EASY AERIAL
SMART SECURITY

# **EASY AERIAL INC. –**
# MOBILE, DURABLE & MODULAR
# FULLY AUTONOMOUS DRONE-BASED
# MONITORING SURVEILLANCE SYSTEMS

**Easy Aerial ("EA") is an American aerospace company based in the Brooklyn Navy Yard.**

**EA specialize in the development & manufacturing of robotic systems that automate monitoring and surveillance using smart autonomous drones.**

Our primary product is a drone-in-a-box system that can be deployed remotely from anywhere in the world. No drone operator or prior experience is needed to execute a pre-planned or on-demand mission.

Our Smart Aerial Monitoring Systems ("**SAMS**") are produced in the US to the highest standards and are deployed in critical locations around the world. Easy Aerial's passion for innovation in security drives our design efforts and guarantees that our systems are simple and easy to use.

# SAMS

*Smart Aerial Monitoring System*

An advanced, affordable, portable and easy to use autonomous aerial monitoring system that can be configured to meet any need.

The drone autonomously takes-off, perform a fully monitoring mission, lands and recharges without the need of a drone operator.

The system automatically activates based on a scheduled mission or upon a security trigger such as a fence alarm, fire alarm or other distress call.

**The system consists of 3 main parts:**

- Easy Guard ("**EG**")
- Falcon or Osprey Drones
- Easy Remote Monitoring Software ("**ERMS**")

# SAMS

*Smart Aerial Monitoring System*

## Scheduled Monitoring Missions

- Autonomous pre-planned aerial monitoring missions.

- Intuitive mission planning, including smart geo-fence and safe zones.

## Trigger-based missions

- Missions triggered by a wide array of third-party sensors: ground sensors, fence sensors, radars, fire alarms, cameras etc.

- Six (6) seconds after a trigger event - the drone is in the air.

- Optimal mission calculated autonomously on the fly.

## Remotely piloted Missions

- Manual remotely piloted missions.

- Option to switch to manual flight during autonomous mission.

# SAMS - T

*Smart Aerial Monitoring System Tethered*

Tethered version is based on the SAMS with the addition of a 200 ft tether line that has advanced data-over-power (DOP) technology.

SAMS-T features unlimited flight time with ultimate data security.

Complete SAMS-T operation including takeoff and landing can be performed autonomously from a remote location without any human intervention on site.

**The system consists of 3 main parts:**
- Easy Guard Tether ("**EG-T**")
- Alpine Swift or Albatross Drones
- Easy Remote Monitoring Software ("**ERMS**")

# SAMS - T

*Smart Aerial Monitoring System Tethered*

**Ideal for event management:**
The SAMS-T allows constant eye-in-the sky and is ideal for incident management of fires, sports events, demonstrations, etc. Because all the communication in the SAMS-T solution is transferred over the power line it is also considered safe from a cyber security standpoint.

- Outdoor Sports event.
- Demonstrations.
- First –responders applications.
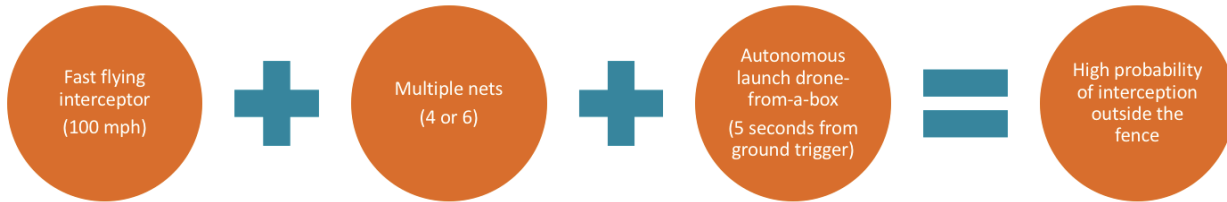- Traffic management.
- Post disaster recovery.

**SAMS-Dual (SAMS-D)** a revolutionary combination between the SAMS & SAMS-T enabling both perimeter and tethered missions from the same ground station. This product will change the competitive landscape enabling a drone unlimited hover time using the tether that detaches in the air to start a mission based on a trigger. All fully autonomous without human intervention.
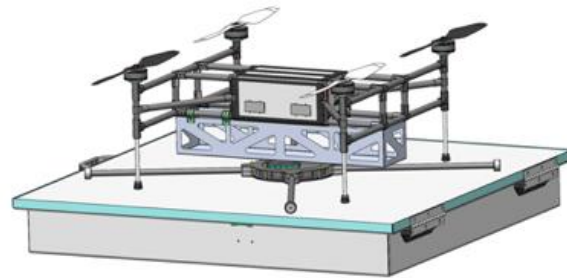
**SADI (Smart Anti-Drone Interceptor)**
SADI will eliminate a rogue drone threat by providing automatic & autonomous solution that will take-down the adversary drone outside of the base or facility fence without risking other aircraft and without interfering with the normal operation of military bases.

Fast flying interceptor (100 mph) **+** Multiple nets (4 or 6) **+** Autonomous launch drone-from-a-box (5 seconds from ground trigger) **=** High probability of interception outside the fence

**Eagle Delivery Drone**
Our Eagle drone can carry up to 35 lb. We have sold the first few to Trajectory Japan. The plan is to further develop the Eagle for self-charging which will allow autonomous cargo delivery with self-charging capabilities.
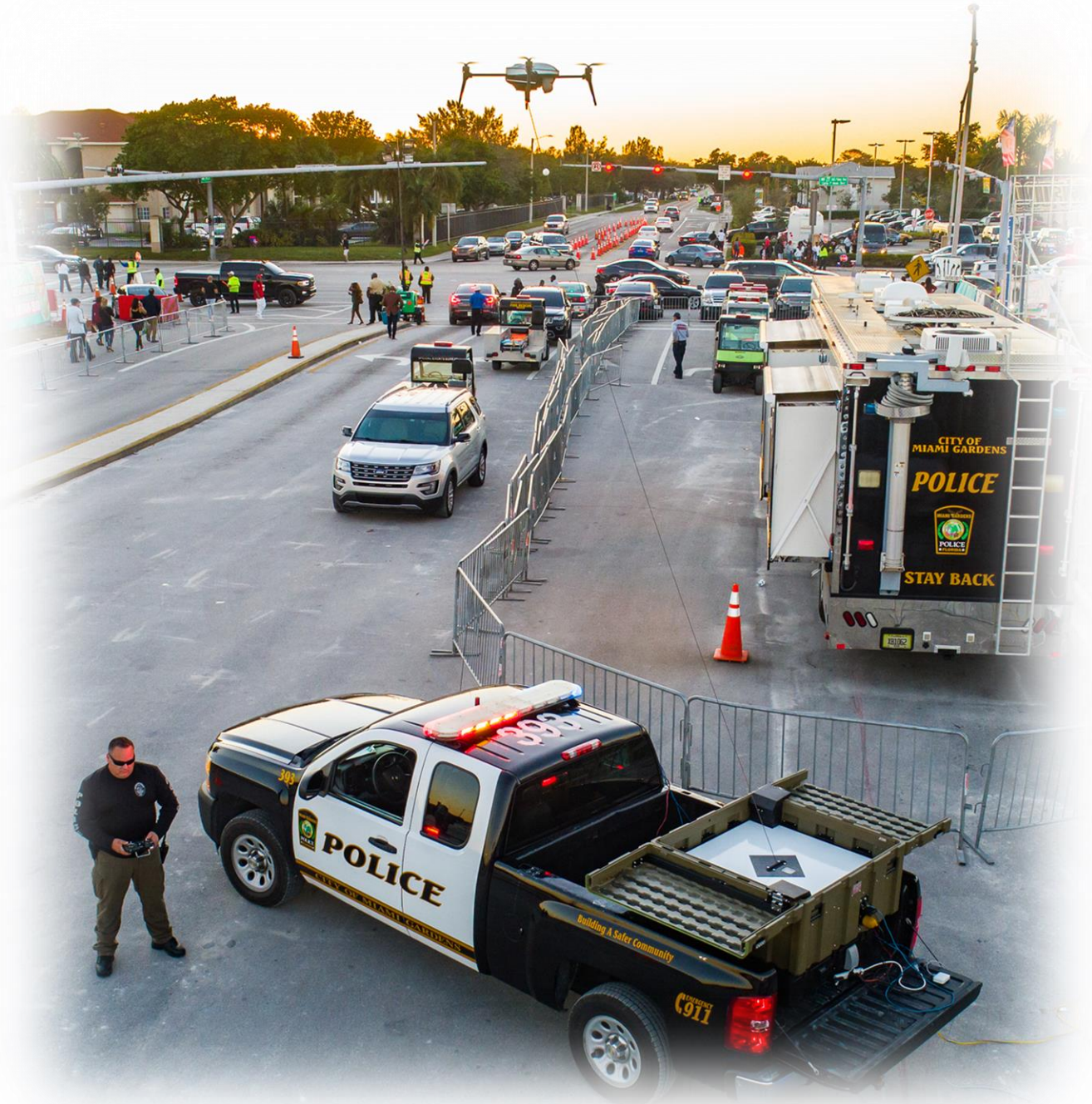
# TECHNOLOGY ROAD MAP

**AI/ML**

- Automation to allow seamless operation of multiple systems at the same time.
- Pattern recognition/auto-comparison of images to detect terrain anomalies
- Object classification.
- Auto-follow objects (day & night).
- Voice Control and Operation.

**ALL-WEATHER CAPABLE**

- Extreme cold and hot weather conditions.
- Extreme windy conditions.

**TACTICAL**

- Ability to operate the system using voice commands  only while driving in a highly rough terrain
- Ability to operate the systems while driving over 30 mph.

# DRONES

## FALCON & ALPINE SWIFT DRONES

The Falcon drone is the ultimate US military quadcopter. Made from military-grade, weather resistant materials, it is durable, tactical and capable of carrying a wide variety of payloads up to 2kg (4.4lb) in weight.



| FALCON DRONE | |
|---|---|
| Weight | 3.5kg |
| Flight Time | 45 minutes |
| Top Speed | 100 km/hr |
| Total Distance | 13 km |

| ALPINE SWIFT DRONE | |
|---|---|
| Weight | 2.6kg |
| Flight Time | Unlimited |
| Payload Capacity | 2.5 Kg |

*All EA drones are designed and manufactured in the US; Flight Time w/o payload

# DRONES

## OSPREY & ALABTROSS DRONES

The Osprey Hexacopter is a uniquely designed drone with motor redundancy and increased reliability. The hex configuration makes this frame ideal for carrying larger payloads up to 3.0kg (6.6lb).



| OSPREY DRONE | |
|---|---|
| Weight | 5.5kg |
| Flight Time | 55 minutes |
| Top Speed | 100 km/hr |
| Total Distance | 20 km |

| ALBATROSS DRONE | |
|---|---|
| Weight | 3.0kg |
| Flight Time | Unlimited |
| Payload Capacity | 3.5 Kg |

*All EA drones are designed and manufactured in the US; Flight Time w/o payload*

## EAGLE DRONE

The Eagle Drone is Easy Aerial "Special Projects" heavily-lifter drone.

Powerful motors and redundant electronics make sure this drone can sustain heavy payloads in extreme operations.

*All EA drones are designed and manufactured in the US; Flight Time w/o payload*

| EAGLE DRONE | |
|---|---|
| Weight w/o Batteries or Payload | 9.5kg |
| Weight Battery (Each) | 2.75Kg |
| Flight Time w/o Payload | 55 minutes |
| Flight time with 5 kg Payload | 45 minutes |
| Flight time with 10 kg Payload | 35 minutes |
| Flight time with 15 kg Payload | 25 minutes |

## EASY GUARD

The Easy Aerial ground station (Easy Guard, "**EG**") is an independent, automatic, aircraft hangar for takeoff, landing and charging. It features an automated roof opening and closing system and is made from military grade plastic, rendering it mobile, rugged and weather resilient. The Easy Guard is lightweight and portable for easy deployment from ground, structure or vehicle. Two people can carry and mount it using convenient handles on the side.

The SAMS-T ground station ("**EG-T**") has the same features as the EG with the addition of a 200 ft. smart tether-line that maintains tension. It supplies constant power and two-way communication to the drone throughout the flight.

## POWER GUARD

The Power Guard is an add-on to the EG and EG-T designed to act as a base for EG on the bed of a pickup truck and provide remote electric power.

The Power Guard enables 20 full charges of Falcon drone battery or 12 hours of continuous tethered flight of the Alpine Swift drone.

## ERMS

Easy Remote Monitoring Software ("**ERMS**") is a proprietary software that enables command and control of a single or multiple remotely operated drones, while transmitting high-definition optical and thermal video in real-time. Our software can be securely accessed anywhere and at any time, enabling users to manage missions with one click.

The system includes:

- HD video and thermal video feed delivered in real-time.
- Intuitive user interface.
- Automatic mission planning and real-time.
- Manual mission override capabilities.
- Smart geo-fencing.
- Automatic comprehensive logs.
- Ability to accept triggers from any 3rd party alarm software.
- Easy integration of output feed into existing monitoring systems.

# APPLICATIONS

**PERIMETER SECURITY**

*Military Base, Power Plant, Industrial, Airport, etc.*

**EMERGENCY RESPONSE**

*First Responder, Firefighters, Police, Disaster Relief*

**MASS EVENT MONITORING**

*Sports Events, Concerts, Rallies*

**AGRICULTURAL & INDUSTRIAL INSPECTION**

*Mines, Harbors, Large Factories*

# GOVEROMNET PROJECTS

**USAF**

- Protect our troops challenge (May to July 18).

- SBIR Phase I for using autonomous drones for perimeter security (November 18, 75K).

- SBIR Phase II for using autonomous drones for perimeter security and incident management (March 19, 1.5M).

**DHS Next Generation First responders (NGFR) Program**

- Six month evaluation (March to August 19).

- Tether and non- tethered autonomous systems for first responders.

- Deployment from emergency vehicles.

- Use cases: Natural disaster.

- Various payloads (cameras, cell tower, wi-fi tower).

**CBP Low- altitude for officers ("LASO") program**

- Tethered systems of pickup truck for officers patrolling the border of the US.

# PARTNERS

**Collaborations to create the most powerful solution for various applications**

- VMS and C2 Systems.

- Human behavior software (TIPS-AIR).

- Advanced analytics.

- Facial recognition software.

- Portable radar systems.

- Drone detection systems.

**Global Distributers**

- 200+ drones to date.

- Seven Countries; Four continents.
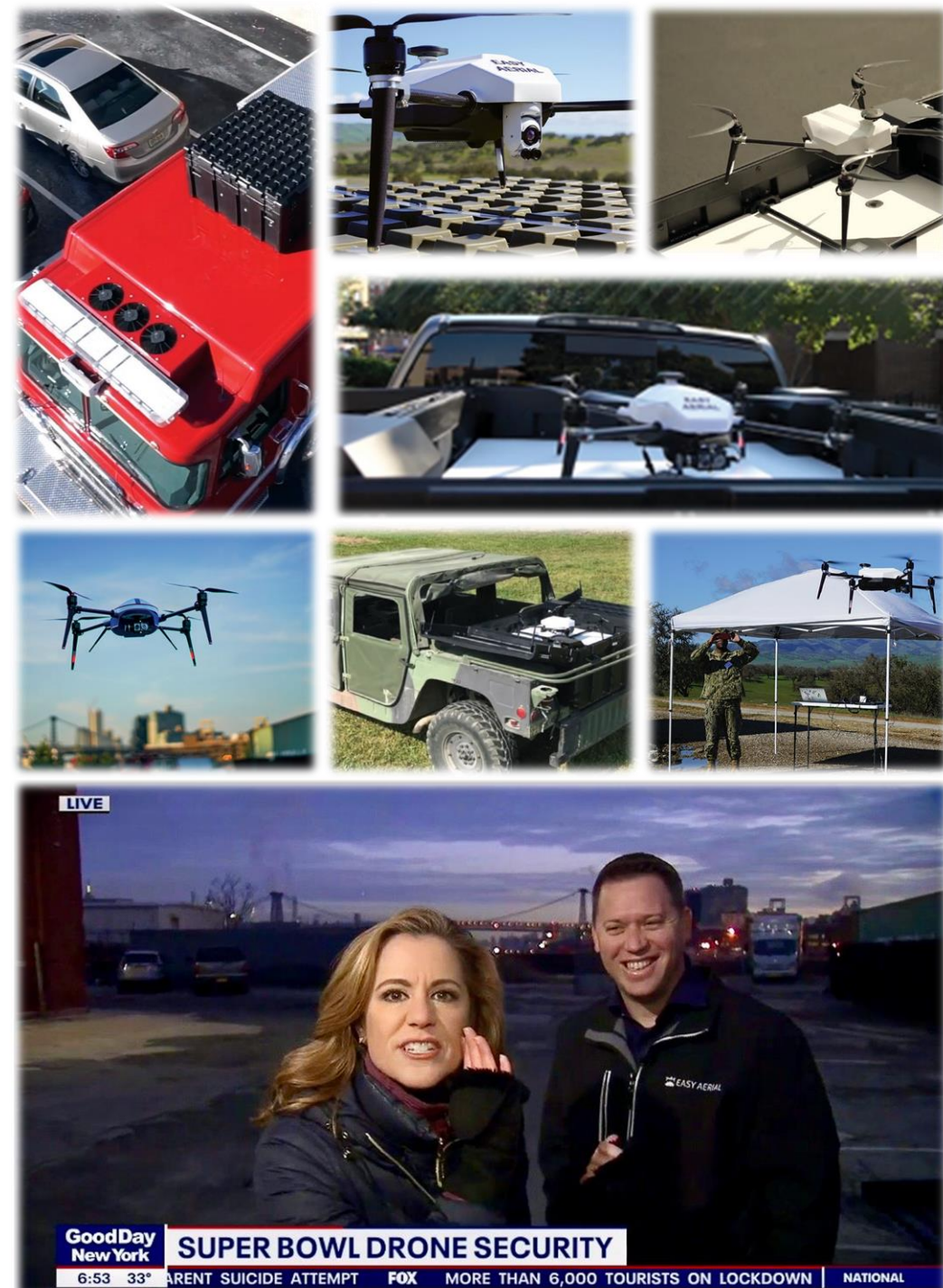
- Official Global distributors and re-sellers

# COSTUMIZED SOLUTIONS

**Our proprietary systems are fully customizable and modular. This enables us to use our expertise and knowledge to tailor the right package for you!**

In addition, our versatile software can integrate with any security and C2 systems to enable easy and intuitive operation.

We can customize our solution to almost anything, from multiple payloads and telemetry to additional accessories such as flashlights or speakers.

**Have something in mind? We will make it happen!**

# TEAM

Easy Aerial is an American company comprised of highly motivated, agile engineers on a mission to provide efficient high-quality, affordable robotic security. We are conveniently located in the Brooklyn Navy Yard, where we design and manufacture our all-American drone systems.

EASY AERIAL

Smart Security

Thank You