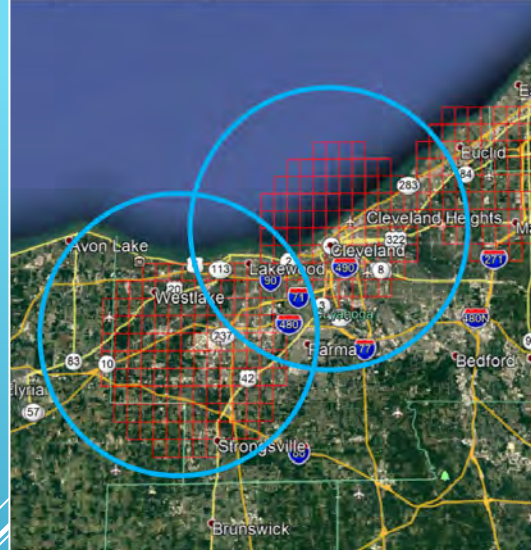


# Unified Drone Detection Network

Aerozone Alliance Member  
Communities Presentation

Friday | January 15<sup>th</sup>, 2021



# Agenda

- ▶ Who?
- ▶ Why now?
- ▶ What is drone detection?
- ▶ How can we help you?
  - Software Demo
- ▶ Benefits of Network
- ▶ Subscription Model Cost
- ▶ Q+A

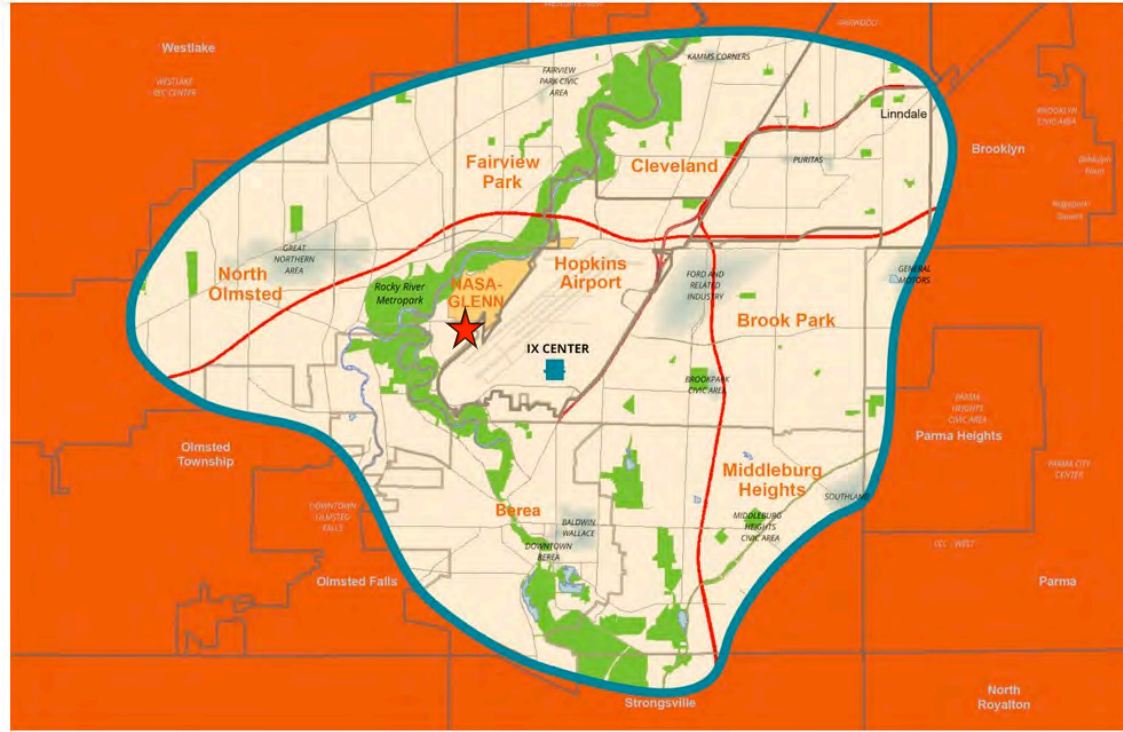


# Unified Drone Detection, LLC

- Partnership  + **Unified Drone**
- Subscription model accessing hardware utilizing Aerial Armor's industry leading software platform (Est.2015)
- Expansion into a multi layered hardware detection platform



# Who?



# Unified Drone

## About Us

- Local training and support
- Mission to create industry best practices + resources
- Vision to lead on a national level (globally?)
- Economic development
- Long term sustainability
- Strategic partnerships in NEO + nationwide

Industry Experts | Knowledgeable | Connected





# Aerial Armor

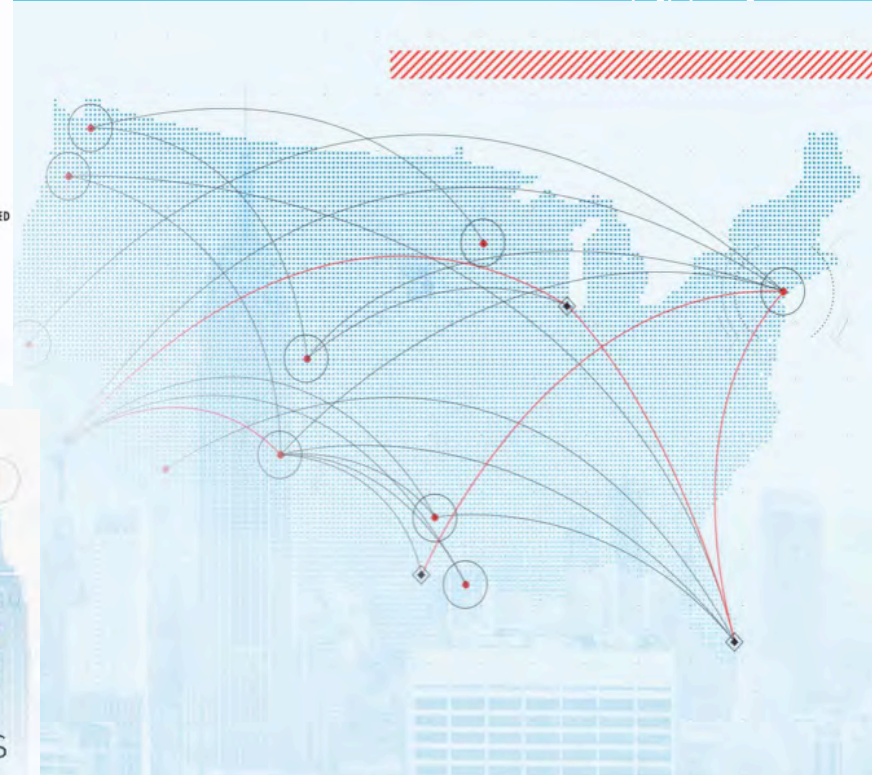
## About Us

Aerial Armor has been at the forefront of the drone industry since 2015. We **specialize in detecting and deterring** drone related threats for all scenarios. You need a company that's well versed in the rapidly evolving drone industry. We **remain current** with the latest types of drone detection systems and have **partnered with the best manufacturers** in the industry.

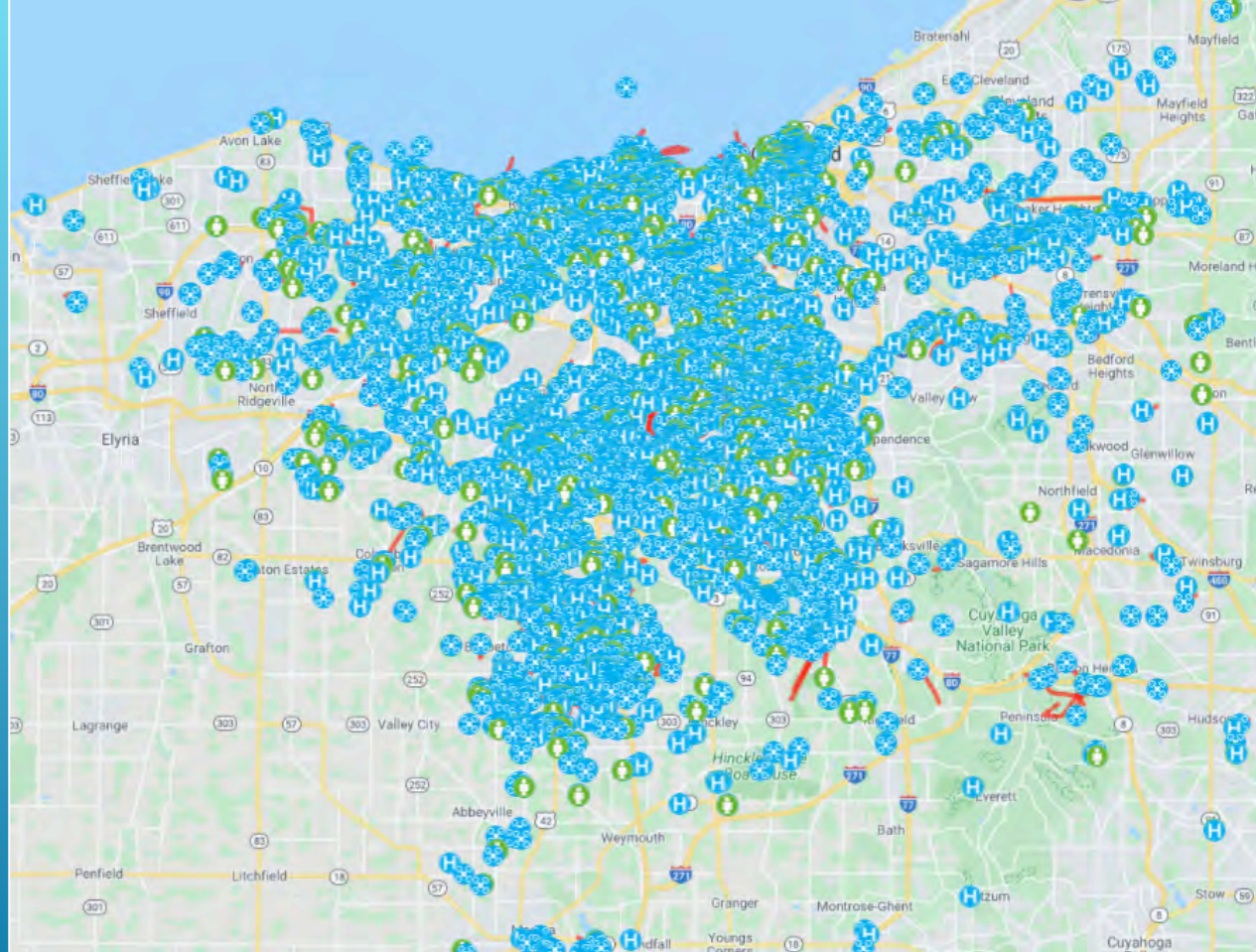
We've worked with law enforcement and security professionals throughout the US. We've seen the impact and risk that drones can ensue on **public safety, espionage, contraband delivery**, and many other threatening situations. This **experience** is what our clients depend on and what our company takes pride in.



# Who?



# Why now?



# Why now?

**FAA** announced major changes to the *Operation of Unmanned Aircraft Systems (UAS) Rule* expected January 2021 > **we have the solution to prepare now and protect your community!**



**Executive Summary**  
**Final Rule on**  
**Operation of Small Unmanned Aircraft Systems Over People**  
**December 28, 2020**

The Operation of Unmanned Aircraft Systems Over People Final Rule is the next incremental step towards further integration of unmanned aircraft (UA) in the National Airspace System. The final rule allows routine operations over people and routine operations at night under certain circumstances. The rule will eliminate the need for those operations to receive individual Part 107 waivers from the FAA.

The final rule amends the existing Part 107 in Title 14 of the Code of Federal Regulations. The rule has been sent to the Office of the Federal Register and will become effective 60 days after the publication date in the Federal Register. Publication is expected in January 2021. Compliance timeframes and major provisions are summarized below.

**Category 1, Category 2, Category 3, and Category 4 Eligibility for operations over people**

The final rule establishes four new categories of small unmanned aircraft for routine operations over people: Category 1, Category 2, Category 3, and Category 4. The final rule also allows for routine operations over moving vehicles.

- **Category 1 eligible** small unmanned aircraft must weigh less than 0.55, including everything on board or otherwise attached, and contain no exposed rotating parts that would lacerate human skin. No FAA-accepted Means of Compliance (MOC) or Declaration of Compliance (DOC) required.
- **Category 2 eligible** small unmanned aircraft must not cause injury to a human being that is equivalent to or greater than the severity of injury caused by a transfer of 11 foot-pounds of kinetic energy upon impact from a rigid object, does not contain any exposed rotating parts that could lacerate human skin upon impact with a human being, and does not contain any safety defects. Requires FAA-accepted means of compliance and FAA-accepted declaration of compliance.
- **Category 3 eligible** small unmanned aircraft must not cause injury to a human being that is equivalent to or greater than the severity of injury caused by a transfer of 25 foot-pounds of kinetic energy upon impact from a rigid object, does not contain any exposed rotating parts that could lacerate human skin upon impact with a human being, and does not contain any safety defects. Requires FAA-accepted means of compliance and FAA-accepted declaration of compliance.
- **Category 4 eligible** small unmanned aircraft must have an airworthiness certificate issued under Part 21 of FAA regulations. Must be operated in accordance with the operating limitations



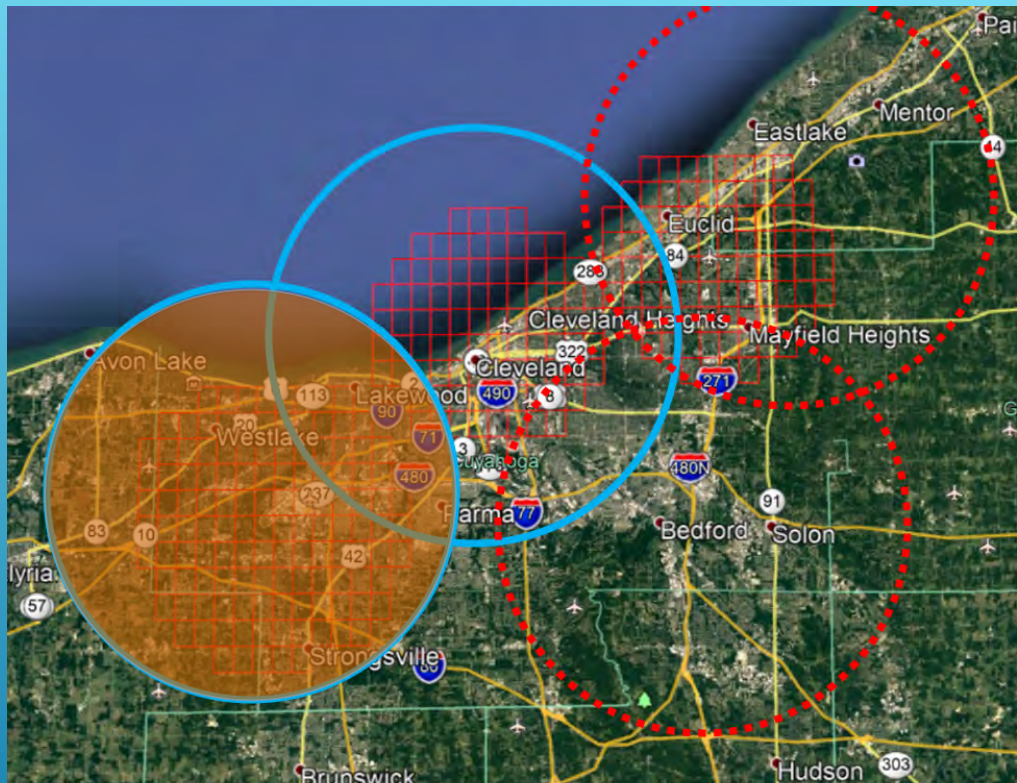
# What is “Drone Detection”?



# What is “Drone Detection”?



# What?





# UDD Network

- **Goal** = continuous network covering all of Ohio
- Potential Future Expansion: Akron/Canton, Lake County, Columbus, Cincinnati
- Client demand will determine location





# Advantages of UDD Network

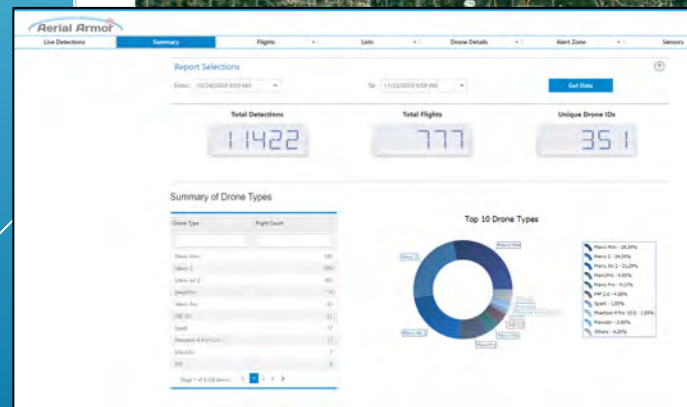
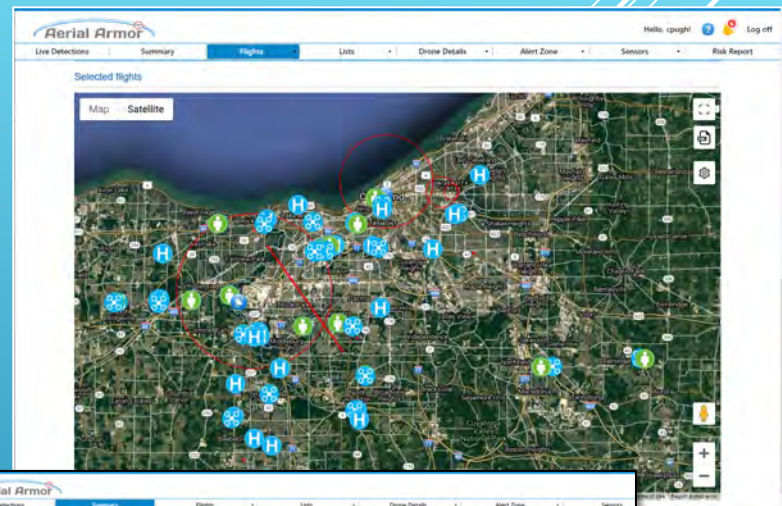
- Lower cost to access drone detection technology
- Avoid capital cost of hardware
- No maintenance cost
- System redundancy
- Lower risk of system obsolescence





# Demo

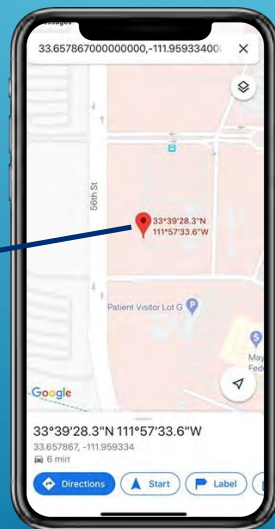
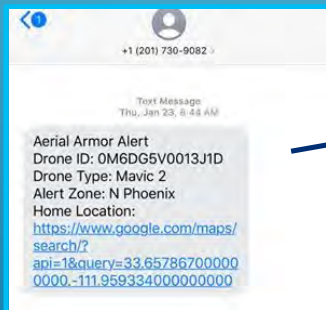
- Web-Based Platform
- Live Detection
- Historical data storage
- Canned reporting and downloadable data
- Flight path reconstruction
- ADS-B tracking and visual representation
- Alert zones, watch lists and programmable notifications
- Software allows multiple drone detection hardware sources



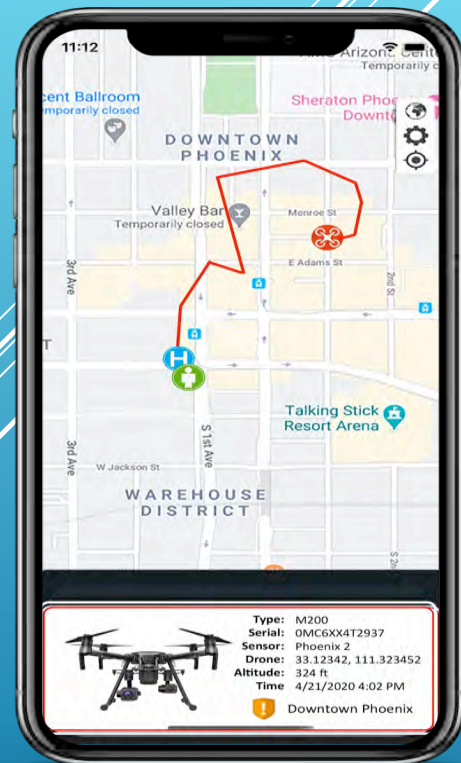


- Available on iOS & Android devices
- User can see live detections
- Faster response time
- 99% success rate
- Location accuracy

### Text Notifications



# App / Mobility





# Benefits of UDD Network

- Easy reporting, historical data, search and alert zone functionality
- Improved communications across City departments
- Reduces staff labor
- Local support and training
- Top tier customer service
- Assistance with FAA Public Safety & Law Enforcement
- Member of UDD Network





# Subscription Pricing

## ➤ 4 Customer Types

Type	Annual Cost	Area	Users	Locations	Sub-Entity
Regional	\$50K	250 mi <sup>2</sup>	10	3	Yes
Large	\$26K	125 mi <sup>2</sup>	6	2	Yes
Medium	\$15K	50 mi <sup>2</sup>	4	1	No
Small	\$6K	15 mi <sup>2</sup>	2	1	No

- Multi-year discount; 2 yr = 10% savings, 3 yr = 20% savings
- Sub-Entity add-on available for Regional and Large contracts as part of covered area; 10 mi<sup>2</sup>, 2 users & 1 location



# Two Week | No Cost Threat Assessment + Trial



# Why UDD Network

- User friendly
- Web-based
- Live detections
- Mobile
- Efficient + effective
- Keep system current and up-to-date

**Save time + money**

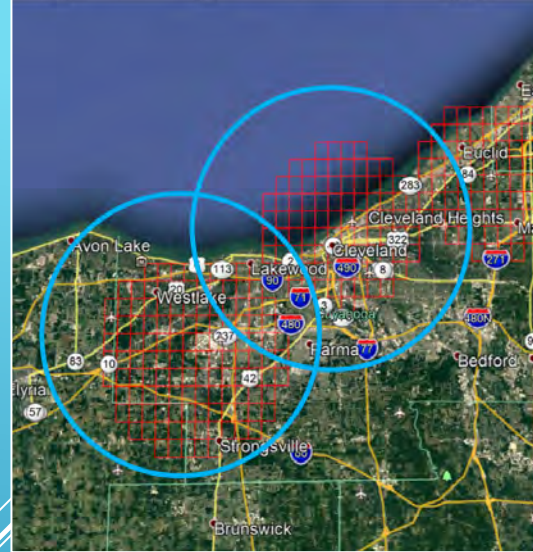


# Discussion

Hillary Lyon

415.827.6269

[hlyon@tasdrones.com](mailto:hlyon@tasdrones.com)







Hillary Lyon

[hlyon@tasdrones.com](mailto:hlyon@tasdrones.com)

415.827.6269

**Thank you!**

