PROJECT SUMMARY 102000.000.1155.000

Advanced Air Mobility Elevating Northeast Ohio (AAMEN)

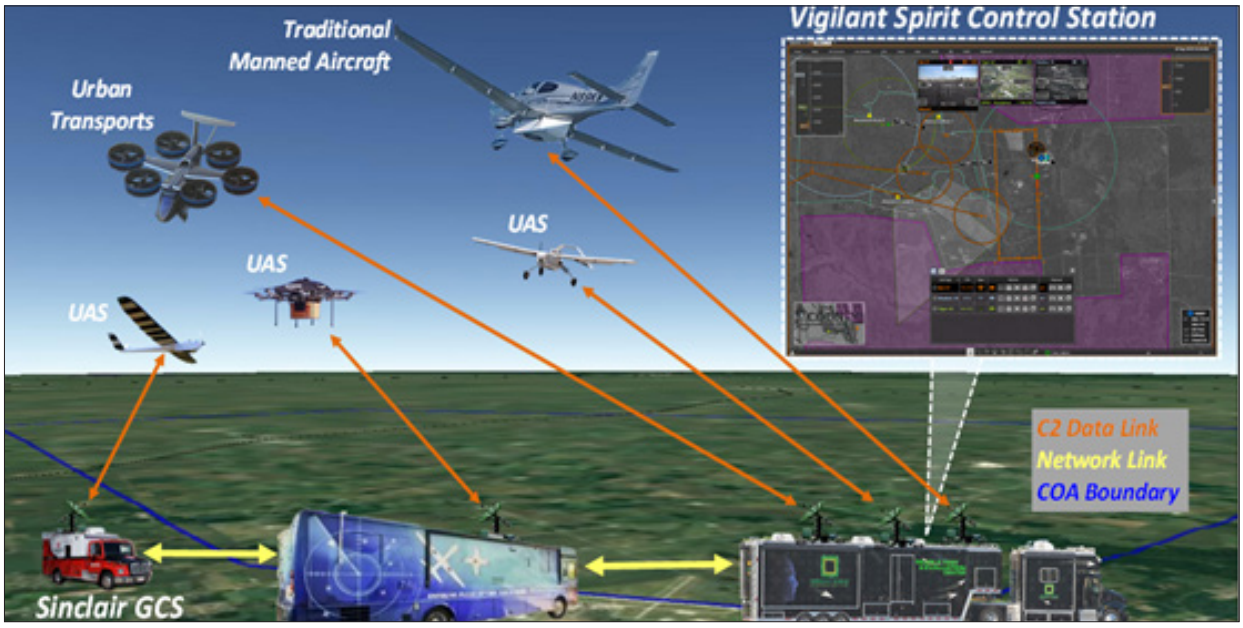

Photo Credit: Parallax Advanced Research

Overview of AAMEN program – Pictorial overview of the concept that will guide the project.

PROBLEM

As the utilization of unmanned aerial systems (UAS) continues to increase with the proliferation of recreational, first responder, commercial, and military applications, along with the evolution of electric Vertical-Takeoff-and-Landing (eVTOL) vehicles to support cargo and passenger operations, the safe integration of these aircraft into a new more comprehensive air traffic management (ATM) system is of national importance. Agility Prime, launched in 2020, is the Air Force program to develop and capture the Advanced Air Mobility (AAM) market for the United States. Focused on electric vehicle take-off and landing (eVTOL), Agility Prime is promoting the growth of the commercial AAM market using the Department of Defense (DoD) resources to leverage the market for DoD advantage.

OBJECTIVE

This project will address key issues to support the integration of unmanned system traffic management (UTM) for air vehicles in lower altitudes with existing air traffic control (ATC) for traditional aircraft. This project will employ technologies developed by the Air Force in a dual-use fashion to promote AAM in Northeast Ohio, including manufacturing technology development that will benefit Ohio, the DoD, and the nation as it moves toward this revolutionary leap in transportation.

This project aligns to:

Advanced Manufacturing

PROJECT START DATE
SEPTEMBER 2024

EXPECTED END DATE
SEPTEMBER 2026

PROJECT SUMMARY

TECHNICAL APPROACH

The first year of the effort will be focused on the design and procurement of the mobile systems and developing the approach to integrating key technologies; airspace design research to assist in Federal Aviation Administration (FAA) standards development; and development of curriculum and other programs designed to engage students, industry, and local, state, and federal government entities.

The second year of the effort will focus on the outfitting and testing of the mobile systems with key technologies being evaluated to collect and share important data with partners, the Air Force, and the FAA. Student programs will be tested and integrated into the existing UAS/AAM curriculum. Finally, a market study and strategic plan will be completed to support follow-on work for a more extensive demonstration of capabilities.

FUNDING

$8,641,907 total project budget

PROJECT PARTICIPANTS

Project Principal:
Parallax Advanced Research

Other Project Participants:
Kent State University
Sinclair College
Youngstown Business Incubator

Public Participants:
U.S. Department of Defense

About NCDMM

NCDMM delivers innovative and collaborative manufacturing solutions that enhance our nation's workforce and economic competitiveness. NCDMM has extensive knowledge and depth in commercial and defense manufacturing areas to continually innovate, improve, and advance manufacturing technologies and methodologies. Our experienced team specializes in identifying the needs, players, technologies, and processes to attain optimal solutions for our customers. We connect the dots. That's the NCDMM methodology. NCDMM also manages America Makes, AMARII, AMIIC, and El Paso Makes, and is a subsidiary of the Manufacturing Technology Deployment Group, Inc. (MTDG).