



Interested Party Testimony- House Aviation and Aerospace Committee

HB 77 — Operation Of Unmanned Aerial Vehicles In Ohio

November 14, 2023

Chairman Holmes, Vice Chair Willis, Ranking Member Baker and Members of the Committee.

Thank you for the opportunity to provide testimony on House Bill 77.

My name is Dr. Stuart Mendel, Affiliate Professor at Baldwin Wallace University and Project Director for the Northeast Ohio Flight Information Exchange also known as the NEOFIX. The University serves as the focal point for this applied research and community engagement program to fulfill its visioned role as a leading regional comprehensive university impacting learners, businesses, and communities throughout the Great Lakes region.

For years, the drone market was in a nascent phase and had yet to break into the mainstream. Then, in 2016, drone industry growth took flight when the Federal Aviation Administration (FAA) granted hundreds of new exemptions for companies to operate drones in the U.S. through FAA Part 107.

These exemptions included several new use cases in multiple industries, such as insurance, construction, and agriculture — each of which demonstrates the broad range of commercial drone applications.

The FAA helped push commercial drone market growth forward by formulating a regulatory framework with its consumer drone registry. Now, drone manufacturers and tech suppliers are doing all they can to capitalize on this and turn drones into a full-fledged industry.

Sales of US consumer drones to dealers surpassed \$1.25 billion in 2020, according to Statista. Goldman Sachs forecasts the total drone market size to be worth \$100 billion—supported by this growing demand for drones from the commercial and government sectors.

Among the states, Ohio is primed in the leading cohort of early adopters of drone operations. Rest assured it will be this first group of early adopter states that will engage with the FAA to develop the policies, regulations and procedures for the whole country. The NEOFIX is the working model for key elements of the infrastructure depicted and envisioned Chapter 8 of the 2022 Ohio Drive Ohio Advanced Air Mobility (AAM) Report.

House Bill 77, if implemented effectively, can support the safe growth and development of this market in Ohio.

As background, the NEOFIX is public private partnership leading to an integrated system allowing for more overall visibility and awareness of the airspace, the ground space, and drones, creating a safer

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Questions referred to:

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airspace in the county. The NEOFIX integrates public data to support a common operating picture that public safety can leverage – both to support public safety operations AND to identify potential bad actors for counter-UAS (unmanned aircraft system). NEOFIX is digital infrastructure that will accelerate use of drones for public safety (Drone as a First Responder) while lowering the costs of these operations.

NEOFIX allows State and Local government to publish key information to UAS Operators and Industry, giving everyone engaged in Commercial and Civilian Advanced Air Mobility a clear, common picture – in the same way that charts do for traditional aviation.

UAS operators and industry use NEOFIX to understand the local environment before and during operations

Public safety use NEOFIX to coordinate operations and alert private operators State, and Local government use NEOFIX to manage the interaction of UAS for local communities.

Communities with drone ready infrastructure offer strong incentives for manufacturing and testing, business operations, technology development, and workforce training and education.

The rollout for the NEOFIX is ahead of schedule and the web interface is active. It can be accessed by the general public at free of charge through the Baldwin Wallace University Technology Partnership Transfer website or more directly through the NEOFIX platform itself. More advanced features are available to people who request them, also at no charge. As I mentioned when I presented the concept to this committee this past March 21, 2023, the NEOFIX has received \$450,000 in funding from Cuyahoga County over two calendar years ending in December 2024 as well as \$350,000 in private investment.

NEOFIX provides a secure, access controlled central point of access for industry and a governance model for how State, and Local governments publish information, so industry doesn't have to deal with a patchwork of conflicting regulations – improving safety and economic growth.

In a short period of time, the work of drone readiness has included:

- Organizing public and private stakeholders for the purpose of describing and publishing community assets
- Clarifying and publishing local rules and hazards
- Attracting existing AAM business
- Stimulating new manufacturing, data programming and analysis, cyber security and related industry to the region.

NEOFIX stakeholders include participants from the public sector including the FAA and FAA knowledgeable private actors along with each of the categories depicted on the Public Infrastructure Authority Flow Diagram provided. This document reflects the government actors and their relationship

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to one another in the civilian and commercial advanced air mobility infrastructure. HB 77 fits neatly into this framework, and it our expertise in community outreach and planning through which we view House Bill 77.

For example, in our work in Cuyahoga County, we have worked with public safety and county planning to identify specific risks and hazards for publication through the system. Because of this work, we recommend Section 4561.50 – Subsection A for “Critical Facilities” add “water, sewage, or energy processing or distribution facility” and “any facility which stores chemicals or fuel in an above ground, outdoor holding tank.”

In developing the NEOFIX our work has been designed to serve as a regional template adaptable to each of Ohio’s 88 counties. Organizing and standing up the NEOFIX as a functioning model aligning with the state’s DriveOhio July 2022 AAM Framework Report, (specifically section 8 AAM Strategic Framework). Section 4561.53 is an excellent idea that aligns to successful, existing programs in other states such as Virginia and California and in the work we are conducting under the NEOFIX program in Northeast Ohio. We have talked to the Director of the Ohio UAS Center and are excited and ready to share our public data with the UAS Center so that it can be included in the statewide registry.

I will reiterate our goals including the design and implementation of the NEOFIX: to protect critical infrastructure, make sure local rules are clear, consistent, and available, and make these available as a clear, clean easy to use state asset. The next stage of our work is engagement processes with the localities and municipalities. This is a way we can make include and publish information on no-go areas, to ensure that localities can create thoughtful rules and share consistent data.

We now have substantial experience with this process in Northeast Ohio and are excited to support the UAS Center and the State of Ohio by bringing our expertise to anywhere in the state where it is needed.

Thank you for your time and the opportunity.

I will now take any questions you may have.

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