Beijing is reinterpreting what constitutes a nuclear "First Use," in which case China might feel free to employ nuclear weapons first during a conflict despite its public-facing nuclear employment doctrine.

Growing Desire for an Indigenous South Korean Bomb. At the same time, there is an increasing desire within South Korea to develop an indigenous South Korean bomb as a means to present a credible deterrent to North Korea.[20] Indeed, by some estimates, a majority of South Koreans believe that having their own nuclear weapons would significantly increase their own security.[21] While one can debate this notion, states have

successfully pursued nuclear weapons programs when they assess that the security environment demands it.[22] And in a democracy, political leaders must ultimately be responsive to the will of their population.

History of U.S. Nuclear Deployments in South Korea

During the Cold War, the United States had strategic nuclear weapons on ballistic missile submarines patrolling the Pacific Ocean and also had NSNWs deployed within the Pacific theater. These deployments included nuclear missiles on surface combatants such as destroyers, air-delivered nuclear weapons on aircraft carriers, and nuclear gravity bombs stored in South Korea itself.[23] Such nuclear deployments were part of a worldwide U.S. posture designed to deter communist aggression and assure U.S. allies.[24]

Indeed, during the Cold War, U.S. allies Taiwan and South Korea pursued nuclear weapons programs when they doubted the credibility of America's extended nuclear deterrent to them.[25] While the United States convinced them to abandon these nuclear programs, both Taipei and Seoul had long-standing and lingering concerns about America's nuclear capabilities.

At the end of the Cold War, the United States unilaterally removed its NSNWs from Asia as part of the Presidential Nuclear Initiatives.[26] In the 2010s, the United States officially retired the nuclear variant of the Tomahawk cruise missile, the final nuclear system that was seen by many allies as the "Asian" deterrence capability.[27] In both cases, the United States sought to assure allies that the relatively static security environment—combined with a minimal Chinese nuclear arsenal and a small, immature North Korean nuclear program—did not require American NSNWs within theater.

As of today, the United States has not maintained NSNWs in East Asia or the Western Pacific in almost 35 years.[28]

The Case for Redeploying Non-Strategic Nuclear Weapons to Korea

The Contours of Redeployment of NSNWs to South Korea. Given the deteriorating security environment in East Asia—particularly North Korea's expanding and maturing nuclear arsenal and Kim's repeated attempts at nuclear coercion—the United States should reverse the decisions of the 1990s and redeploy NSNWs to the peninsula. Doing so would deter U.S. adversaries from carrying out a nuclear strike on America's allies or on the United States by demonstrating that the United States could respond to a low-yield nuclear strike quickly with a low-yield nuclear option of its own.

Such NSNW deployments should in the immediate term include a limited number of air-delivered nuclear gravity bombs to U.S. air bases in South Korea capable of being delivered by American pilots flying American nuclear-capable fighter-bombers stationed in Korea. While Defense Department planners and targeteers with access to classified information should identify the exact number of weapons needed in Korea, a rough unclassified estimate would probably be on the order of a few dozen weapons.

This deployment of gravity bombs would be an interim measure until the next-generation nuclear-armed cruise missiles come on line over the next five to 10 years, specifically the air-launched long-range standoff missile and the sea-launched cruise missile-nuclear.[29] Both systems will have a greater range than a gravity bomb, be able to penetrate adversary air defense systems from a stand-off range, and contribute to regional deterrence and stability—but they will not be available for years to come. To that end, forward deploying U.S.-based nuclear gravity bombs to Korea is a step Washington and Seoul can do in the immediate term.

Redeploying NSNWs to East Asia should not be taken lightly, but—given that the United States and its allies have attempted for two decades to engage in nuclear threat reduction discussions with North Korea only to be rewarded with continued threats of nuclear holocaust against the United States, South Korea, and Japan—it is time for a different approach. Redeployment could, if done correctly, both deter North Korean and Chinese aggression and stave off additional regional proliferation, particularly among South Korea and Japan, by demonstrating America's extended deterrence commitment to its Pacific allies and assuring them of American credibility.

NSNW as a Means to Strengthen a Weakened Regional Deterrence Architecture. Forward deploying nuclear weapons to South Korea fundamentally offers a more credible deterrence posture to Pyongyang and Beijing than the one that currently exists.

Today, because of the lack of NSNWs in East Asia, the United States relies upon nuclear systems generated out of the continental United States (CONUS). These systems fall into a few different categories: high-yield ICBMs, high-yield submarine-launched ballistic missiles (SLBMs), nuclear gravity bombs of a variety of yields, and variable yield air-launched nuclear cruise missiles. All of these weapons and associated delivery systems are either home-ported, stored, or based in CONUS, and all have their shortcomings when it comes to deterring limited, low-yield attacks on regional U.S. allies.

During the Cold War, the United States recognized that credible deterrence, particularly at the regional level, is strengthened by the forward deployment of U.S. nuclear weapons. This enabled the various NATO nuclear

strategies that included Eisenhower's "New Look" and the subsequent "Flexible Response" option of the 1960s to the 1980s.[30] NATO's Flexible Response was predicated upon providing U.S. political leadership and NATO battlefield commanders greater optionality when it comes to responding to adversary aggression. This optionality included not only robust conventional capabilities but also diverse CONUS-based high-yield strategic nuclear capabilities and a low-yield, theater nuclear capability resident within Europe that could be employed with precision across a specific battlefield.

This period of the Cold War began to see nuclear weapons as falling into two general categories: strategic (designed to deter strategic attack against the American homeland) and non-strategic (designed to deter theater or battlefield attack against American or allied forces overseas).[31] While strategic systems could go far to deter a nuclear attack against American cities or targets, non-strategic systems were needed to contain horizontal escalation and because their lower yields, rapidity of delivery options, and more discrete effects made them a more credible deterrent on the battlefield. Taken together, a robust and credible strategic deterrent (which had less utility for deterring an attack on an ally, because the weapons were optimized to deter an attack on the American homeland) coupled with an effective forward deployed theater NSNW capability gave the American President greater optionality in deterring aggression than a single force comprised solely of large, high-yield strategic nuclear weapons.

In addition to the operational advantage provided by the greater optionality, U.S. political leadership in the Cold War understood that a forward deployed capability that could be employed by local military commanders upon granting of release authority was seen by U.S. allies and NATO's adversaries as more credible than a promise of a CONUS-generated strategic nuclear strike.[32] This was especially salient when Europeans directly asked American policymakers if they would actually be willing to use nuclear weapons in their defense. President Charles de Gaulle famously asked President John F. Kennedy whether he would be willing to trade Washington for Paris should it come to a nuclear war.[33] Forward deploying nuclear weapons to the frontline states of NATO—and also in Korea—meant that Cold War policymakers and military commanders would be less likely to have to answer that question, because theater-range, low-yield NSNWs could better contain a nuclear war within a designated theater and have less of a risk of escalation to the American homeland.

The above logic still applies today—which is why NATO retains theater-range NSNWs in Europe and is discussing potentially redeploying theater nuclear weapons to NATO's eastern flank to deter Russian nuclear

coercion.[34] Such NSNW capabilities provide U.S. adversaries—whether in Europe or in Asia—with a visible reminder that the United States is capable of putting low-yield, theater-range nuclear weapons on target in short order—and has a nuclear arsenal that is capable of deterring not only strategic attack on the American homeland but also against America's overseas allies.

Applying the Logic of the Cold War to the Current Environment. A similar logic applies to Korea. Forward deployed weapons that are theater range and relatively low yield can be highly responsive and delivered in a relatively short period of time. Further, they are a more credible deterrent than a high-yield strategic nuclear weapon that is launched from a U.S.-based ICBM or ballistic missile submarine. A simple experiment is useful here.

Should North Korea use a low-yield nuclear weapon against a target in South Korea, the United States would currently have to respond with a CONUS-based bomber, a high-yield ICBM, or a high-yield SLBM. The ICBM and the SLBM would almost certainly have to overfly Russia or China before hitting North Korea. This would involve assuring Moscow and Beijing that they are not the targets of the strike, and they should not be concerned. This would be a diplomatic challenge of the first order, to say the least.

Further, the President would have to ponder whether a high-yield ICBM would not be wildly disproportionate to a low-yield strike—that is, whether responding to a (notional) 20-kiloton strike warrants a 150-kiloton (or more) response. The President may be uncomfortable with such a high-yield-only response and would therefore withhold a strategic response. Alternatively, the President may wonder if responding to a low-yield strike with a high-yield nuclear weapon would cause the conflict to escalate vertically—that is, that adversaries in the conflict would respond to an American high-yield nuclear weapon with their own high-yield nuclear weapon(s).

While the President could launch a CONUS-based bomber armed with a low-yield nuclear gravity bomb in response to a low-yield North Korean strike, the bomber mission would likely take several days to generate before it even began the long flight from CONUS to the Korean peninsula—in stark contrast to the short flight time of a U.S. nuclear-capable fighter-bomber stationed in Korea.

Finally, the President would wonder if launching a CONUS-generated nuclear strike in response to a theater nuclear strike would expand the war to the American homeland. That is, if the United States launched a nuclear strike from a ballistic missile submarine homeported in Washington State[35] or from a nuclear ICBM silo or a nuclear bomber based in Montana,[36] would not those places become targets for a retaliatory strike by U.S. adversaries should the initial nuclear strike not end the conflict decisively?

U.S. adversaries almost assuredly know that these dilemmas will be presented to the American President and may therefore question whether a nuclear attack by them on U.S. allies would truly elicit a nuclear response from the United States given the limited nuclear options available to the United States due to the lack of theater NSNWs. The President could still employ strategic nuclear weapons in response to a North Korean or Chinese nuclear attack on its allies if the United States did have forward deployed NSNWs in East Asia, but forward deploying nuclear weapons would give the President more optionality and flexibility and therefore make the U.S. deterrence posture more credible—just as was the case in Europe and Korea during the Cold War.

The Role of NSNWs in Staving Off Regional Proliferation. Another reason to forward station nuclear weapons in Korea aside from strengthening deterrence is to assure U.S. allies that they do not need their own indigenous nuclear capabilities. To begin with, a more credible deterrence posture (as articulated above) is assuring to U.S. allies, as it reinforces their belief that the United States does in fact have the capabilities to respond effectively to a nuclear attack.

As noted earlier, as interest in an independent nuclear capability grows among South Koreans, the nuclear latency issue becomes more pressing in South Korea.[37] Put simply, nuclear latency is a means by which a state can pursue many of the capabilities of a nuclear weapon state—such as fissile material production capability, warhead design, and delivery mechanisms—without acquiring a nuclear arsenal.

While Washington accepted selective allied nuclear proliferation in the Cold War,[38] it has opposed all forms of nuclear proliferation for more than half a century. Indeed, Washington has done what is necessary to both deter its adversaries and assure its allies—to include forward stationing nuclear weapons in allied territory.

Washington should do all it can to convince its allies that America's nuclear umbrella remains credible. In the case of Korea, it should consider:

- Upgrading nuclear storage sites in Korea to receive and securely store U.S. NSNWs;
- Deploying U.S. nuclear gravity bombs in Korea;
- Potentially conducting U.S.–South Korean conventional support to nuclear operations, whereby South Korean aircraft could support American fighter-bombers as they exercise nuclear employment operations;[39] and

- Discussing with Seoul the utility of training South Korean pilots flying South Korean fighter-bombers to employ U.S. nuclear gravity bombs as part of a full-fledged, NATO-like nuclear-burden-sharing arrangement.[40]

The last two options should be considered only if the security situation in Northeast Asia continues to deteriorate or if public desire for an independent nuclear capability continues to increase in South Korea.

Arguments Against the Reintroduction of Nuclear Weapons to Korea

Those who argue against the reintroduction of NSNW to Korea generally make five primary arguments.

1. Such a Move Would Be Destabilizing. One could argue that redeploying nuclear weapons would be destabilizing and actually worsen the security situation and trigger further North Korean and Chinese nuclear expansion.[41] Such an outcome is possible but unlikely. States generally make nuclear posture and force design decisions based upon a wide variety of inputs, but there is little if any evidence that an adversary's nuclear arsenal is the determining or even primary input.[42] In fact, a redeployment could trigger those states to slow their nuclear expansion and seek some type of arms limitation or regional stability talks. Ultimately, however, the source of destabilization within the region is not the United States or its allies in Seoul or Tokyo but Pyongyang and Beijing, which are expanding the nuclear and missile arsenals.

2. The United States Can Already Service Targets Within the Region with Existing Nuclear Weapons. The United States can in fact easily service targets with ICBMs, bombers, or ballistic missile submarines. But given all the downsides of using CONUS-generated and higher-yield systems in response to a regional nuclear war—not least of which are vertical and horizontal escalation—this is a far from optimal response that would put the U.S. homeland at unnecessary risk of an adversary high-yield strategic nuclear response.

3. Redeployment Could Trigger Retaliation Against South Korea. This is a legitimate concern. China in particular has a history of using economic coercion to force Seoul to change its behavior.[43] Following the deployment of the U.S. terminal high altitude area defense missile defense system to South Korea, China engaged in punitive economic measures to force Seoul to abandon it.[44] This effort ultimately failed,[45] and South Korea

today hosts the highly capable, battle-proven system on its soil. Seoul must decide how much economic pain it is willing to endure in order to better deter its adversaries.

4. The United States Should Double Down on Assurance Through Soft Power. Some argue that the United States should focus on strategic dialogues, engagements, joint statements, and tabletop exercises.[46] There is nothing wrong with this approach as an additive measure—and in fact the United States did this in the summer of 2024 at the high-level U.S.–South Korea Extended Deterrence Strategy and Consultation Group[47]—and the United States has been doing this for more than a decade and a half.[48] While some good has come from such exchanges and dialogues, they have not been sufficient to alleviate the growing security threat within the region or assure the South Koreans.

5. It Would Incentivize a Strike on Nuclear Storage Sites. While America's adversaries could strike American nuclear storage sites in South Korea, it is more likely, in this author's opinion, that the presence of American nuclear weapons would give the adversaries pause on striking such locations out of a fear of triggering a retaliatory response on their own nuclear weapons storage sites.

If the natural place to store these weapons is at Osan and Kunsan Air Bases in Korea, as one U.S. Air Force officer posited,[49] then such locations would likely be removed the North Korean target list.

Both Osan and Kunsan are home to American air power that would be used in any defense of Korea. Further, these bases represent the most visible demonstration of and are central to America's ability to carry out lethal operations on the peninsula. Osan is also home to the Seventh Air Force, which includes the region's most advanced Air Operations Center, capable of coordinating and managing all air operations—including bombing sorties, air defenses, and the flow of additional forces into theater from the United States—during any contingency in Northeast Asia.[50]

For this reason, both air bases—but particularly Osan—are already very attractive candidates for a preemptive North Korean nuclear strike. Indeed, taking Osan off the board would significantly impact America's ability to flow forces into theater.

However, the United States might interpret such strikes as an attempt to engage in a counterforce strike.[51] Nuclear counterforce operations attempt to prevent an adversary from carrying out additional nuclear strikes following an initial set of nuclear strikes—or, if executed preemptively, degrade an adversary's ability to respond to forthcoming nuclear first strikes.[52] The latter approaches can be highly escalatory themselves, because the recipient

of a preemptive counterforce barrage could believe that the attacker is preparing for a much larger, strategic attack and seeks to deny the target of a counterforce attack the ability to respond in a meaningful fashion. In such a circumstance, the attacker could well trigger a retaliatory counterforce strike by the recipient of such an attack.

In this scenario, a North Korean counterforce strike on Osan and Kunsan—if nuclear weapons were stored there—could trigger widespread and far more damaging retaliatory strikes on North Korea's nuclear sites. For this reason, putting nuclear weapons at Osan and Kunsan does not make them more likely to be struck by North Korean forces during an acute crisis or a conflict; rather, it makes them less likely to be early targets in a war.

Conclusion

The United States does not want to reintroduce nuclear weapons to Korea. However, the security environment in Northeast Asia is deteriorating. Deterrence is weakening, and America's allies are questioning the credibility of America's nuclear umbrella.

But if the choice is between nuclear proliferation and the reintroduction of American nuclear weapons under American control to Korea, the United States should at a minimum seriously consider the latter.

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