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**MANAGING CHINA'S MISSILE THREAT:
FUTURE OPTIONS TO PRESERVE FORWARD DEFENSE**

**TESTIMONY BEFORE THE U.S.-CHINA ECONOMIC AND SECURITY
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MISSILES FORCES: IMPLICATIONS FOR THE UNITED STATES"**

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Vice Chairman Shea, Commissioner Tobin, and other Members of the Commission: thank you for the opportunity to participate in this hearing and share my thoughts on the implications of China's offensive missiles. This is an increasingly important issue, not only for the United States, but also for its allies and partners throughout East Asia. Following the Cold War, the United States enjoyed a very large—and largely uncontested—conventional military advantage in the region. That advantage is eroding, however, and China's missile arsenal is a major reason why. My remarks will focus on how China's offensive missile forces are making the U.S. strategy of forward defense more challenging; how the United States could use offensive missile forces of its own to enhance deterrence and improve crisis stability; and how it might navigate the diplomatic barriers to developing those forces, in particular the Intermediate-Range Nuclear Forces (INF) Treaty.

Assessing the Implications of China's Missile Arsenal

The security environment in the Asia-Pacific is currently experiencing a number of worrisome trends, including the escalation of maritime territorial disputes in the East and South China Seas, the proliferation of advanced military capabilities to a number of local actors, and a shifting balance of power. China's efforts to strengthen its armed forces are at the center of each one. As a result, there is a growing debate over whether and how the United States should adapt its military strategy, posture, and force structure in response.

For decades, China has been preparing the People's Liberation Army (PLA) to fight local conflicts against technologically superior opponents. As part of this effort, it has been developing a variety of anti-access/area-denial (A2/AD) systems, which could exploit vulnerabilities in the American style of expeditionary warfare to impede U.S. power-projection during a crisis or conflict.¹ Since the end of the Cold War, the United States has grown accustomed to facing opponents that are too weak to seriously threaten its overseas bases, air and naval forces, and battle networks, all of which underpin its ability to conduct and sustain large-scale military operations abroad. Today, however, Beijing is fielding capabilities that can hold at risk fixed forward bases, menace high-signature air and naval platforms, and disrupt the United States' ability to collect, store, and transmit information. In particular, the PLA has amassed a large arsenal of ground-launched ballistic and cruise missiles for land-attack, sea-denial, and anti-satellite operations.²

Why has China placed so much emphasis on ground-launched offensive missile forces to support its "counter-intervention" strategy, and why are these systems such a cause for concern in the United States and among local nations? Initially, mastering missile technology offered the PLA a way to compensate for the limitations of its air and maritime power-projection capabilities. Yet ground-launched offensive missiles have a number of inherent advantages over combat aircraft and naval platforms—advantages that could allow China to deliver a significant amount of firepower against critical targets in a relatively short period of time.

Specifically, ground-launched offensive missiles are:

- *A cost-effective way to generate combat power in the early stages of a campaign.* Ballistic and cruise missiles are far less expensive to procure than aircraft or ships, much cheaper than most existing air and missile defenses, and orders of magnitude cheaper than many prospective targets.
- *Difficult to locate, interdict, or otherwise disrupt before and immediately after being launched.* Well-trained operators can deploy mobile platforms to hide

¹ Anti-access capabilities are used to prevent or constrain the deployment of opposing forces into a theater of operations, whereas area-denial capabilities are used to restrict their freedom of maneuver once in theater. See Andrew F. Krepinevich, Jr., "The Pentagon's Wasting Assets," *Foreign Affairs*, 88, No. 4, July/August 2009. On the characteristics of the American style of expeditionary warfare see Alan Vick, "Challenges to the American Way of War," Remarks to the Global Warfare Symposium, Los Angeles, CA, November 17, 2011.

² For an overview of China's military capabilities and strategy, see Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2014*, Annual Report to Congress (Washington, DC: DoD, 2014).

sites that are hard to detect, maneuver them to pre-surveyed positions when they are ready to fire their payloads, tear down their equipment within minutes of executing an attack, and relocate them before being discovered. They can also transmit and receive information over hardened, dedicated, and closed systems like buried fiber optic networks, which are more difficult to jam than radio frequency transmissions and less vulnerable to attack than air- or space-based communications systems.

- *Difficult to intercept once in flight.* Ballistic missiles have high terminal velocities and can be designed to maneuver or equipped with penetration aids. Alternatively, cruise missiles are often relatively slow, but stealthy, and can be programmed to follow complex flight paths that stress air defense systems.

The dangers posed by China's missiles are also magnified by the relatively fragile nature of the United States' military posture in East Asia. U.S. air-to-air combat capability and air-to-ground strike capacity are currently concentrated in tactical aviation platforms that must operate from a handful of close-in land bases or a few aircraft carriers in order to be effective. With so many eggs in so few baskets, and with those baskets increasingly vulnerable given their proximity to China (e.g., air bases on the island of Okinawa) or their need to take up station inside its threat ring (e.g., aircraft carriers), Beijing might be tempted to launch a missile attack when tensions are high, one that could shift the military balance in its favor.

Of course, the United States would still be able to conduct a strike campaign in response using bombers that can operate from range and submarines that are difficult to detect, even if local air bases were under assault and carriers were damaged or held back. Yet U.S. bombers are few in number, especially penetrating bombers that can survive inside defended airspace, while submarines have shallow weapons magazines, and therefore must find a safe port to reload once they exhaust their limited inventory of munitions. Penetrating long-range strike aircraft and undersea warfare systems are also likely to be tasked with a wider range of missions given the growing missile threat to forward bases and surface naval platforms, potentially overstressing these high-demand/low-density assets.

In sum, the conventional military balance in East Asia is characterized by an emerging asymmetry in the ability to generate combat power, especially at the outset of a conflict. If that asymmetry persists or shifts further in China's favor, it could weaken deterrence, undermine crisis stability, and make it much more difficult for the United States to defend its interests in the region.

Could U.S. Missiles Help Turn the Tide?

How should the United States respond to these challenges? There are a number of steps that it could take to preserve its military power: fielding a new penetrating bomber to supplement and eventually replace the aging B-2; acquiring a carrier-based surveillance and strike platform that significantly extends the range of the air wing; building undersea warfare systems with greater payload capacity; and investing in new active and passive defenses to protect forward operating locations.³

It could also emulate China by developing ground-launched missile forces of its own.⁴ For instance, U.S. ground-launched offensive missiles could:

- *Increase the overall volume of firepower that the United States could bring to bear.* That, in turn, could deter China from launching an attack in the hope of inflicting a decisive blow against forward-operating forces. It could also provide alternative military options in the event that deterrence fails and Beijing inflicts significant losses on U.S. forces, disrupts flight operations at theater airbases, and compels carrier strike groups to remain beyond the effective range of their air wings.
- *Create new military options for the United States and enable the development of novel operational concepts.* Ground-launched missiles could hold at risk opposing surface naval forces when U.S. anti-surface warfare and maritime-strike capabilities were unavailable, and could attack targets on land before enemy air defenses have been suppressed or destroyed.
- *Impose costs on China.* Beijing might devote significant resources to defend against missile attacks, a threat that it does not currently face and therefore can largely ignore. It might also invest in the persistent surveillance and strike systems necessary to suppress offensive missile forces, which it does not need at present. As the United States knows well, missile defense and missile suppression are demanding missions with expensive capability requirements.
- *Create bargaining leverage with China.* Although Beijing has no incentive to accept any limits on its missile forces right now, that could change if it faces a missile buildup.
- *Assure local allies.* If air bases and surface naval forces become increasingly vulnerable, the United States might be tempted to remove critical assets from

³ Evan Braden Montgomery, "Contested Primacy in the Western Pacific: China's Rise and the Future of U.S. Power Projection," *International Security*, 38, No. 4, Spring 2014.

⁴ Jim Thomas, "Why the U.S. Army Needs Missiles," *Foreign Affairs*, May/June 2013.

the region during a crisis—a decision that could damage key alliance relationships. Ground-launched missile systems are more difficult to hold at risk than aircraft or ships, however, and cannot easily be withdrawn.⁵

What specific roles might ground-launched missiles play? Anti-ship missiles could be used for sea-denial, including chokepoint defense and open-ocean targeting. The former might entail blocking hostile surface naval forces from exiting China’s “near seas” and operating in the waters between the first and second island chains, where they could encircle allies like Japan or interdict U.S. forces en route to the region.⁶ The latter might involve holding at risk hostile surface naval forces that attempt to seize disputed territory, impede freedom of navigation, or enforce a maritime blockade against a local nation. Alternatively, land-attack missiles could be used for deep-strike: holding at risk surveillance systems, command-and-control facilities, air bases, and other potential targets located on an adversary’s territory.⁷

The United States does not presently have the capabilities to support these missions. Notably, the U.S. Army—which is the logical candidate to spearhead new ground-based sea-denial and deep-strike efforts—does possess some extended-range indirect-fire systems. Yet these systems were designed for combined arms operations against opposing mechanized and armored units at ranges of several dozen or, at most, several hundred kilometers. They cannot, therefore, be used effectively against surface naval forces or more distant targets on land. The United States could modify existing or planned systems to fill these gaps. For instance, it could extend the range of the Army Tactical Missile System (ATACMS) and/or give it the sensor package necessary to strike maritime targets. It could also adapt air- or ship-launched weapons such as the Long-Range Anti-Ship Missile (LRASM) for use with ground-based delivery system. To date, however, there are no publicly announced plans to do so.

⁵ Importantly, most of the benefits outlined above would obtain only if ground-launched missiles were forward-garrisoned in frontline nations such as Japan and the Philippines, rather than deployed into the theater during a crisis.

⁶ The term “near seas” refers to the Yellow Sea, East China Sea, and South China Sea. The first island chain runs from Japan to the Malay Peninsula and rings the near seas, while the second island chain extends farther west to the Marianas.

⁷ Terrence R. Kelly et al., *Employing Land-Based Anti-Ship Missiles in the Western Pacific*, Technical Report (Santa Monica, CA: RAND, 2013); and James R. Holmes, “Defend the First Island Chain,” *Proceedings*, U.S. Naval Institute, 140, No. 4, April 2014; and Andrew F. Krepinevich, “How to Deter China: The Case for Archipelagic Defense,” *Foreign Affairs*, March/April 2015. For a skeptical view, see David W. Kearns, Jr., *Facing the Missile Challenge: U.S. Strategy and the Future of the INF Treaty* (Santa Monica, CA: RAND, 2012).

Reconsidering the INF Treaty

Despite the potential virtues of missile forces, there are a number of barriers that could prevent the United States from pursuing this option. The U.S. Army might oppose taking on new missions that could draw resources away from its traditional areas of emphasis, such as combined-arms maneuver warfare. That barrier could erode over time, however, as the Army searches for a major role in the Western Pacific. In addition, local allies might balk at the idea of hosting missile forces on their territory given domestic political constraints and the potential for Chinese retaliation. Yet they might become increasingly receptive in the near future, particularly if China becomes more assertive, the U.S. military posture becomes more vulnerable, and tensions in the region continue to rise. Finally, certain types of missile forces are prohibited by the INF Treaty, which bars the United States and Russia from testing and deploying surface-to-surface ballistic and cruise missiles—whether they are nuclear-armed or conventionally-armed—with ranges between 500 and 5500 kilometers. The INF Treaty is under duress, however, and might not persist in its current form, if it survives at all.

In July 2014, the State Department publicly revealed what many already suspected—namely that Russia was in violation of its INF obligations. Washington has accused Moscow of testing a prohibited ground-launched cruise missile, although it has not revealed the system in question.⁸ Some observers have also raised concerns that Moscow has tested a surface-to-surface ballistic missile at ranges that exceed INF's restrictions (technically making it an intercontinental ballistic missile that is exempt from INF but captured by the New START Treaty), as well as at ranges that fall within INF's bounds (indicating that it might be used as an intermediate-range weapon irrespective of its treaty classification). By most accounts this would be a circumvention of the INF Treaty rather than a violation, although it does raise additional concerns about Russian intentions.⁹

Moscow's lack of compliance with both the letter and spirit of the INF Treaty is not surprising, given that senior Russian officials proposed withdrawing from it nearly a decade ago.¹⁰ Nevertheless, Russian cheating has prompted a host of

⁸ U.S. Department of State, *Adherence to and Compliance With Arms Control, Nonproliferation, Disarmament Agreements and Commitments* (Washington, DC: U.S. Department of State, July 2014), pp. 8–10. See also James R. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," Statement for the Record, Senate Armed Services Committee, February 26, 2015, p. 7.

⁹ Steven Pifer, "The Moscow Missile Mystery: Is Russia Actually Violating the INF Treaty," *Foreign Policy*, January 31, 2014; and Jeffrey Lewis, "An Intercontinental Ballistic Missile by Any Other Name," *Foreign Policy*, April 25, 2014.

¹⁰ Robert M. Gates, *Duty: Memoirs of a Secretary at War* (New York: Alfred A. Knopf, 2014), p. 154.

arguments for how the United States should respond, from urging Moscow to resume complying with the treaty to withdrawing from it in retaliation.¹¹ There is a third option worth consider as well, especially if Russian non-compliance appears unavoidable: modifying the treaty. For instance, Washington and Moscow could agree to sanction the development of intermediate-range missiles, preserve the ban on missile deployments in Europe, and lift the ban on missile deployments in Asia.¹²

Given Russia's eroding military position relative to China, historical tensions between the two neighbors, and their competition for influence in the Russian Far East, there are reasons to suspect that Moscow's interest in exiting INF stems more from the need to counterbalance Beijing than the desire to coerce Brussels.

In 2007, President Putin hinted that he might pull out of the treaty unless it was adapted to include other countries. Otherwise, he argued, "It will be difficult for [Russia] to keep within the framework of the treaty in a situation when other countries do develop such weapons systems, and among those are countries in our near vicinity."¹³ This may have been more than empty rhetoric or an effort to make the U.S. think twice about deploying missile defenses in Europe. Recent reports suggest that Russia plans to station the RS-26 intercontinental ballistic missile—which it has apparently tested to intermediate ranges—in Irkutsk. That would place it within range of China but outside the range of many targets in Europe.¹⁴ Interestingly, during the original INF negotiations, Moscow wanted to retain some of its missiles in the East rather than destroy them all, but Washington insisted on a "global double zero" option that would outlaw these weapons irrespective of their location.

¹¹ Steven Pifer, "Don't Scrap the INF Treaty," *The National Interest*, June 9, 2014; and John Bolton and John Yoo, "An Obsolete Nuclear Treaty Even Before Russia Cheated," *Wall Street Journal*, September 9, 2014. See also Elbridge Colby, "The Real Trouble with Russia," *Foreign Affairs*, April 7, 2014; and Tom Nichols, "The INF Treaty and Russia's Road to War," *The National Interest*, August 2, 2014.

¹² I have previously made the case for this option and addressed criticisms of it in a series of articles: Evan Braden Montgomery, "China's Missile Forces are Growing: Is It Time to Modify the INF Treaty?" *The National Interest*, July 2, 2014; Evan Braden Montgomery, "How Should America Respond to China's Deadly Missile Arsenal?" *The National Interest*, September 19, 2014; and Evan Braden Montgomery, "Time for American Land-Based Missile Forces to Counter China?" *The National Interest*, October 14, 2014.

¹³ Quoted in Demetri Sevastopulo and Neil Buckley, "Putin Dismisses US Missile Shield Plan," *Financial Times*, October 13, 2007. This is not the only time that Russian officials or others have suggested "multilateralizing" INF. But nations with large arsenals of intermediate-range missiles—like China—have little to gain by joining the treaty at present.

¹⁴ See Pavel Podvig, "First RS-26 to be Deployed in Irkutsk in 2015," *Russian Strategic Nuclear Forces*, July 1, 2014, available at http://russianforces.org/blog/2014/07/first_rs-26_to_be_deployed_in.shtml.

An “Asia option” could have at least two potential benefits:

- *It would enable the United States to develop and deploy ground-launched missile forces in the Western Pacific.* As described above, this could enhance deterrence and improve crisis stability as China’s military becomes more powerful.
- *It would drive a wedge between China and Russia.* In this scenario, there would be little doubt that Moscow’s pursuit of new missiles was directed squarely at Beijing.

Pursuing this option would certainly raise concerns about the reaction of U.S. allies in Asia, the possibility that Beijing might accelerate its own missile deployments in response, and Washington’s ability to monitor and verify the new arrangement. All of these concerns are reasonable, but they are not necessarily unmanageable. For instance, if China’s military power continues to grow, allies like Japan and the Philippines might become increasingly receptive to hosting U.S. missile forces, as well as more willing to tolerate Russian weapons that are aimed primarily at China. In addition, while Beijing could certainly field more missiles in response, it might not be willing to run an arms race with two major powers at the same time. Finally, monitoring the location of mobile missiles in a country as large as Russia would certainly be a difficult task. If Russia has no interest in adhering to the existing treaty, however, then the United States will have to address this challenge irrespective of INF’s status and provisions.

Conclusion

The United States has several core interests in East Asia: preventing a single actor from dominating the region, protecting allies and security partners, and preserving freedom of the commons. China’s growing missile arsenal could enable Beijing to challenge them all. To sustain a military strategy of forward defense despite a shifting balance of power, Washington might need to consider steps it has avoided in the past, including the development of new ground-launched missile forces. That could require taking a hard look at the INF Treaty, however, which has served U.S. interests for nearly three decades, but might soon be obsolete.

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