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# Our Office Locations

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★ Global Headquarters
● Service Area
● Regional Office
● Field Office

# Scientel Solutions Highlights

## Diversity

Our winning team is comprised of 20% females, 30% minorities and over 15% veterans

## 25+ Years

Scientel Solutions was originally established in 1992 as Nuclear Energy Services (Halliburton)

## 300+

Over 300 towers built

## Connected

Direct connection into over 20 major data centers spanning 3 continents

## Innovation

Highly trained engineering team with the ability to lead customers to reach their full technological potential

## $1M

Scientel has donated over $1M to charitable and veteran organizations over the last five years

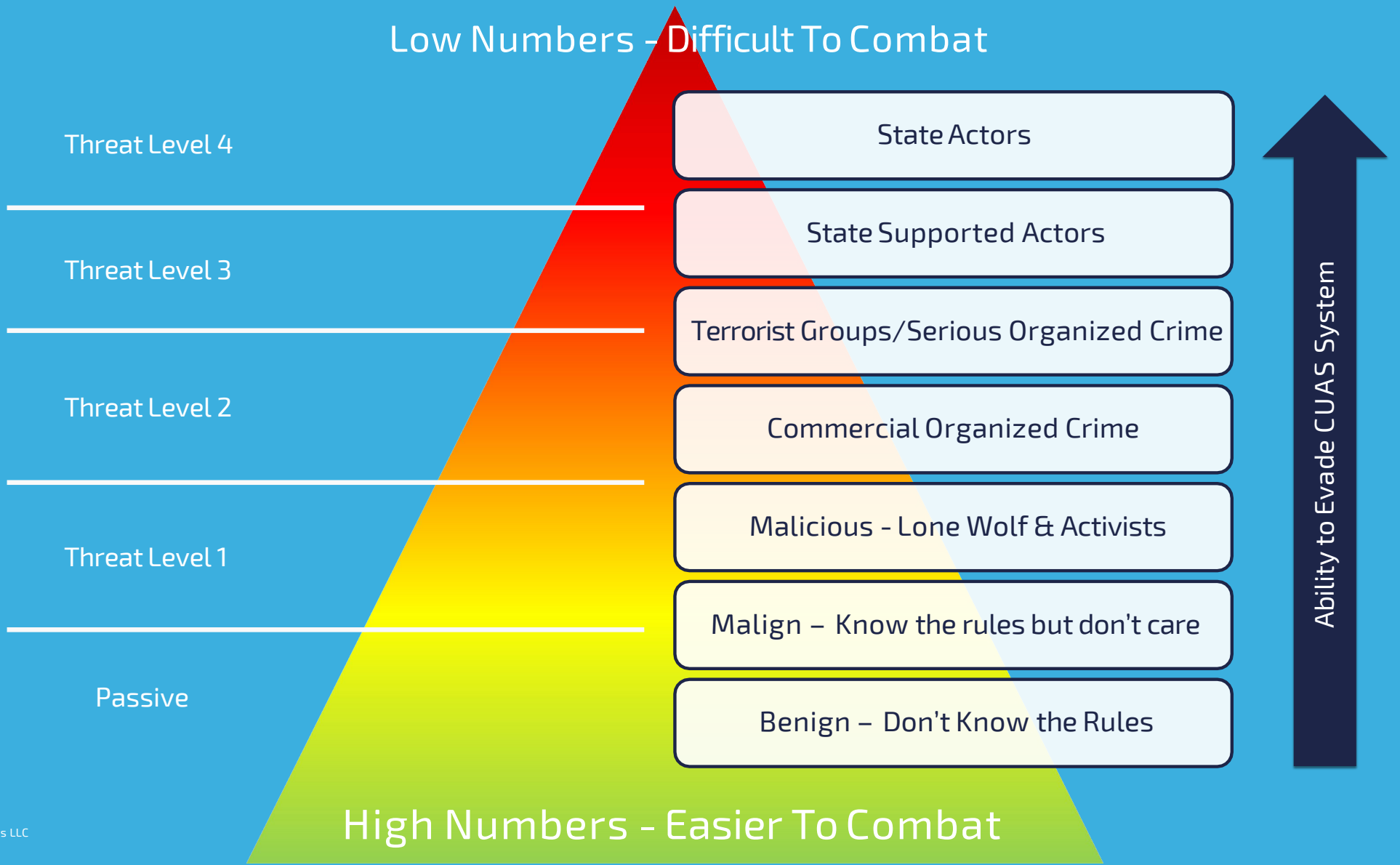
## Growth

Fifteen offices throughout North America + Europe

## 10M

Scientel has connected over 10 million IP addresses throughout the world

# Levels of Drone Threats



# Threat Level o – Low Risk

| | |
|---|---|
| Who? | DJI Drone User |
| What (Intent)? | Inadvertent and deliberate invasion of privacy |
| Technical ability | Low – no modifications to drone |
| Evasion Ability | No awareness of drone defense technology, no defensive measures or actions taken |
| Type of Drone | DJI Drone Only |
| Number of Drones | Single |
| Control Method Used | Real-time command and control |
| Frequencies Used | 2.4 & 5.8 GHz |
| Launch distance from Target | Up to 500m |
| Altitudes flown | 100 to 400ft |
| Flying Conditions | Fair weather only |
| Use of GPS | Yes |
| Likelihood | Very High |
| Impact | Varied depending on imagery captured |

# Threat Level 1 – Medium Risk

| | |
|---|---|
| Who? | Benign - Lone nuisance drone user including paparazzi. |
| What (Intent)? | Deliberate invasion of privacy. |
| Technical ability | Low – no modifications to drone |
| Evasion Ability | No awareness of drone defense technology, no defensive measures or actions taken. |
| Type of Drone | Multi-rotor |
| Number of Drones | Single |
| Control Method Used | Real-time command and control |
| Frequencies Used | 2.4 & 5.8 GHz |
| Launch distance from Target | Up to 500m |
| Altitudes flown | 100 to 400ft |
| Flying Conditions | Fair weather only |
| Use of GPS | Yes |
| Likelihood | Very High |
| Impact | Varied depending on imagery captured |

# Threat Level 2 – High Risk

| | |
|---|---|
| Who? | Criminal - Lone activist, terrorist or drone operator with limited criminal intent. |
| What (Intent)? | Disruption, hostile surveillance, transport of illicit substances and commercial espionage. |
| Technical ability | Low – no modifications to drone |
| Evasion Ability | No awareness of drone defense technology, no defensive measures or actions taken. |
| Type of Drone | Multi-rotor (commercial with no modifications)<br>Fixed wing (commercial with no modifications) |
| Number of Drones | Single |
| Control Method Used | Real-time command and control |
| Frequencies Used | 2.4 & 5.8 GHz |
| Launch distance from Target | Up to 500m |
| Altitudes flown | 50 to 400ft |
| Flying Conditions | Fair weather only |
| Use of GPS | Yes |
| Likelihood | High |
| Impact | High – based on activity and intent |

# Threat Level 3 – Very High Risk

| | |
|---|---|
| Who? | Organized Criminal – Terrorist group(s), determined activists or drone operators with advanced organized criminal intent. |
| What (Intent)? | Severe economic disruption, mass transport of illicit substances and harm to individual(s). |
| Technical ability | Medium |
| Evasion Ability | Some awareness, obscured launch points, RF precautions and autonomous flights. |
| Type of Drone | Multi-rotor (commercial with some modifications)<br>Fixed wing (commercial with some modifications) |
| Number of Drones | Two |
| Control Method Used | Real time command and video with GPS assisted autonomous flight mostly using ISM frequencies. |
| Frequencies Used | 2.4 & 5.8 GHz |
| Launch distance from Target | Up to 1000m |
| Altitudes flown | 50 to 1000ft |
| Flying Conditions | Inclement weather |
| Use of GPS | Yes plus IMU |
| Likelihood | Low |
| Impact | Very High based on capability, activity and intent. |

# Threat Level 4 – Extreme Risk

| | |
|---|---|
| Who? | Terrorist - Medium to high technical ability conducted well supported terrorist groups, advanced criminal networks and state actors/intelligence services. |
| What (Intent)? | Severe economic impact, a 'spectacular' event and multiple casualties. |
| Technical ability | High – custom built drones |
| Evasion Ability | Extensive awareness, obscured launch points at greater distances, RF precautions and high use of autonomous flights. |
| Type of Drone | Multi-rotor & Fixed Wing |
| Number of Drones | More than two |
| Control Method Used | Fully autonomous |
| Frequencies Used | Any |
| Launch distance from Target | Over 1km |
| Altitudes flown | 20 to 2000ft |
| Flying Conditions | All weathers |
| Use of GPS | No |
| Likelihood | Very low |
| Impact | Extreme based on advanced capability, activity and intent. |

# Drone Threat Levels - Summary

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| | TL 0 – Low Risk | TL 1 – Medium Risk | TL 2 – High Risk | TL 3 – Very High Risk | TL 4 – Extreme Risk |
|---|---|---|---|---|---|
| Who? | DJI Drone User | Benign - Lone nuisance drone user including paparazzi. | Criminal - Lone activist, terrorist or drone operator with limited criminal intent. | Organized Criminal - Terrorist group(s), determined activists or drone operators with advanced organized criminal intent. | Terrorist - Medium to high technical ability conducted well supported terrorist groups, advanced criminal networks and state actors /intelligence services. |
| What (Intent)? | Inadvertent and deliberate invasion of privacy | Deliberate invasion of privacy. | Disruption, hostile surveillance, transport of illicit substances and commercial espionage. | Severe economic disruption, mass transport of illicit substances and harm to individual(s). | Severe economic impact, a 'spectacular' event and multiple casualties. |
| Technical ability | Low | Low | Low | Medium | High |
| Type of Drone | DJI Drone Only | Multi-rotor (commercial with no modifications) | Multi-rotor (commercial with no modifications)<br>Fixed wing (commercial with no modifications) | Multi-rotor (commercial with some modifications)<br>Fixed wing (commercial with some modifications) | Multi-rotor (bespoke systems)<br>Fixed wing (bespoke systems) |
| Number of Drones | Single | Single | Single | Two | More than two |
| Control Method Used | Real time command and video no autonomous flight exclusively reliant on ISM frequencies using DJI protocols | Real time command and video no autonomous flight exclusively reliant on ISM frequencies. | Real time command and video no autonomous flight exclusively reliant on ISM frequencies. | Real time command and video with GPS assisted autonomous flight mostly using ISM frequencies. | Real time command and video & advanced autonomous flight (not reliant on GPS). Not reliant on ISM frequencies. |
| Likelihood | Very High | Very High | High | Low | Very Low |
| Impact | Varied (depending on imagery captured) | Varied (depending on target) | High based on activity and intent | Very High based on capability, activity and intent | Extreme based on advanced capability, activity and intent |
| Monitoring Solution | Aeroscope | AeroSentry | AeroSentry | AeroSentry, AeroEye, AeroSense | AeroSentry, AeroEye, AeroSense |

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# How Do We Detect Drones?

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# Drone Monitoring as a Service (DMAAS)

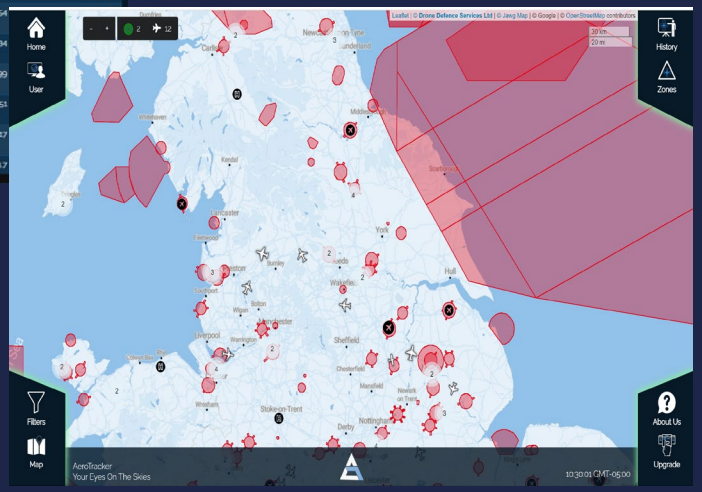
We use multi-sensory, radio frequency-scanning technologies to **detect, track and identify drones** across a large area, on land or at sea.

Our team works with security-cleared experts to design, implement and support the right system for your environment.

Our backwards-compatible systems can be fully integrated into existing Security Management Systems (SMS), reducing the training requirement for your staff.

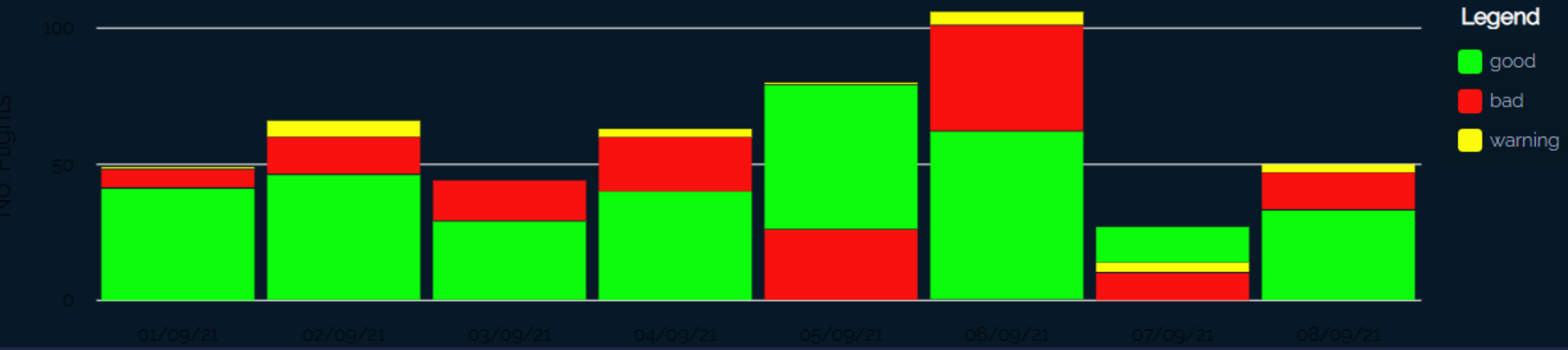
# Online Drone Monitoring and Tracking

- Live view with zone showing location of both the drone and controller
- ADS-B showing data of restricted airspace, broadcasting device type, position and altitude
- History feature allows for flight data including number of flights, aircraft classifications and flight paths
- Ability to export incident reports
- Sensors offer a minimum of 5km detection radius

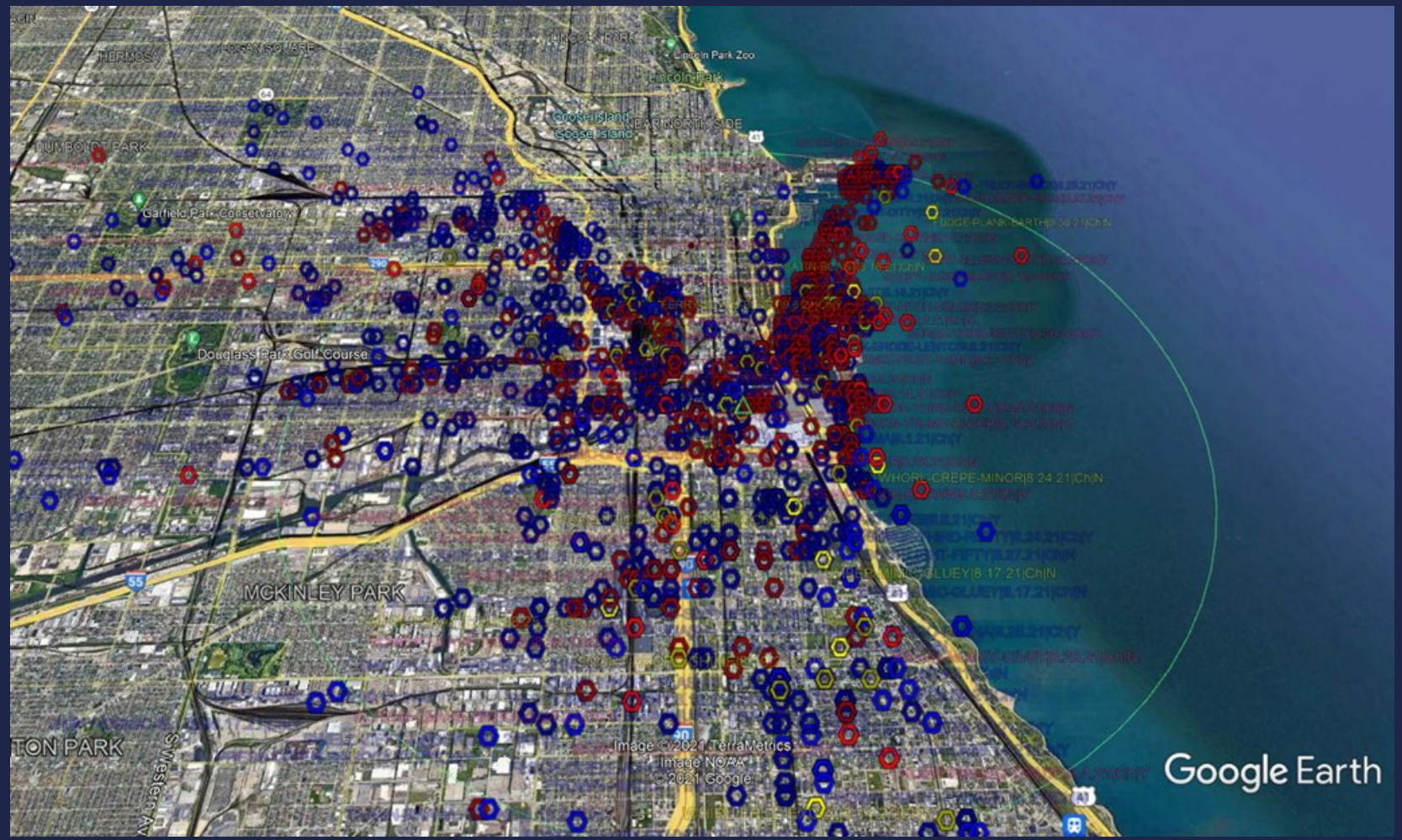



# A Sample Week in Chicago

| Total Flights | Total Drones | Good Drones | Warning Drones | Bad Drones |
|---|---|---|---|---|
| 485 | 485 | 317 | 23 | 145 |



# Chicago Detailed Violations




- Red – Flights exceed 400 ft or Controller was more than 500m from Drone
- Yellow – Within 10%
- Blue – No, FAA violations but still could be violating local regulations

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# How Do We Defeat Drones?

# SkyFence™

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## Fixed Installation Drone Protection

SkyFence™ is a scalable, automatic and fully integrated **electronic countermeasures system that stops more than 99% of commercial drones**. It prevents drones from flying into or close to a protected location by disrupting the devices' command and navigation radio transmissions.

The SkyFence™ is automatically activated, and it works in any weather, day or night. The system **stops more than 99% of commercial drones—with no effect on communications systems.**

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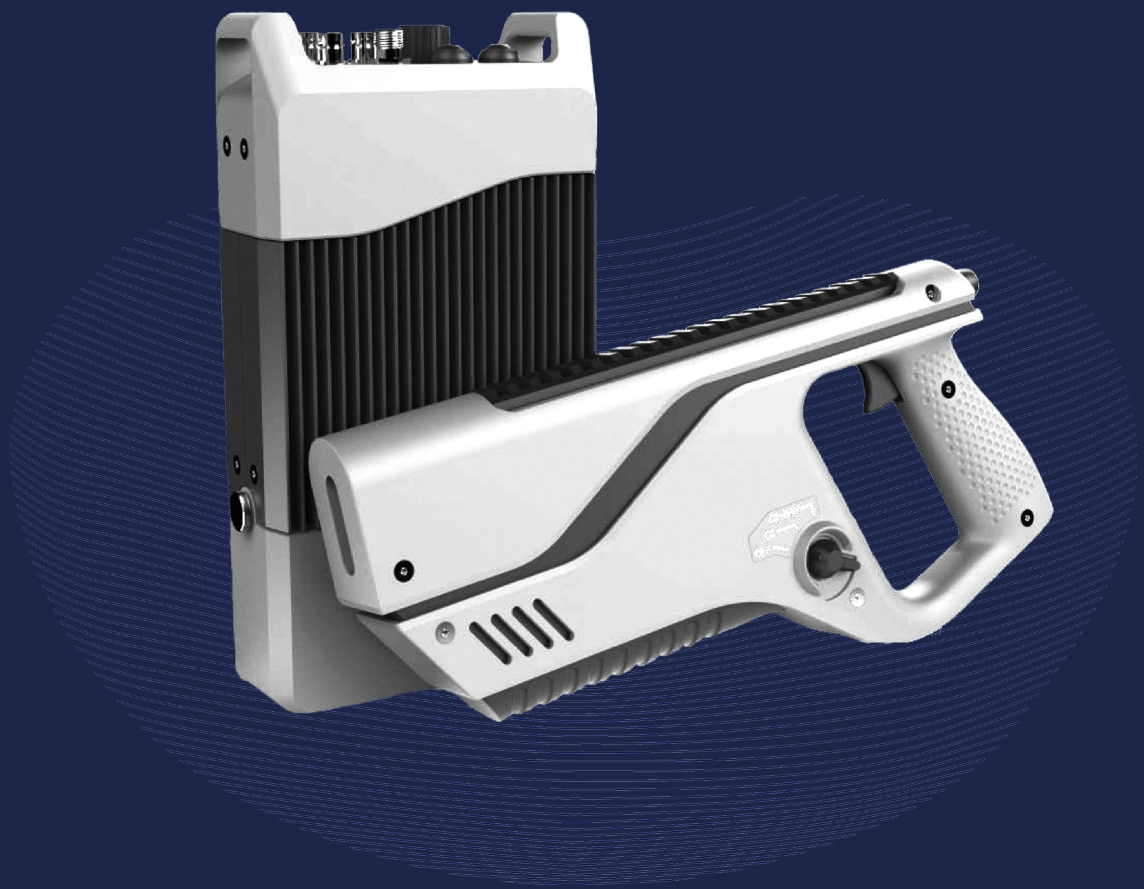
# E1000®

- Portable system to interrupt the command video and navigation signals included in most commercial drones
- Lightweight, compact and durable



# Territories

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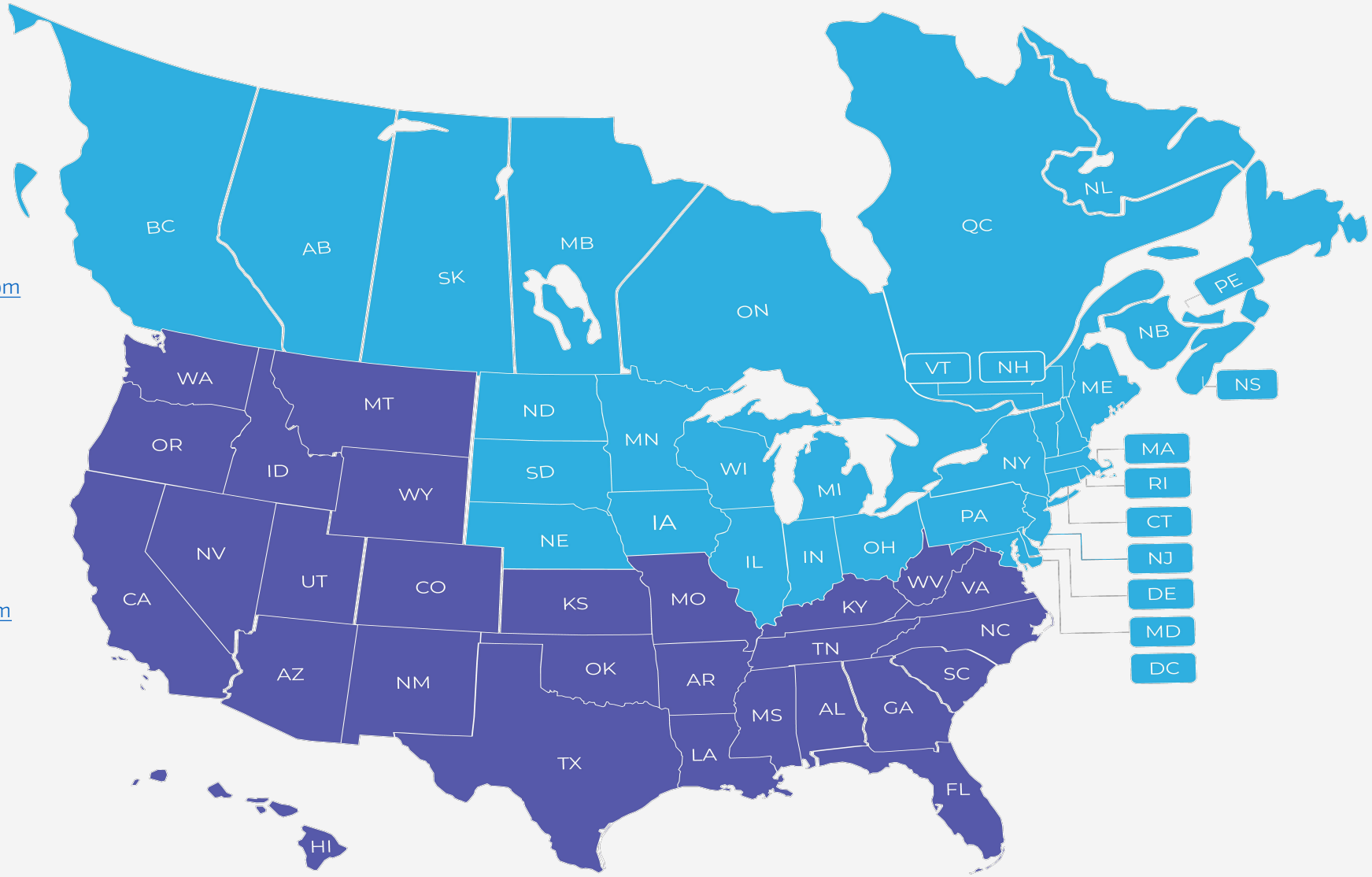


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Thank you!