Chairman Cooper, Ranking Member Turner, and Members of the Committee, thank you for the opportunity to testify on the Department’s missile defense policy, posture, and budget.

The MDR articulates a comprehensive approach to address the missile threat through strengthened deterrence and active missile defense systems for both homeland and regional defense.

The FY 2020 budget requests $12.0 billion for missile defense that includes: $9.4 billion for the Missile Defense Agency; $2.5 billion for the Army; and $100 million for the Air Force. These funds support improving the current system and moving towards innovative concepts and advanced technologies.

**Threat**

Over the past decade, North Korea and Iran have accelerated efforts to develop and field missiles capable of threatening U.S. strategic interests. North Korea possesses a range of systems including road-mobile intercontinental-range ballistic missiles, solid-propellant medium-range ballistic missiles, and submarine-launched ballistic missiles.

For its part, Iran already possesses the largest stockpile of regional missile systems in the Middle East. Iran continues to improve its missile capabilities and develop space launch vehicles which provide knowledge to develop an intercontinental-range ballistic missile.

We also see the re-emergence of long-term, strategic competition by revisionist powers in Russia and China. Russia and China are expanding and modernizing a wide range of offensive missile capabilities. For example, they are fielding increasingly diverse missile systems, and integrating missiles into their coercive
threats and military plans. These plans support anti-access/area denial, or A2/AD strategies, which seek to deny the United States the ability to move forces freely in response to a regional conflict or crisis.

Russia is developing the hypersonic glide vehicle (HGV), which maneuvers outside of traditional trajectories and typically maneuvers in the atmosphere. China is also developing advanced technologies, such as maneuverable reentry vehicles in addition to HGVs.

**Missile Defense Roles, Policy, and Strategy**

As highlighted in the MDR, a comprehensive layered defense is needed to address today’s complex threats.

Within the MDR framework, the key roles for missile defense include:

- Protecting the U.S. homeland, our forces abroad, and allies and partners;
- Diminishing the benefits of adversary coercive threats and attacks;
- Assuring allies and partners we will stand by our security commitments;
- Preserving our freedom of action to conduct military operations; and
- Hedging against future, unanticipated missile threats.

**U.S. Missile Defense Priorities, Programs, Budget, and Capabilities**

**U.S. Homeland Defense**

Let me now turn to the missile defense capabilities, posture, and budget that flow from our policy in the MDR, to counter these threats. Regarding our first priority, to protect the U.S. homeland, today, the United States is protected by the Ground-based Midcourse Defense (GMD) system. The budget requests $1.8 billion for this system, which includes a number of improvements such as:

- Adding 20 Ground-based Interceptors (GBI) in Alaska, bringing the total to 64;
• Continuing development of a Redesigned Kill Vehicle for improved reliability; and
• Continuing to build a new missile field at Fort Greely, Alaska.

The budget also requests funding to field new discrimination radars in Alaska and Hawaii, and extend operations for the sea-based X-band radar.

Further, the MDR recognizes the need for improving our capability to detect and defend against increasingly stealthy cruise missile threats. In response, we are bolstering our homeland defenses against such threats. Funds for homeland cruise missile defense in the FY 2020 budget request include $301 million for the Wide-Area Surveillance system.

**Regional Defense**

To address the regional missile threat, our efforts focus on Integrated Air and Missile Defense (IAMD) to defend U.S. forces abroad, allies, and partners against missile threats from any source. We are strengthening our regional missile defense posture by funding several programs. For instance, we are enhancing the Aegis Ballistic Missile Defense system by procuring Standard Missile (SM-3), Block IB and Block IIA missiles and integrating the SPY-6 radar. The Department will also procure additional Terminal High-Altitude Area Defense (THAAD) interceptors, Patriot interceptors, and the Army Indirect Fire Protection Capability (IFPC) command and control system.

**Preparing for Emerging Offensive Missile Threats and Uncertainties**

In addition to improving our legacy systems, the 2019 MDR calls for pursuing a range of technologies and examining advanced concepts and breakthrough technologies. We are requesting funding for:

• Space-based sensors;
• Integrating Space-based Kill Assessment into the Ballistic Missile Defense System;
• Operating and sustaining the Space Tracking and Surveillance System;
• Developing defenses against hypersonic missiles, including near-term sensor and command and control upgrades;
• Testing a SM-3 Block IIA capability against an ICBM-class target to develop the capability to add a layer to our defense system;
• Kinetic boost phase intercept using a tactical air platform;
• Technology maturation initiatives include initiating a Neutral Particle Beam technology demonstration program and continuing High-Energy Laser development and scaling; and
• A study of space-based interceptors.

Working with Allies and Partners

The MDR stresses the importance of working with allies and partners and encouraging them to invest in their own air and missile defense capabilities that are interoperable with U.S. capabilities. Interoperable Integrated Air and Missile Defense (IAMD) systems can take advantage of cost-sharing and help distribute the burden of common defense.

The United States is committed to completing the deployment of European Phased Adaptive Approach (EPAA), the U.S. contribution to North Atlantic Treaty Organization (NATO) ballistic missile defense in Europe. EPAA has three phases intended to address the threat to NATO and Europe originating from Iran. Phases 1 and 2 are complete and included: the stationing of four multi-mission Aegis BMD-capable ships in Rota, Spain; positioning of a forward-based AN/TPY-2 radar in Turkey; and deploying the first operational
Aegis Ashore system in Romania. Deployment of Phase 3, an Aegis Ashore system in Poland, is underway.

In the Middle East, we are working with our Gulf partners who are acquiring U.S. missile defense systems and we continue to support Israel’s efforts through the DoD-Israeli Ministry of Defense Memorandum of Understanding that began in FY 2019, requesting $500 million for the Iron Dome, Arrow Weapon System and David’s Sling programs.

In the Indo-Pacific region, Japan is an example of mutually beneficial burden sharing, co-developing with the United States, the SM-3 Block IIA. Japan also hosts two U.S. AN/TPY-2 X-Band radars that support U.S. homeland defense as well as both Japanese and U.S. regional missile defense operations. Japan also continues to make significant investments in its own missile defense capabilities, highlighted by its decision to acquire two Aegis Ashore systems.

**Conclusion**

Our missile defense investments and priorities focus on concepts and advanced technologies to ensure the continuing effectiveness of missile defenses against capabilities of potential adversaries. By doing so, we will strengthen our ability to protect the homeland; enhance deterrence, stabilize crises, and better control escalation; protect and assure allies and partners; and hedge against future threats. Thank you again for the opportunity to testify. I look forward to your questions.