SITUATIONAL AWARENESS
FOR
NORTH CAROLINA'S
MODERN ENTERPRISE

Joint Legislative Emergency Management Oversight Committee

February 15, 2018

TigerSwan

- Headquarters: Apex, North Carolina, Founded 2008

- Service-Disabled, Veteran-Owned Small Business

- Global risk management technology and service consultancy

- Former military, federal and municipal law enforcement, executive branch and commercial sector personnel

- 2017 Triangle Business Journal Fastest 50 Growing Company

What is Situational Awareness?

Situational awareness (SA):

- Perception of environmental elements and events with respect to time or space
- Comprehension of meaning, and the projection status after variable change, such as time, weather, or other variable, such as a predetermined event.

Said another way…

Having the right information at the right time so key leadership and personnel can proactively make the correct decision!

1. https://en.wikipedia.org/wiki/Situation_awareness

What does Situational Awareness do?

Effective SA **enhances** decision-making leading up to, during and after an event, the left and right of an event.

"Getting Off the X"

PREEMPTIVE	→	INCIDENT	→	PRO-ACTIVE

1. Knowing what may happen,
2. Understanding what is happening,
3. Predicting how it will change with time, and
4. Being unified in response to the new dynamics.

How is Situational Awareness Achieved?

- Fusion of Information (Intelligence) and Operational need

- Process to collect and share accurate and actionable information

- Technology and Manpower integration

- GEO-SPATIAL Common Operating Picture (COP)

- Technology identifies anomalies, People make decisions

NC Emergency Operations Center at Joint Forces Headquarters

Common Operational Picture?
How Does It Relate To
Situational Awareness!

- **Common Operational Picture** (**COP**) is a GeoSpatial display of relevant, operational/Intelligence information (e.g. position of assets, (personnel, infrastructure)
  - Shared by Diverse User Elements

- **COP** facilitates collaborative planning and combined execution and assists all elements to achieve *situational awareness*

- A **REALTIME** COP enables effective, dynamic execution and **PROACTIVE** decision making

1. https://en.wikipedia.org/wiki/Common_operational_picture

SA for the Modern World

- Developed full spectrum Enterprise technology platform (GuardianAngel) for Global SA
- Real Time Integrated Situational Awareness Response and Communications
- **Anomaly** based technology with **machine driven rules** for reduced costs
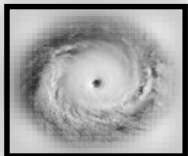- Technology **AGNOSTIC** platform for use across **all Enterprise entities**

- TigerSwan Global Response Center (GRC)
- TigerSwan GRC conducts SA fusion globally for Clients
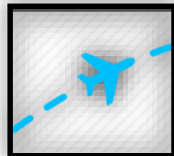
Real-Time Awareness and Communications

- **Integrating Multi-Sensor Devices**
  - Personnel (Phone App)
  - Aircraft (ADS-B)
  - Vehicles (OBDII Tracking)
  - Assets (GPS)
- **Information and Crowd Sourcing information**
- **Mass Communications/Notification**
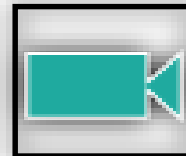- **Multi-Agency Collaboration**
- **Cost Savings**

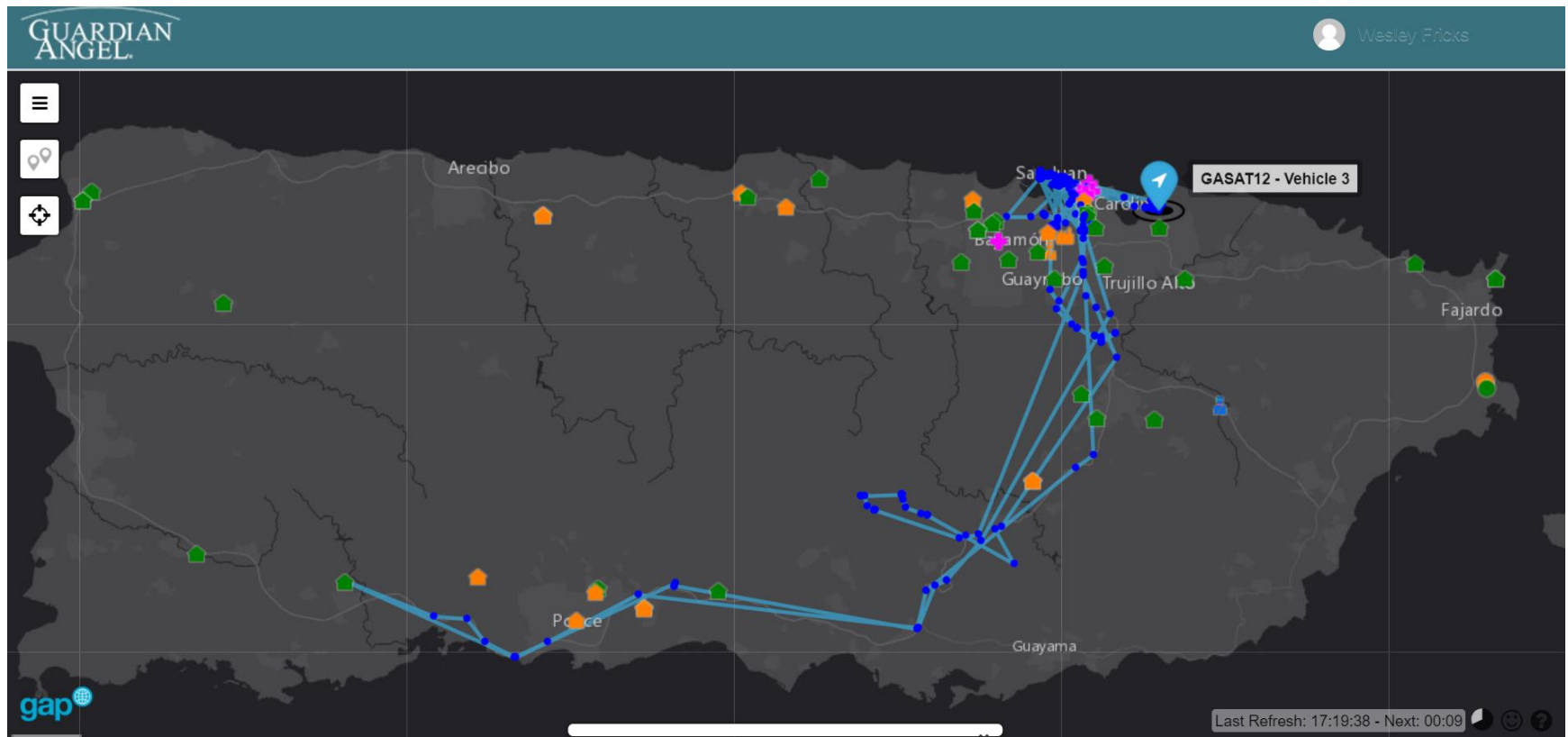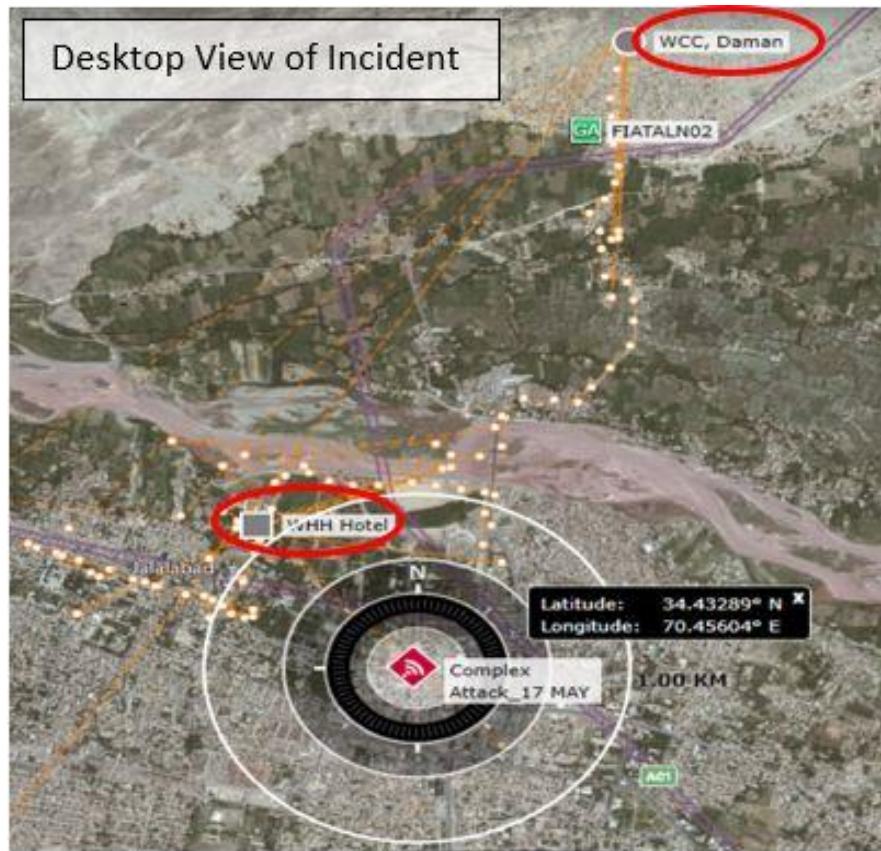| Weather Alerts | Social Media Monitoring | Flight Tracking | CBRNE | Physical Security | Vehicle Trackers | Phone App | Sensor Integration |

Scenarios from TigerSwan GRC using GuardianAngel Situational Awareness COP Tool

Field Operations in Puerto Rico in Response to Hurricane Maria

Scenarios from TigerSwan GRC using GuardianAngel Situational Awareness COP Tool

J-Bad Bombing

Life Support Mission in Syria

Beyond Theory
Impact to North Carolina
Art and Science

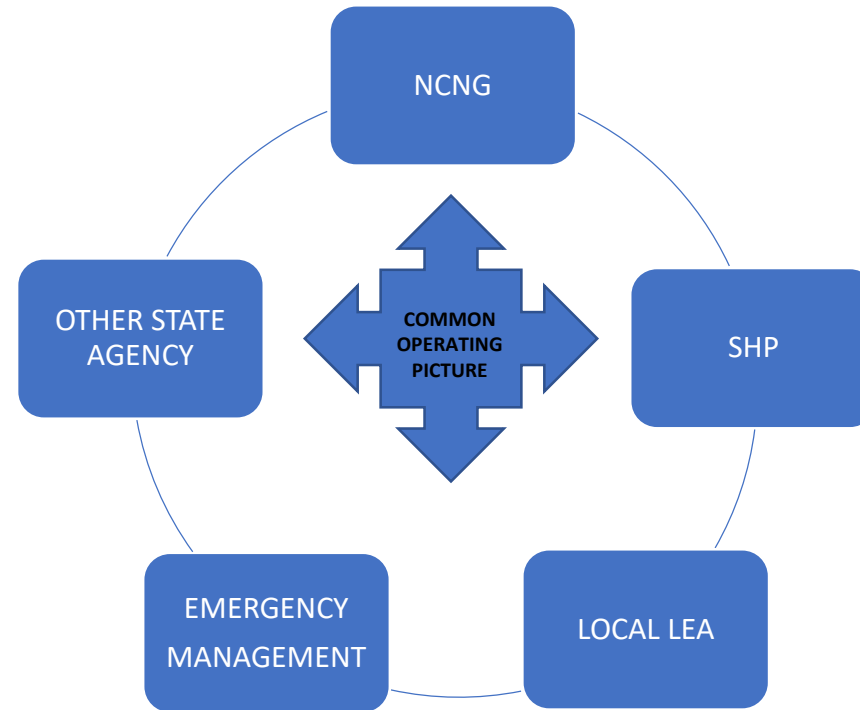2016-Present, TigerSwan provided Real Time SA support to NCNG and NCEM with our GuardianAngel Platform.

- 2016 Charlotte Civil Unrest support to NCEM, NCNG, NCHP
- 2016 NCNG Reaction Force Readiness Validation Exercise
- 2016 NC Emergency Management Emergency Operations Center Support during Hurricane Matthew, Enabling cross-agency collaboration
- 2017 Winter Storm Helena
- 2017 NCNG Support of Air Assets Deployed to Houston for Hurricane Harvey

Hurricane Matthew Support

- NCEM employed GuardianAngel Platform to assist State EM Response Team at Joint Operations Response Center
- TIgerSwan embedded personnel on a 24/7 basis for 17 days to support mission

Technology-agnostic,

seamless integration GuardianAngel with NC SPARTA

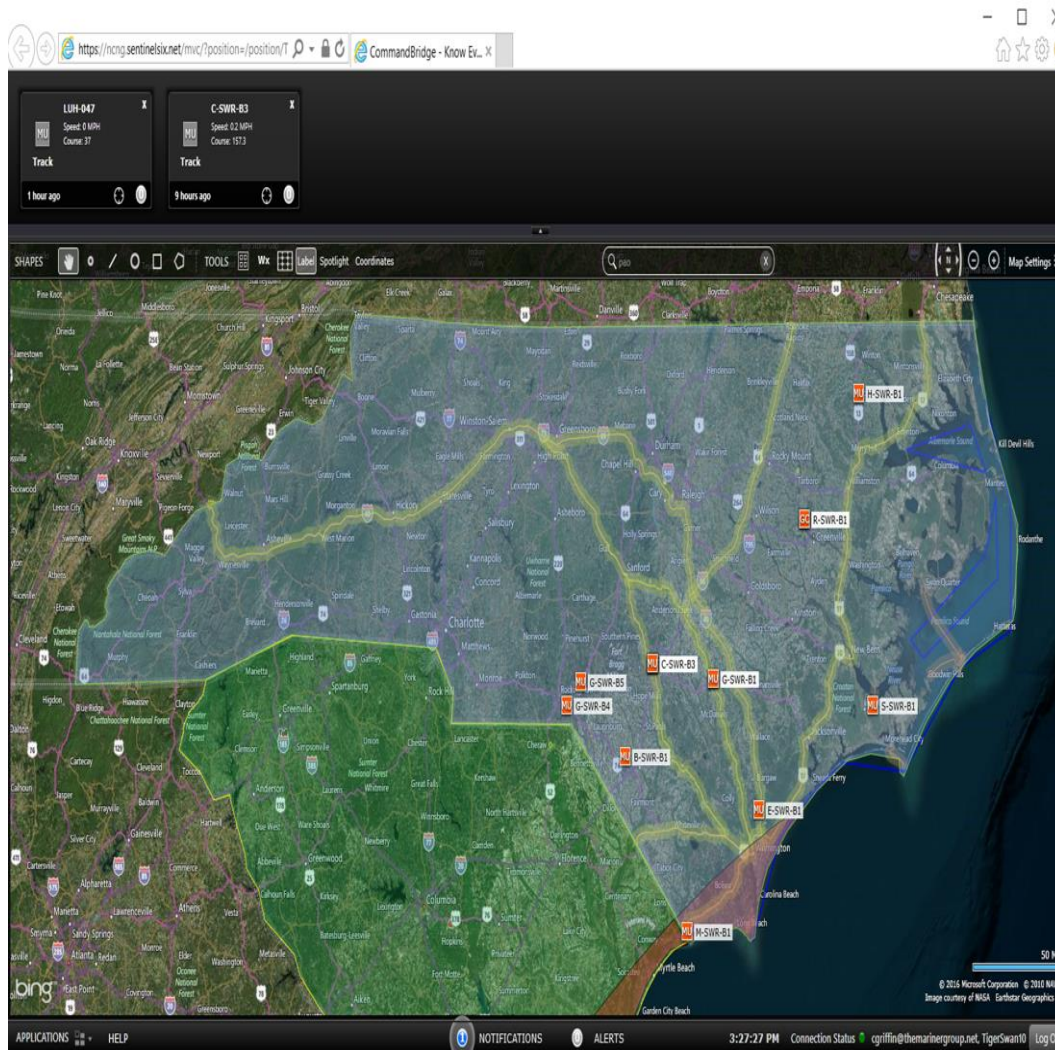**Achieve Geo-Spatial real time COP of assets with response workflows**

web-based and cloud-hosted, information access not limited to the EOC.

Field personnel on smart phones can access key information

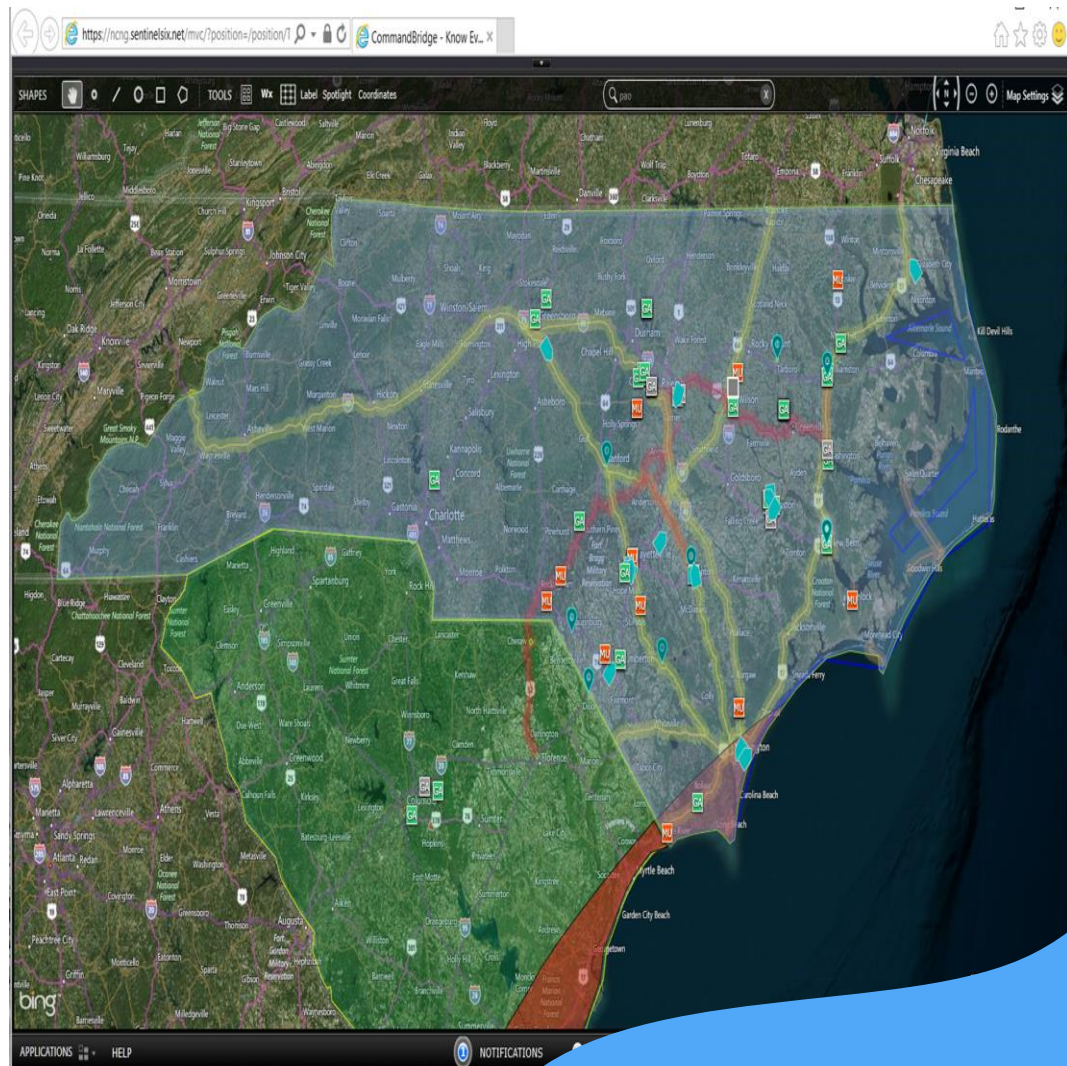# NC Agencies and Departments Support from GuardianAngel Hurricane Matthew

- NCEM Command Staff
- NCNG Joint Operations Center
- NC Highway Patrol
- NCNG Business EOC
- NCEM Air Ops
- NCEM Emergency Services

Hurricane Matthew Support

GuardianAngel Provided Real-Time Monitoring and Tracking for key personnel and response assets and were able to share real-time update for the following entities:

- Swift Water Response Teams
  - Raleigh, Greensboro, Charlotte,
  - Henderson, Winston, Buncombe,
  - New Bern, South Orange,
  - Mooresville & East Lincoln Teams

- NC State Highway Patrol

- Fire Departments
  - Charlotte, Raleigh and Greensboro

- Helo-Aquatic Rescue Team (HART)

- Damage Assessment Teams

TigerSwan
Solutions to Uncertainty

NC
Nothing Compares
NORTH CAROLINA

GuardianAngel

STATE OF NORTH CAROLINA

DEPARTMENT OF PUBLIC SAFETY

Request for Proposal #: 19-013809-WAX

Real-Time Resource Tracking and Alerting Application

Date of Issue: February 24, 2017

Proposal Opening Date: March 14, 2017

At 2:00 PM ET

Direct all inquiries concerning this RFP to:

Angela Wainright

Purchasing Officer

Email: angela.wainright1@ncdps.gov

Phone: 919-324-6476

IFB/RFQ Number: 19-013809-WAX

1.0   INTENT, USE, DURATION AND SCOPE

The NC Department of Public Safety (NC DPS) is seeking a fully installed, implemented, and hosted platform to solve NCDPS and the Division of Emergency Management's (NCEM) unique needs to facilitate a total coordinated response throughout the state. The state requires that their government employee's location and safety can be monitored via live tracking with the ability to enable an emergency distress button. This capability must also come with the ability for the person to turn-off the tracking device at will, but also to be able to alert the device from the off position if needed. The State has invested heavily in the creation of the NC SPARTA (WebEOC) system and therefore the State requires integration to the existing NC SPARTA system, including the bi-directional flow of information seamlessly between the chosen platform and NC SPARTA systems to create a common operating picture. The state has a requirement of receiving on-site technical, operational and analytical support within one hour at the Joint Force Headquarters (JFHQ-NC). The State requires that the vendor be the owner of the primary technologies used in the system.

- Real-time monitoring
- Emergency SOS
- Incognito mode
- NC SPARTA integration
- Bi-directional communication
- Common Operating Picture

What's Next for NC

Platform for use across the North Carolina State Enterprise

Center for Safer Schools / Safe Schools Initiative
State Government Complex Security
Member Security
Wildlife Resources Commission
Division of Adult Correction & Juvenile Justice
Fire and Rescue Commission
Motor Fleet Management

Questions?