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Impact of a NE Asian NWFZ on Taiwan Strait and Korea Deterrence

The United States currently maintains robust conventional deterrent capabilities in both the Korean and Taiwan Strait contexts. Neither that capability, nor the credibility of the U.S. extended nuclear deterrent, would be appreciably undermined by a NE Asian NWFZ in the short-term. However, if Chinese military modernization continues to erode the balance of power across the Taiwan Strait beyond one or two more decades, a NWFZ could exclude certain options that the United States or, especially, its partners might deem desirable to reinforce the credibility of extended deterrence in the context of a war over Taiwan. While building periodic renewal requirements into the agreement might partly address these concerns, limits on Chinese deployments or force structure might go farther towards generating mutual and sustainable support for such an agreement.

Short- and Medium-term (5 and 15 year) Impact

The United States does not presently hold or deploy nuclear weapons on the territory of any Northeast Asian state, and since 1991, it has not deployed nuclear weapons on any surface warships, attack submarines, or naval aircraft, meaning that these weapons will not accompany U.S. naval forces during port visits or deployments in Northeast Asia. And while the United States retains the capability to deploy nuclear-armed bombers forward, the 2010 Nuclear Posture Review (NPR) deemphasizes the role of nuclear weapons and, especially, that of tactical nuclear weapons. The 2010 NPR states,

“With the advent of U.S. conventional military preeminence and continued improvements in U.S. missile defenses and capabilities to counter and mitigate the effects of CBW, the role of U.S. nuclear weapons in deterring non-nuclear attacks – conventional, biological, or chemical – has declined significantly. The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attack.”

Conventional deterrence. U.S. military deployments and discussions of operating practices and the military balance suggests a belief in its ability to deter non-nuclear attacks by potential adversaries in both the Taiwan and Korea scenarios using conventional means. In at least the short- to mid-term, there is little prospect for change in this view in either case, though the two cases present very different types and degrees of challenge.

In the Korean case, U.S. nuclear weapons were withdrawn from the peninsula in 1991. The correlation of economic and military strength had been moving against North Korea for at least two decades by that point and it has continued to do so since then. Although the North Korean military maintains large numbers of ground forces personnel and equipment, the ability of those forces to maneuver successfully is limited by a lack of resources to train, geography that

benefits the defense, South Korea's preparation of the battlefield (e.g., the preparation of bridges for demolition), vastly superior U.S. and ROK airpower, the allies' ability to employ mines and cluster munitions, and by the continuing increases in the number and types of U.S. standoff and precision strike weapons.

Historically, the United States has suggested that it might respond to chemical attacks with nuclear weapons, and North Korea continues to maintain large stocks of such weapons. Certainly, chemical weapons could complicate U.S. and ROK military tasks by provoking the large-scale evacuation of civilian populations or by denying or impeding the use of air bases in South Korea. However, U.S. airpower could continue to operate and respond effectively from bases in Japan and Guam, while South Korean and U.S. ground forces are capable of operating in a chemical environment.

Provocations by North Korea, such as the recent shelling of Yeonpyeong Island in November 2010, also present challenges to U.S. defense planners. But while responding might require some escalation (if, for example, aircraft were employed), nuclear weapons would not be a solution.

While U.S. and ROK capabilities relative to those of a hypothetical North Korean adversary, trends across the Taiwan Strait are moving in the opposite direction. With annual double-digit growth in its defense budget since 1997, China has been able to improve its military capabilities faster than either Taiwan or the United States. Moreover, because PLA planners have been largely focused on Taiwan, the PLA has developed capabilities optimized for Taiwan-related scenarios. China's so-called anti-access, area denial (A2/AD) systems, such as accurate conventionally armed ballistic missiles and modern submarines, would severely complicate the U.S. task of aiding Taiwan.

Nevertheless, the United States retains a number of important military advantages in a Taiwan scenario, and adjustments to its procurement, posture, and operational concepts will likely enable it to ensure credible conventional deterrence at least in the short- to mid-term future. The United States can reduce its vulnerability to ballistic missiles by hardening its bases, dispersing aircraft, and operating during the initial phases of a conflict from greater distances. It can exploit its existing strengths in submarines and standoff weapons to threaten Chinese ships at sea, port facilities, or landing areas. And it can enhance deterrence by threatening a protracted war that might threaten Chinese sea-lanes or overseas assets.

(Note: the language above or elsewhere does not constitute advocacy or conflict nor any suggestion that the United States seeks conflict with China. However, both states' militaries do, among the contingencies they both consider, prepare for possible war with one another.)

Nuclear use. The actual use of nuclear weapons by China or North Korea would presumably void the restrictions imposed NWFZ in Northeast Asia and permit the United States to introduce weapons of its own. Even if the United States were to employ nuclear weapons, it would not necessarily have to first deploy them to South Korean or Japanese soil. Attacks with strategic or tactical weapons could be conducted from the continental United States using either missiles (in the case of strategic weapons) or aircraft (strategic or tactical).

In America's recent wars, B-2s and other aircraft have flown direct from the continental United States to conduct conventional strikes, and they periodically conduct operational bombing exercises across the Pacific. While this may entail tanking up to six times mid-flight, the U.S. Air Force operates some 476 tankers in its active and reserve components, and refueling a relatively small number of bombers is not likely to stress U.S. support forces, even across large distances.¹

During a crisis, the United States may wish to enhance nuclear deterrence by manipulating the readiness or deployment of its nuclear forces.² While a NE Asian NWFZ might limit some of its options in this regard, the United States would still have a number of options, including the deployment of nuclear-capable bombers anywhere in theater, the deployment of nuclear weapons to Andersen Air Force Base in Guam or to areas not covered under the NWFZ, or adjustments to alert levels in the United States. In this context, limitations on the deployment of nuclear weapons to Japan, Korea, or Taiwan would not significantly undermine its ability to signal.

Long-Term Impact on the Reassurance of Partners (Beyond 15 years)

Barring unforeseen developments, the U.S. capability to deter North Korean conventional attack using conventional weapons is unlikely to erode in the foreseeable future. The prospects for conventional deterrence across the Taiwan Strait are more uncertain beyond the next one or two decades. Depending on economic and technological variables, the United States will probably be able to retain a degree of advantage in conventional conflict through further adjustments to its force structure and posture, but it may no longer be able to dominate all areas or phases of a conflict.

¹ Providing tanker support for shorter-legged tactical aircraft would be much more onerous during a conflict with China, especially if those aircraft were based farther to the rear as threat from Chinese conventionally armed missiles threatens forward air bases. While it is true that demands on the tanker force will take a cumulative strain, the marginal impact of a small number of strategic attacks would make little difference.

² Balanced against this will be a desire to avoid escalation. One reason that the United States did not lower its alert levels under the 2010 NPR was that a restoration of higher levels during crisis might prove escalatory and prompt an adversary towards higher levels of alert.

Washington might also still be able to threaten the use of either tactical or strategic nuclear weapons in retaliation for first use by an adversary, even without basing weapons on the sovereign territory of partner states.

However, even under relatively optimistic assumptions, however, the United States might find it more difficult to reassure allies if a NE Asian NWFZ were in effect. As China becomes more capable of challenging the United States in the conventional arena and as the PLA's nuclear second-strike capability becomes more robust, allies and partners might question the willingness of the United States to become involved in conflicts in which it no longer enjoyed clear conventional superiority or escalation dominance. To date, U.S. partners have asked for more explicit reassurances on the workings of extended deterrence. In the future, they may be less willing to rely on rhetoric and may see merit in the U.S. deployment of "tripwire" nuclear forces on their own territory.

Hedging Against the Future and/or Assuring Mutual Benefit

The observations above suggest that although there might be few immediate costs to U.S. deterrence capabilities in the short- or mid-term, that situation will become less certain in the longer term. One solution would be termination or pre-established renewal requirements that would enable participants to hedge against the possibility that a NWFZ were no longer desirable. Given the strategic uncertainties in Asia, such provisions might be prudent.

Even with such provisions, U.S. and allied planners might nevertheless be reluctant to enter into agreement that, once signed, might become politically difficult to escape even if the strategic circumstances seemed to merit such a move. More important for generating support would be ensuring that the NWFZ's provisions were balanced in such a way that they provided strategic benefits to both (or all) sides.

Gains accruing from arms control agreements need not be symmetrical if they contribute to stability or lessen the likelihood of escalation. But without some restriction on Chinese weapons development or deployment, U.S. (or Japanese or ROK) strategists might well object to such an agreement as imposing some costs on its side (especially in the long-term) without corresponding gains to stability.

Perhaps ideal from a U.S. or allied perspective would be mutual restrictions on short- and intermediate-range nuclear forces, which might arguably reduce the prospects for vertical escalation in the event of conflict. Given the importance of these forces in China's strategic posture vis-à-vis India and Russia and the fact that the United States is already limited in this area by the INF treaty with Russia, the specifics of such an agreement would have to be carefully crafted and might require U.S. concessions in other areas. Nevertheless, given the potential gains to China of limiting the introduction of nuclear weapons into the region, Beijing should be willing to discuss some limitations on its own forces or activities in exchange for limits on others.

Selective References

Dupree, Philip, Jordan Thomas. "Air-Sea Battle: Clearing the Fog." *Armed Forces Journal*. <http://www.armedforcesjournal.com/2012/05/10318204>.

Grant, Rebecca. "Countering the Missile Threat." *Air Force Magazine*, Vol. 93, No. 12. December 2010.

Kulacki, Gregory. *Japan and America's Nuclear Posture*. Union of Concerned Scientists, 2010.

Peifer, Douglas C. "China, the German Analogy, and the New Air-Sea Operational Concept," *Orbis*, Vol. 55, No. 1, Winter 2011.

Shlapak, David, David T. Orletsky, Toy I. Reid, Murray Scot Tanner, Barry Wilson. *A Question of Balance: Political Context and Military Aspects of the China-Taiwan Dispute*. RAND Corporation, 2009. <http://www.rand.org/pubs/monographs/MG888.html>.

Trachtenberg, David J. "U.S. Extended Deterrence: How Much Strategic Force is Too Little?" *Tailored Deterrence: Influencing States and Groups of Concern*. USAF Counterproliferation Center, May 2011. (available online)

U.S. Department of Defense, *Nuclear Posture Review Report*, April 2010. Document available at <http://www.defense.gov/npr/>.

van Tol, Jan, Mark Gunzinger, Andrew F. Krepinevich. "AirSea Battle: A Point-of-Departure Operational Concept." March 2010. Available at <http://www.csbaonline.org/publications/2010/05/airsea-battle-concept/>.