

STATEMENT OF  
MR. WAHID NAWABI  
CHAIRMAN, PRESIDENT AND CEO AEROVIRONMENT, INC.  
BEFORE THE  
HOUSE COMMITTEE ON OVERSIGHT AND ACCOUNTABILITY  
SUBCOMMITTEE ON CYBER SECURITY, INFORMATION TECHNOLOGY, AND  
GOVERNMENT INNOVATION

JUNE 22, 2023

**Introduction (Oral Presentation)**

Chairwoman Mace, Ranking Member Connelly, and distinguished members of the Committee, I am Wahid Nawabi, Chairman, President and CEO of AeroVironment, Inc. We are a 52 year old technology company, publicly traded on the NASDAQ. I was born and raised in Afghanistan. As a 14 year old teenager, I escaped Afghanistan with my three younger sisters traveling for two months from Kabul, Afghanistan, through Pakistan, to New Delhi, India. We were reunited with my parents in New Delhi. I legally immigrated to the U.S. at age 15, became a U.S. citizen and started a new life as an American, learning English, finishing high school and college, becoming an electrical engineer. I'm an example of a legal immigrant, who pursued the American dream. I feel a personal obligation and consider it my duty to help improve the security of our nation and defend our values not only in U.S., but around the globe. I am grateful for the opportunity today to represent the 1,300 employees of AeroVironment and discuss with you our current and future vision of intelligent robotic systems and how they will enhance our safety and security.

AeroVironment's robotic systems enable the success and assure the safety of government and commercial customers. We are a global leader in unmanned aircraft systems, unmanned ground vehicles, loitering munition systems, and high-altitude pseudo-satellites. We are a large supplier of unmanned systems to the U.S. Department of Defense, providing products to all the Military Services and USSOCOM, as well as the U.S. Departments of State, Justice and Homeland Security. Additionally, our small UAS are employed by more than 50 allies around the globe. We have over a dozen facilities across the country. All our products are manufactured in the United States, except our unmanned ground vehicles, which are made in Germany.

In 2021, AeroVironment celebrated its 50-year anniversary. Over the last half-century, we've been innovation pioneers, pushing the boundaries of what is possible and delivering advanced solutions to support our government and commercial customers. In the 1980s, AeroVironment created the first portable, hand-launched drone for information collection and transmission. Beginning in the 2000s, the U.S. Department of Defense selected AeroVironment's small, unmanned aircraft systems for multiple programs of record. In 2021, AeroVironment developed critical components for the Mars Ingenuity Helicopter, the first powered aircraft flight on another planet and the 2021 Robert J. Collier Award winner for the greatest achievement in aeronautics or astronautics in America. Most recently and over the last year, AeroVironment innovative solutions have helped Ukraine defend itself from Russia, providing critical intelligence, reconnaissance and surveillance and precision strike capabilities. AeroVironment's products are not only critical on the battlefield, but also greatly enhance domestic capabilities such as law enforcement, border patrol and natural disaster relief.

Future missions for intelligent robots, integrated with artificial intelligence and autonomy, only require imagination. Systems operating on the ground and up to the stratosphere will enhance global communication, transportation, infrastructure and agriculture inspection, weather monitoring, and provide disaster preparedness and relief. Our solar-powered high-altitude pseudo-satellite can provide a global broadband telecommunications network, weather monitoring for organizations such as NOAA and FEMA as well as Space Domain awareness. Powered entirely by solar arrays, it is designed to stay aloft for up to six months in the stratosphere. Government and commercial customers are only just beginning to harness the potential of this revolutionary and cost-effective capability.

AeroVironment continues to develop unmanned systems with computer vision and machine learning capabilities, which can navigate autonomously on its own, sense, analyze, and identify items of interest, reducing operator workload and increasing situational awareness and safety. We constantly evaluate and integrate new capabilities into our current and future products to assure we stay ahead of our competitors and our nation's adversaries.

I'd like to share a short video showcasing a few of our current and future systems employed by our government and commercial customers.

Thank you again to the Committee for the opportunity to be here today. I invite each of you to visit AeroVironment's facilities across the country and I welcome your questions.

[END OF ORAL PRESENTATION]

## **Corporate Overview**

AeroVironment's portfolio of UAS includes small and medium-sized, runway-independent unmanned aircraft systems with extended range, endurance and multi-payload capabilities. These solutions deliver increased, multi-mission capabilities and the option of selecting the appropriate aircraft based on the mission. These capabilities provide significant force protection and force multiplication benefits to tactical units and security personnel, as well as greater safety, scalability and cost savings to commercial operators.

AeroVironment also offers ground robotic solutions to complement our existing unmanned aircraft solutions. This expanded portfolio of intelligent, ground robots address a broader set of missions for our customers. AeroVironment's UGVs safely and effectively perform a variety of dangerous missions, including explosive ordnance disposal (EOD), hazardous materials handling (HAZMAT) and chemical, biological, radiological and nuclear (CBRN) threat assessment. AeroVironment's ruggedized UGVs possess all-terrain capabilities and offer some of the most advanced, specialized, precision manipulators available with autonomous functionality and intuitive operation to deliver a high degree of mission flexibility.

Building on decades of experience developing and demonstrating high-altitude, solar-powered, UAS, AeroVironment is currently developing, and producing a very large, unmanned, solar-powered, high-altitude pseudo-satellite (HAPS) aircraft. Two years ago, this solar powered HAPS successfully flew to over 60,000 feet above sea level, paving the way for the creation of a next generation global broadband telecommunications constellation in order to provide broadband connectivity to billions of people around the globe. Integrated with an LTE payload, during the five-hour stratospheric flight, we successfully demonstrated mobile broadband communication with multiple video calls linking teams in Spaceport America, NM, Tokyo, Japan, Silicon Valley, CA; and Washington D.C.

After founding AeroVironment in 1971, Dr. Paul B. MacCready, Jr., became the first to design and build an aircraft that successfully achieved controlled human-powered flight, strengthening

the company's reputation for achieving the impossible in aerospace engineering. Among several accolades, Dr. MacCready was selected as one of Time Magazine's "20th Century's Greatest Minds." Seven of AeroVironment's innovations are part of the Smithsonian Institution's collection. AeroVironment's historical and notable innovations that form the foundation for today's leading market positions and tomorrow's new opportunities include:

- The world's first effective human-powered and manned solar-powered airplanes, Gossamer Condor: On display at the Smithsonian's National Air and Space Museum.
- General Motors Impact: Prototype for the first modern consumer fully electric automobile, on display at the Smithsonian's National Museum of American History.
- NASA Helios solar-powered unmanned aircraft: August 2001, Helios reached an altitude of 96,863 feet, a world record for sustained horizontal flight by a winged aircraft. Helios' predecessor, Pathfinder UAV, is on display at the Smithsonian's Steven F. Udvar-Hazy Center, National Air and Space Museum.
- Global Observer: World's first liquid hydrogen-powered stratospheric unmanned aircraft system.
- Pointer: First portable unmanned aircraft system, developed in 1986.
- RQ-14 Dragon Eye: Built for Naval Research Lab and the Marine Corp Warfighting Lab was the first small UAS used in combat during Operation Iraqi Freedom in 2003 for reconnaissance and battle damage assessment, on display at the Smithsonian's National Air and Space Museum.
- RQ-11B Raven®: First small, unmanned aircraft system selected for the U.S. Army's program of record in 2005.
- Nano Hummingbird: First flapping wing Nano unmanned aerial vehicle with tri-axis control, Time magazine cover and one of the 50 best inventions of the year 2011.
- Switchblade®: First operation deployment of a back-packable tactical missile system in 2012, one of Time magazine's 50 best inventions of the year 2012
- Blackwing™: First submarine and unmanned underwater vehicle (UUV)-launched loitering unmanned aircraft system developed for reconnaissance.
- Mars Ingenuity Helicopter: AeroVironment developed critical components for the first powered aircraft flight on another planet – 2021 Robert J. Collier Award winner for the greatest achievement in aeronautics or astronautics in America. As of May 2023, Ingenuity has performed 52 successful flights on Mars.