### **RECORD VERSION**

#### STATEMENT BY

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#### **BEFORE THE**

# SUBCOMMITTEE ON STRATEGIC FORCES COMMITTEE ON ARMED SERVICES UNITED STATES HOUSE OF REPRESENTATIVES

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Chairman Lamborn, Ranking Member Moulton, and Members of this Subcommittee, thank you for the opportunity to appear before you today to discuss the ongoing development of the Long-Range Hypersonic Weapon (LRHW). On behalf of Army Senior Leadership, we thank you for your continued support of our Soldiers, Civilians, and their Families. In the last several years, the Army has undergone significant changes across its modernization enterprise in an effort to successfully deter, and if necessary, fight and win our Nation's wars as part of the Joint Force.

The Army prioritized the Long-Range Precision Modernization portfolio to provide an array of complementary capabilities to our Combatant Commanders at a multitude of ranges and ensure battlefield dominance. The responsiveness and survivability of hypersonic weapons is unmatched by traditional ballistic capabilities for precision targeting especially in Anti-Access/Area Denial environments. Combatant Commanders have also identified the crucial need for the United States to possess hypersonic capabilities from a multitude of platforms across domains in order to effectively engage high value targets and fracture the ability of our potential adversaries to anticipate and respond to attacks. In support of the National Defense Strategy, the Department of the Army made the decision to shift focus and resources to pursue the development of its first hypersonic weapon system on an accelerated timeline.

In 2019, Army Senior Leadership assigned this aggressive mission to the Army's Rapid Capabilities and Critical Technologies Office (RCCTO). RCCTO was chartered in April 2019 as part of the Army's modernization strategy to spearhead prototyping emerging technologies into capabilities delivered to combat units for operational experimentation on accelerated timelines. The RCCTO Directorate is responsible for rapid prototyping efforts directed by our RCCTO Board of Directors, which is comprised of the Secretary of the Army, the Chief of Staff of the Army, the Under Secretary of the Army, the Vice Chief of Staff of the Army, the Assistant Secretary of the Army (Acquisition, Logistics and Technology), and the Commanding General of U.S. Army Futures Command.

# **Background of Hypersonic Technology Development**

While news reports and adversarial activities concerning hypersonic technology may seem new to most of the public, there have been incredible, ongoing science and technology efforts within the government for decades. Work performed at our government and national labs undoubtedly laid the groundwork for the Services to jumpstart their programs. Without that foundation to build on, such an aggressive timeline would have been far more difficult. The Army developed an early partnership with the Navy in the development of the LRHW system. Governed by a Memorandum of Agreement across the Army, Navy, Air Force, the Missile Defense Agency, and the Office of the Secretary of Defense (OSD), each Department of Defense (DoD) entity has specific roles in the development of a common hypersonic boost-glide vehicle, also referred to as the Common Hypersonic Glide Body (CHGB).

The Army and Navy are closely partnered, and the Navy's Conventional Prompt Strike (CPS) program and Army's LRHW program share development efforts and resources. The Navy leads the design of the CHGB while the Army leads its production. Previous hypersonic technology development has largely resided only within government labs. Upon the decision to embark on the development of these systems, the Services, government labs, and industry rallied together with remarkable speed to build out a commercial industrial base to meet Combatant Commander requirements. I would be remiss if I did not stress the value that has resulted from multiple industry partners committing to this mission. In just a few short years, the first industry-produced CHGBs have come off the production line and have been used in testing activities.

The Navy has led the development of the missile booster, common to both Army and Navy programs. A fully integrated All-Up Round (AUR), composed of the missile booster and the CHGB, is identical for both LRHW and CPS programs with the differences being the outside canisters, which are unique to each Service's launching platforms. For the Army, it is a ground-based transporter erector launcher while the Navy will employ a payload module sized for use with *Zumwalt* destroyers and *Virginia* class submarines. The Army and Navy have partnered together to execute a series of joint flight campaigns to validate designs, collect necessary data, and support future Science &

Technology (S&T) efforts. This partnership is highly beneficial to both Services as it allows for a more aggressive timeline for delivery and provides critical cost savings.

# **Army Long Range Hypersonic Weapon**

In 2019, RCCTO was directed to deliver a road-mobile and C-17 transportable prototype battery of the LRHW in Fiscal Year 2023. A single LRHW battery consists of four Transporter Erector Launchers on modified M870A4 trailers, each equipped with two All-Up Round + Canisters (eight in total), one Battery Operations Center (BOC) for command and control and a BOC support vehicle. In September 2021, RCCTO delivered the Ground Support Equipment (GSE) to the first LRHW battery allowing soldiers to begin hands-on training. From the beginning, we believed providing soldiers as much time to familiarize themselves with the operating equipment as possible was vital. The unit successfully completed the required New Equipment Training to include deploying the battery aboard a C-17 in a combat-like environment. Even as schedules have slipped with the AUR, Soldiers have been able to continue active training with the GSE to learn the system inside and out. The unit has and will continue to participate in joint flight campaigns as additional training opportunities.

Throughout 2023, the Army and Navy conducted three iterations of Joint Flight Campaign 2 and while these tests did not go as planned, the Army and Navy teams worked with industry as quickly as possible to take the necessary corrective action and return to the range for further testing. Following the third attempt, the CPS and LRHW programs worked together to establish eight lines of effort to conduct a series of design reviews across the weapon systems. In close partnership with the Navy, no stone is being left unturned and we are embarking on a rigorous test regimen. We continue to look at the system holistically to reduce as much risk as possible and return to the test range with confidence. To assist in this goal, each of the Services have established Independent Review Teams (IRT) comprised of outside experts who are assisting with engineering assessments. While we remain confident in the overall system design, the LRHW team remains in consistent contact with the IRT as they conduct deep dives into the system. Our test regimen will ensure incremental success at the sub-system level,

making necessary adjustments and demonstrating repeated success, allowing us to return to flight tests with unwavering confidence. Following a successful end-to-end flight test, RCCTO plans to deliver the first AUR to the unit at Joint Base Lewis-McChord, Washington and transition the LRHW capability to Program Executive Office (PEO) Missiles and Space in Calendar Year 2024 where the program will continue flight testing and further development.

Thank you for the opportunity to speak with you on the Army's Long Range Hypersonic Weapon and the Army's commitment to the program.