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**Written Statement of Ms. Andrea Yaffe
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Senate Armed Services Committee Subcommittee on Strategic Forces
on Fiscal Year 2026 Missile Defense and Missile Defeat Posture
May 13, 2025**

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Introduction

Chairman Fischer, Ranking Member King, and distinguished members of the Committee: Thank you for inviting me to testify on the Department of Defense's missile defense posture. I am grateful to appear alongside my distinguished colleagues. The Assistant Secretary of Defense (ASD) for Space Policy is the principal civilian advisor to the Secretary of Defense, the Deputy Secretary of Defense, and the Under Secretary of Defense for Policy on all missile defense and defeat activities. It is my privilege and honor to oversee this office pending the nomination and confirmation of a new ASD for Space Policy. For this testimony, I will review how air and missile threats have evolved over the last year and provide an update on our missile defense policy, strategy, and programs to meet these challenges.

Missile defenses are a vital element of our strategic force posture, both as a means of deterrence as well as defending the U.S. homeland and security interests abroad. As we see nearly every day in conflicts across the world, offensive missile capabilities are now a central feature of modern warfare. China, the Democratic People's Republic of Korea (DPRK), Russia, and Iran now routinely deploy advanced missile systems to coerce and intimidate opponents, inflict tactical damage, and carry-out strategic campaigns.

Our adversaries are investing in the next generation of offensive capabilities to hold the United States homeland at risk, coerce our allies and partners, and threaten our deployed forces. China, Russia, and the DPRK, are fielding more advanced missiles with greater ranges and in larger numbers to provide the means for strategic-level attack against the homeland, including nuclear and conventional options. These adversaries are rapidly modernizing, expanding, and diversifying their missile forces, incorporating technological

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advances into warheads, delivery systems of all types, and supporting command and control systems. Iran, meanwhile, has the capability to strike targets throughout the Middle East and continues to arm its proxies in the region. The President's Golden Dome for America Executive Order underscores this point: "The threat of attack by ballistic, hypersonic, and cruise missiles, and other advanced aerial attacks, remains the most catastrophic threat facing the United States."

To counter these growing threats, we need next generation missile defeat and missile defense architectures that can complement our existing nuclear and conventional offensive capabilities. The President has mandated that the United States will develop and field a next generation missile defense shield to provide for the common defense of our citizens and the Nation, and deter, defend against, and defeat any foreign aerial attack on the homeland. We will also guarantee our secure second-strike capability. This broad mission set is the task before us today.

Missile defense and the space domain are intrinsically linked as key elements of the necessary solution. Proliferated space-based sensors offer an optimal perspective for missile warning and tracking, and efforts in the space domain will be critical for the future technological growth of missile defense. The other essential requirement for countering missile attacks is to develop and deploy capabilities to defeat them prior to launch.

Security Environment

Missile threats pose a substantial and growing risk to the American people, U.S. national interests, and our allies and partners. The growing cooperation and potential for more

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coordinated action among China, Russia, the DPRK, and Iran is displaying a shared interest in undermining U.S. interests globally.

China

China is modernizing its missile forces to enhance its strategic deterrence capabilities and to deter and counter third-party intervention in regional conflicts. Today, China maintains a diverse arsenal of intercontinental-range forces, theater-range road-mobile ballistic missile systems, strategic hypersonic glide vehicles (HGVs) capable of carrying nuclear warheads, and sea-launched ballistic missile submarines that can hold the United States and our allies and partners at risk. China is expanding its nuclear arsenal at extraordinary speed, developing a nuclear triad of land-based and sea-based missiles and a nuclear-capable strategic bomber. The U.S. Intelligence Community assesses that China will have more than 1,000 operational nuclear warheads by 2030, many of which will be deployed at higher readiness levels. We remain very concerned about the lack of transparency from China regarding these developments.

China is also developing more survivable intercontinental ballistic missiles (ICBMs) to improve its nuclear-capable missile forces. Its ICBM arsenal currently consists of approximately 400 missiles, including fixed and mobile launchers capable of launching unitary and multiple independently targetable reentry vehicles. China's development of advanced nuclear delivery systems, such as a strategic HGV and a fractional orbital bombardment system, creates new challenges for deterrence.

China views the possession of advanced conventional missile systems as a means to coerce neighbors and subvert U.S. efforts in the region. China possesses a variety of conventional mobile ground-launched, short-range, medium-range, and intermediate-range

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ballistic missiles and ground-launched cruise missiles to enable long-range precision strikes within the First and Second Island Chains. This includes conventionally armed anti-ship ballistic missile variants and multi-role missiles for targeting aircraft carriers and other ships in the Western Pacific.

Beijing is also developing and testing more advanced theater-range missiles, including capabilities and methods to counter adversary ballistic missile defense (BMD) systems. This includes the DF-17 and longer-ranged DF-27 that have HGV payloads designed to evade early warning radars and associated defenses. More alarmingly, China is exploring the development of conventionally armed intercontinental range missile systems. If developed and fielded, these capabilities would enable China to strike all 50 states, the District of Columbia, and U.S. territories with conventional missiles. The introduction of intercontinental conventional capabilities has the potential to introduce uncertainty regarding whether an attack has a conventional or nuclear payload, thereby risking escalation to a nuclear exchange. In addition to missile development, China is making significant advancements in Command, Control, Computing, Communications, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISR) capabilities, such as a space-enabled targeting network, as well as counter C5ISR capabilities, such as ground-based and space-based counterspace weapons, to strengthen their kill webs, enable the successful delivery of their long-range precision weapons, and, ultimately, hold U.S. and allied and partner forces at risk.

Russia

Russia continues to field ballistic, cruise, and hypersonic missiles and is using these systems extensively in Ukraine. It has employed air-launched, ground-launched, and sea-

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launched systems, some of which could also deliver a nuclear warhead. In addition, Russia is pursuing novel and destabilizing nuclear systems that are additive to its existing capabilities, and are designed to hold the U.S. homeland, allies, and partners at risk.

Additionally, the direct-ascent anti-satellite missiles and on-orbit counterspace capabilities being developed by China and Russia threaten the space-based sensors critical for our early warning and missile defense architecture. These threats underscore the need to create a shared international understanding what constitutes responsible operational rules for safety and stability in space.

DPRK and Iran

The DPRK and Iran also have missile capabilities that threaten our territory, forces, and allies. The DPRK continues to develop its ICBM forces with frequent long-range tests of new systems, including the test last October of a new, more powerful solid-fueled missile capable of reaching most of the continental United States. The DPRK's conventional missile forces, including short and medium-range ballistic missiles, and cruise missiles, remain a substantial threat to the DPRK's neighbors and to U.S. territory and forces in the region.

Iran possesses the largest missile program in the Middle East and twice demonstrated its willingness and ability to use this force last year with coordinated air and ballistic missile strikes of more than a thousand kilometers against Israel. Iran also remains the world's biggest proliferator of ballistic and cruise missiles and unmanned aircraft attack systems and related technologies to state and non-state entities. The recipients of Iran's support include Hamas in Gaza, the Houthis in Yemen, and Hezbollah in Lebanon. Like Iran, these groups have

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demonstrated a willingness to use these weapons – whether against Israel or commercial shipping in the Red Sea.

Adversary Cooperation

We also see these countries working together to advance their respective interests. Russia has provided technical and economic assistance to the DPRK and Iran in return for thousands of munitions, attack drones, and ballistic missiles. Russia has employed DPRK missiles in Ukraine, resulting in improvements in their accuracy and destructive capability. The significant growth in the DPRK-Russia strategic partnership merits close attention because the two countries increasingly share resources, knowledge, and technology to bolster and expand their air and missile forces.

Adversary Missile Defense Capabilities

China and Russia possess the largest integrated air and missile defense forces in the world, dedicated to protecting their respective homelands and forces from air and missile attack. China is modernizing its ballistic missile defense capabilities, fielding the indigenous CH-AB-02 (HQ-19) and developing kinetic-kill vehicle technology to field a mid-course interceptor. This mid-course interceptor will form the upper layer of a multi-tiered missile defense. China tested a land-based, mid-course interceptor on February 4, 2021. Russia, meanwhile, has maintained a missile defense system to defend Moscow since the 1970s. It currently consists of about 68 nuclear-armed interceptors. Russia is also developing the S-500, which has some capability against ballistic missiles, and operates other credible air and missile defenses to defend critical assets and fielded forces.

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Missile Defense Strategy and Posture

DoD must contend with adversaries possessing a range of sophisticated technologies, including advanced cruise and ballistic missiles and maneuverable HGVs, as well as lower-tier threats, like unmanned aircraft system (UAS), from both state and non-state actors. These capabilities continue to evolve and include a wide range of platforms, speeds, distances, and attack vectors that are easily concealed and evasive.

This is where the value of missile defense – a core component of deterrence-by-denial – comes in. Robust missile defense capabilities raise the threshold for conflict and introduce uncertainty and complexity into attack planning, thereby undermining an adversary's confidence that an attack will be successful. The greater the cumulative challenges for an adversary, the greater the likelihood of avoiding an attack in the first place. If deterrence fails and an attack does occur, missile defenses limit the damage and assure the means of effective responses. Moreover, missile defenses provide time and space for the President to decide how to respond most effectively. The financial outlays of missile defense and missile defeat today more than offset the exponentially greater cost that would be incurred by the lack of defenses in a potential conflict tomorrow. This premise is at the core of the Golden Dome executive order.

Missile defense systems also contribute to deterrence by reinforcing our diplomatic and security posture while reassuring allies and partners. Should deterrence fail, the United States, our allies, and partners would need robust missile defense and defeat options not only to defend and protect our interests, but also to manage escalation. Integration with our allies and partners improves our all-domain awareness, redundancy, and shot deconfliction, and we are working to overcome barriers to data and cost sharing.

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Last year, we witnessed this scenario unfold on multiple occasions. Iran's large-scale ballistic, cruise missile, and UAS attack against Israel in April and follow-on massive ballistic missile attack in October 2024 represented one of the largest concentrated barrages ever conducted by any nation. The successful coalition missile defense and missile defeat responses against both attacks created opportunities for strategic pause, allowing Israel to calibrate its next moves rather than rush into a counterattack with potential unintended escalation.

The deterrence by denial contributions to missile defense continue to serve as a complement to the cost imposition strategies offered by our conventional and nuclear forces. Together they give our decision-makers time and credible options to deter aggression, assure lethality, and protect the American people from harm and respond to attacks if deterrence fails.

Space-based capabilities and assurance of nuclear second-strike capabilities are also part of the direction for a Golden Dome for America. The executive order calls for the groundbreaking development and deployment of a next generation missile defense shield capable of protecting the American people against a catastrophic missile attack. Golden Dome is a top priority for the Department and will include the development of cutting-edge domain awareness systems, kinetic and non-kinetic missile defeat capabilities in the space and cyberspace domains, and advanced command, control, and battle management systems to integrate and augment traditional U.S. missile defense capabilities.

Burden sharing with allies and partners is also a priority in the missile defense arena. Japan's co-development of the Glide Phase Interceptor with us is a prime example, as is their acquisition of Aegis system equipped vessels and SM-6 interceptors. Data sharing in the Indo-Pacific region is also a crucial initiative, with efforts already in place with Japan and South

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Korea, and discussions underway with Australia as well. Meanwhile, we are co-developing the Arrow 4 and co-producing Iron Dome, David's Sling, and Arrow 3 BMD systems with Israel, and Saudi Arabia is acquiring seven THAAD batteries. Closer, to home, Canada is acquiring over-the-horizon radars that will be helpful for the defense of North America. Finally, in Europe, Germany, Norway, Poland, Romania, Sweden, and Switzerland are acquiring Patriot batteries and interceptors. These allied investments are a start, but not sufficient to meet the growing threats that we collectively face today. As the Secretary has stated many times, greater burden-sharing is required, and we continue to emphasize this point in our discussions with our allies and partners.

Conclusion

The Department of Defense remains committed to making the necessary investments in our strategic posture to deter our adversaries and, if deterrence fails, prevail in conflict. The missile defense and defeat mission requires sufficient and consistent funding and support. Thank you for your dedication to our mission and our servicemembers, and for the opportunity to testify to you today alongside my distinguished colleagues. I look forward to answering your questions.