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STATEMENT OF

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BEFORE THE SENATE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON STRATEGIC FORCES

ON MISSILE DEFENSE

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Chairman King, Ranking Member Fischer, and distinguished Members of the Strategic Forces Subcommittee, thank you for the honor to appear before you today and provide testimony on behalf of the Department of Defense for the Senate Armed Services Committee Hearing on Missile Defense. I am pleased and appreciate the opportunity to discuss this important topic.

In a rapidly evolving threat environment, U.S. adversaries are developing more lethal weapons by advancing technology in areas such as ballistic, hypersonic and cruises missiles that threaten the safety and security of the United States and our allies. In support of the National Defense Strategy priorities, the Department of Defense created the Office of the Under Secretary of Defense for Research and Engineering to set the strategy for technology and innovation while addressing the needs of the joint force. Directed Energy, a defense-specific technology, is a key critical technology area we are developing to counter a wide variety of current and emerging threats with the goal of rapid response and engagement at the speed of light.

This is a joint effort that is being largely supported and carried out by the Office of the Undersecretary of Defense for Research and Engineering (OUSD(R&E), the Missile Defense Agency (MDA), the Air Force, the Army, and the Navy. The scope of the effort spans countering cruise missiles in the near term, hypersonic missiles in the near and medium term, and ballistic missiles in the long term.

To address the threat of adversaries' cruise missiles, a number of key technologies and capabilities crucial for countering cruise missiles will be demonstrated over the next two years. The OUSD(R&E) High Energy Laser Scaling Initiative (HELSI) is funding industry to develop and deliver high energy laser technology for cross-domain applications across the Department.

The Department is also developing High Power Microwave (HPM) weapons for a wide range of missions including countering drones, cruise missiles, and hypersonic missiles. There is the Microwave Technology Testbed at MDA, the Remote Electromagnetic Disruption of Critical Advanced Threat (REDCAT) at the Navy, and the Counter-Electronic High-Power Microwave Extended-Range Air Base Air Defense (CHIMERA) at the Air Force.

Lastly, countering hypersonic and ballistic missiles will require substantially more laser power. Therefore, under the HELSI effort, OUSD(R&E) will begin scaling laser powers in Fiscal Year 2023, and is examining opportunities to accelerate the scaling significantly. This combined with improved beam control systems will allow capabilities against hypersonic and ballistic missiles to be developed by the Services and MDA.

Chairman King, Ranking Member Fischer, Members of the Subcommittee, the OUSD(R&E) is committed to setting the technology and innovation strategy to advance defense-specific technologies, such as directed energy, and deliver these critical capabilities to the warfighter. We will continue to support these joint efforts to increase readiness as well as the capability and capacity of fielded homeland and regional missile defense systems while investing in advanced technology that offer new ways to counter diverse sets of threats.

Thank you again for the invitation to testify and I look forward to answering the committee's questions. Thank you.