



Innovation Through Autonomy

THANK YOU TO OUR PARTNERS & CLIENTS:



WHO IS CHARLOTTE UAV?



WHAT WE DO

**AERIAL
MAPPING**

INSPECTIONS

DRONES

ROVERS

BOATS



WHAT ARE WE DOING IN NUCLEAR?

**LEVERAGING INNOVATIONS IN ROBOTIC TECHNOLOGY TO
REDUCE RADIATION EXPOSURE & PROVIDE BETTER DATA
WHILE SIMULTANEOUSLY REDUCING OPERATIONAL COSTS**

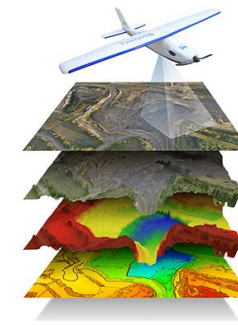


MIRION
TECHNOLOGIES

RADēCO, Inc.
"Radiation Detection Company"



DRONES AS A SERVICE | POWER PLANTS



2D MAPPING

3D MODELING

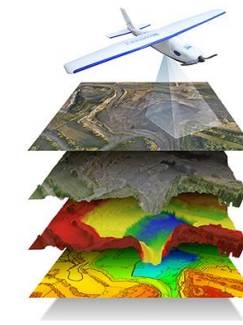
**HAZARDOUS
INSPECTIONS**

ORTHOMOSAIC

The orthomosaic is a 2D map. Each point contains X, Y and color information. The orthomosaic has uniform scale and can be used for 2D measurements (distance, surface).



DRONES AS A SERVICE | POWER PLANTS



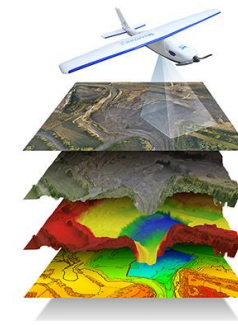
2D MAPPING

3D MODELING

**HAZARDOUS
INSPECTIONS**



DRONES AS A SERVICE | POWER PLANTS



2D MAPPING

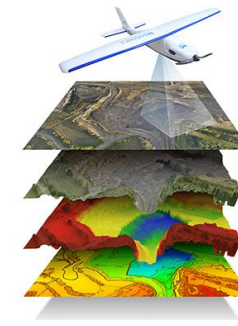
3D MODELING

**HAZARDOUS
INSPECTIONS**

Post Inspection 3D Model

- Repair Work Orders
- Change Detection
- Communication

DRONES AS A SERVICE | POWER PLANTS



2D MAPPING

3D MODELING

**HAZARDOUS
INSPECTIONS**

DRONES AS A SERVICE | POWER PLANTS

IWL INSPECTION RESEARCH PROJECT

LESSONS LEARNED

CHEAPER

FASTER

SAFER

BETTER DATA

MORE CONVENIENT





MIRION
TECHNOLOGIES

HEALTH PHYSICS



INTRODUCES...

RadKnight™ Drone Solutions

A series of drones that utilize a Radiological Detector Payload.

Radiological information collected by the RadKnight system is transmitted over an encrypted connection between the computer and drone.

Several payload configurations are available to meet your monitoring needs:

RDS-31 | Low range GM up to 10 rem/hr, also WRM2 transmission capable

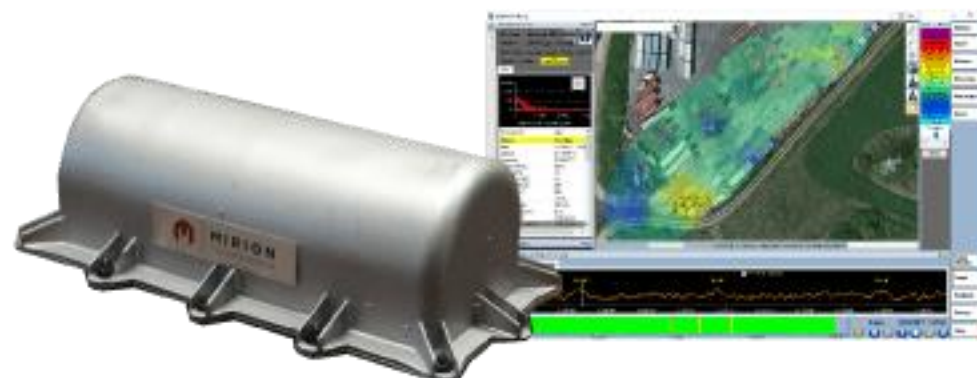
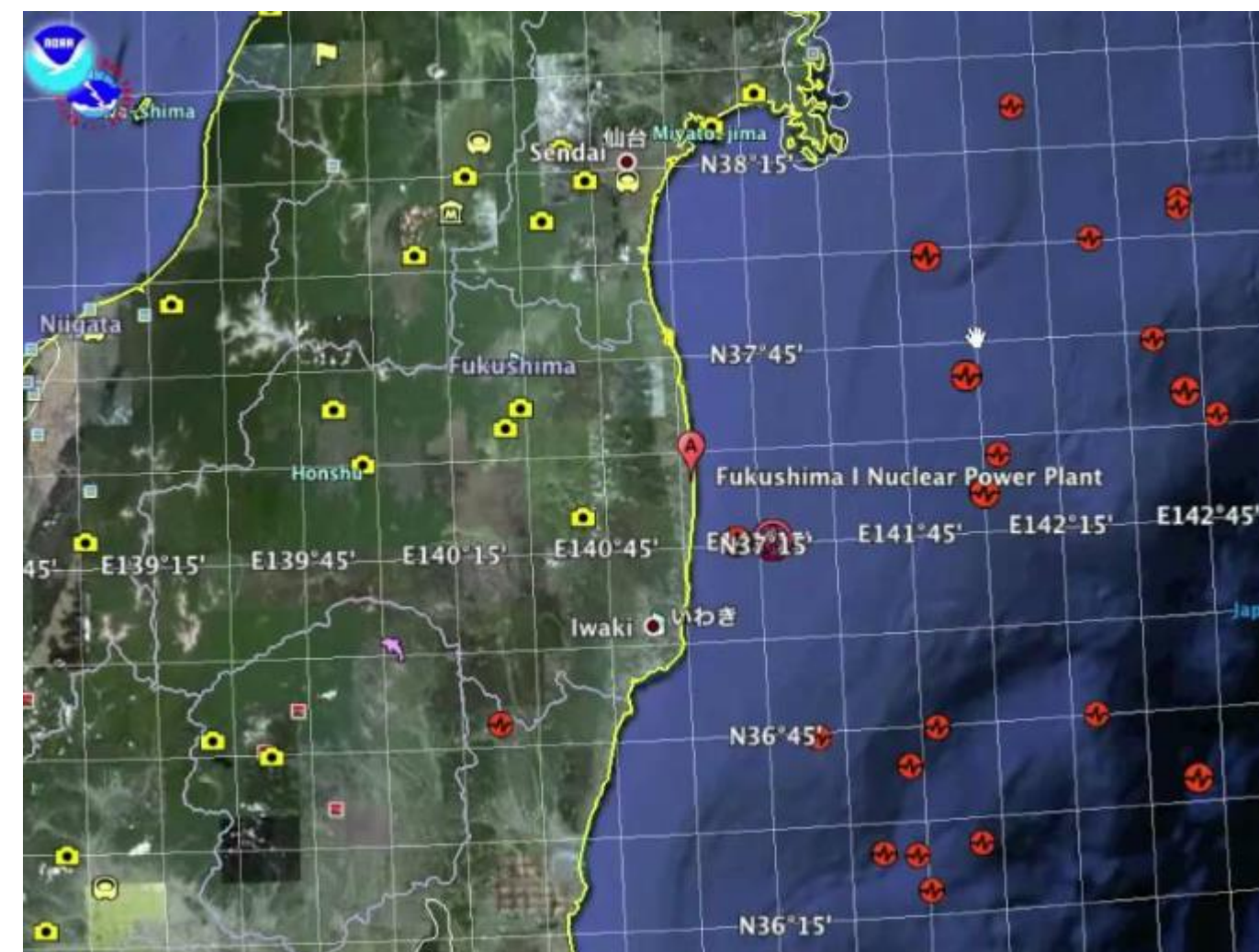
Telepole II Detector | Low & high range detectors up to 1000 R/hr

*SIM-Teq™ training telepole detector is also available for use with our simulated sources.

SPIR-Explorer | NaI or LaBr detector options with dose rate & GPS, access to isotopic information

APPLICATIONS:

Emergency Response –
Plume Mapping



Destrier - LR

Medium-sized Autonomous vehicle

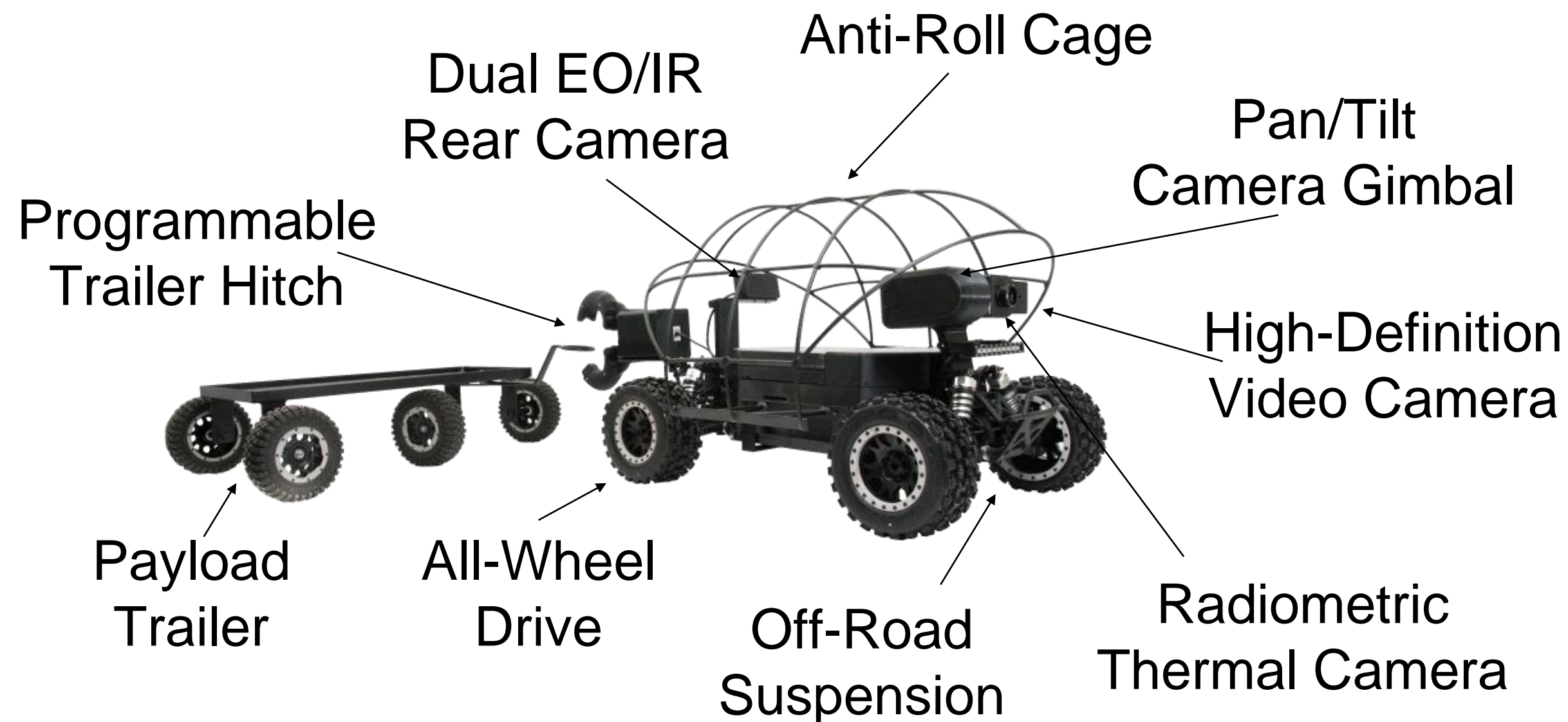
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COMING SOON...

BUDDY

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ROBOT TECHNICIAN

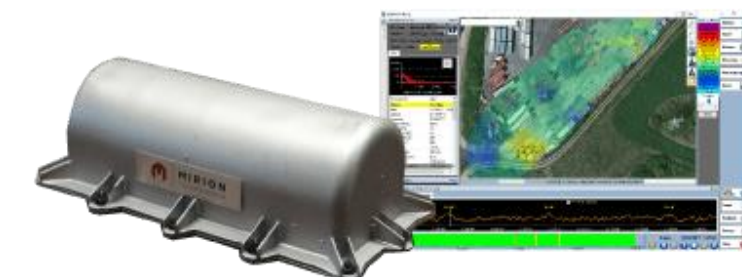
400+ PAYLOAD CAPACITY

CONFIGURABLE

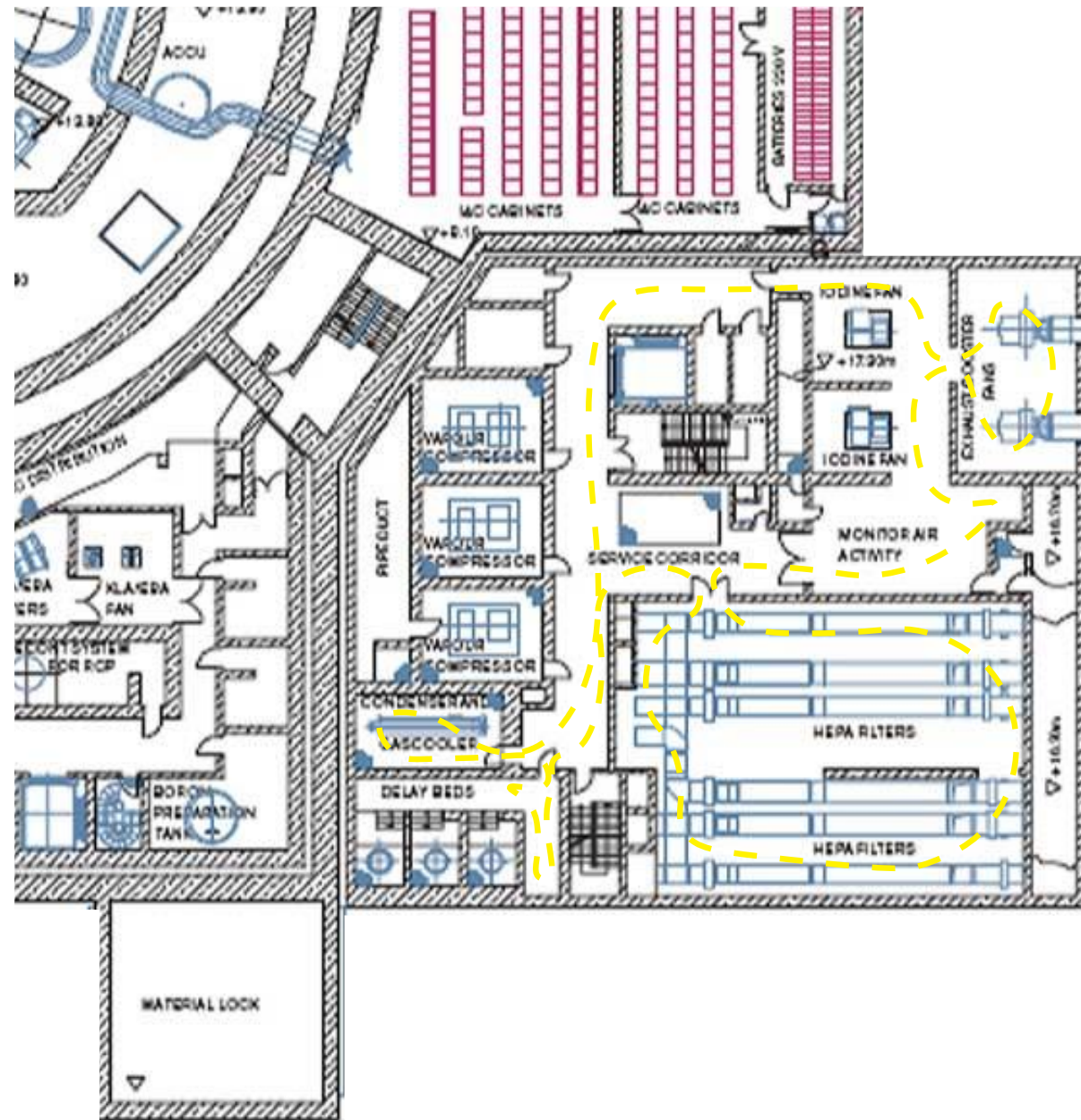
BATTERY-POWERED

PROGRAMMABLE MISSIONS

2-WAY COMMUNICATIONS



WAYPOINT NAVIGATION



BUDDY

NAVIGATION

WAYPOINT

PROGRAMMED ROUTES

REMOTE CONTROL

TWO-WAY COMMUNICATIONS

SENSE & AVOID



COMING SOON...

NUCLEAR TASK ROBOT SWARM CONTROLLED FROM A SINGLE POINT

FIRE WATCH

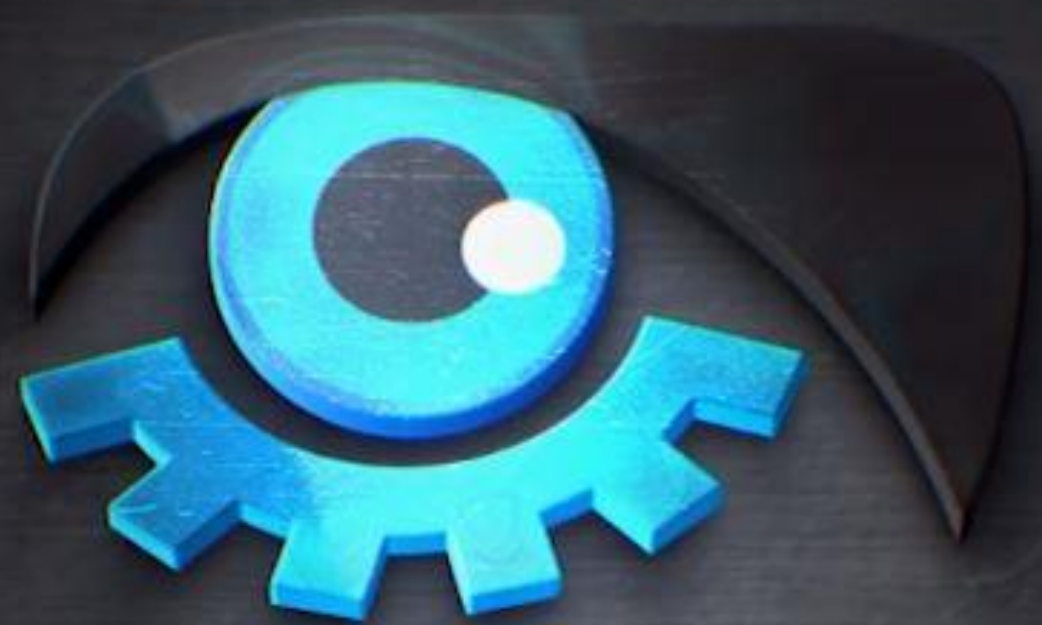
MONITORING & INSPECTING

DELIVERY / DISPOSAL

EMERGENCY RESPONSE

SECURITY WALK-DOWNS





Charlotte
UAV