

**RANDOLPH COUNTY  
EMERGENCY SERVICES  
UAV PROGRAM**



# PROGRAM HISTORY

- July 2017 – County Commissioner's budgeted \$15,000 for UAV Program
- July-September – Researched platforms, needs assessments, etc.
- October 2017 – Purchased UAV, first staff certified, began training on platform
- December 4, 2017 – First mission



# UAV PLATFORM AND PAYLOAD

- DJI Matrice 210
- Zenmuse XT (thermal camera)
- Z30 (30x optical zoom camera)
- DJI Crystalsky monitor
  
- \$22,960 Investment

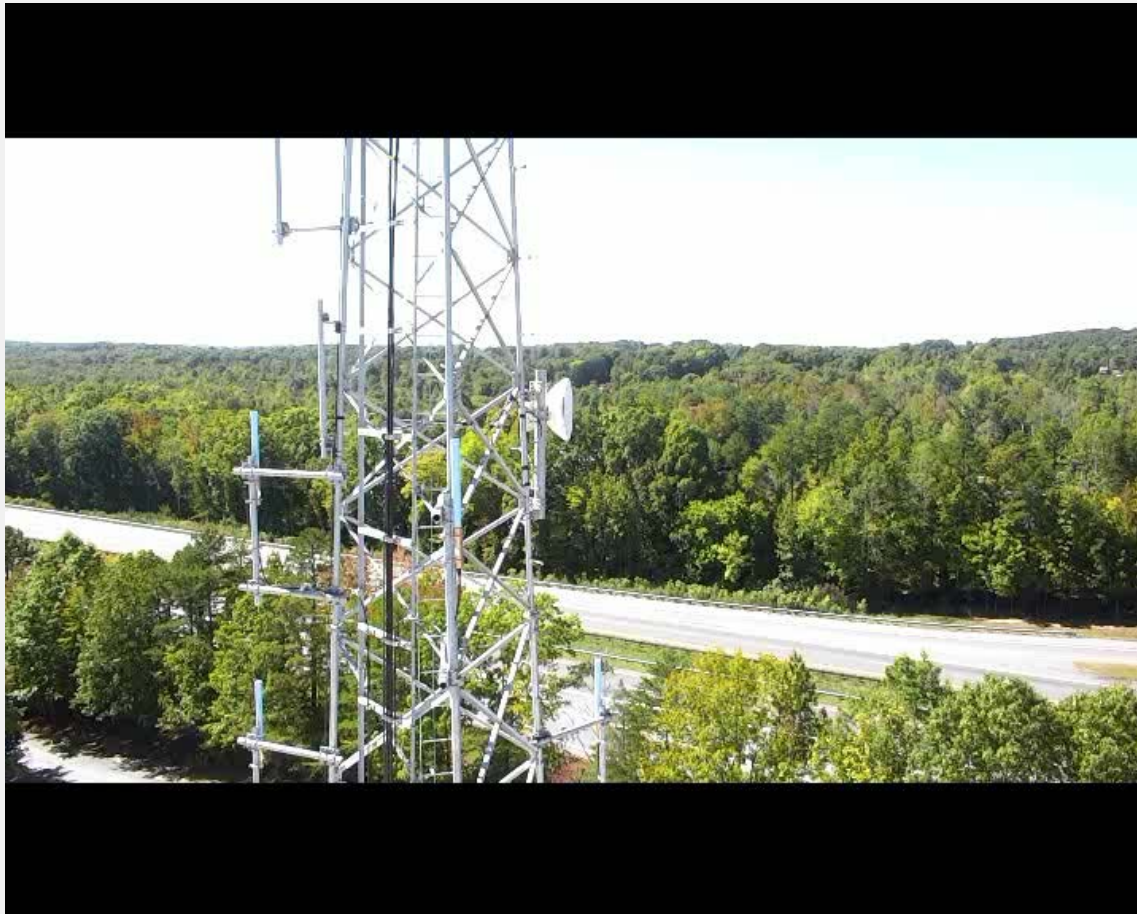


# TRAINING

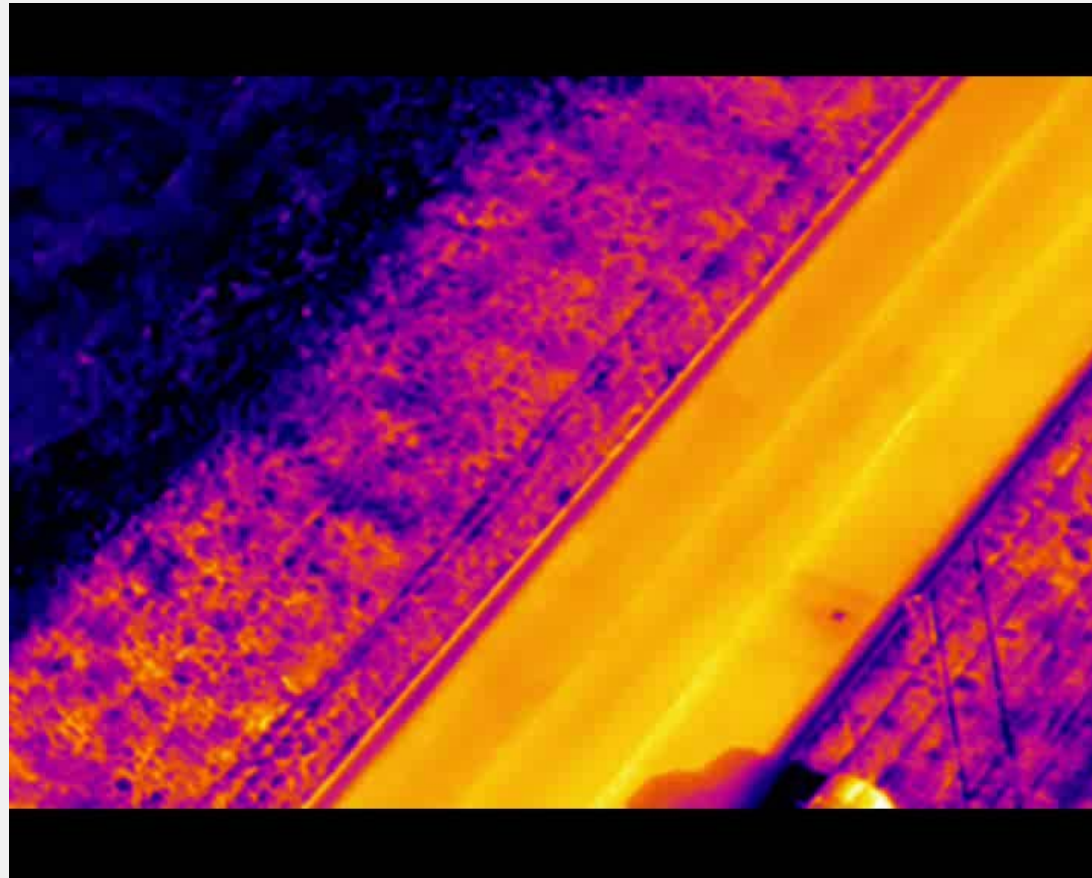
- Teaching staff how to operate the drone
- Develop pre-flight, in-flight, post flight checklist
- Scenario based training (tower inspections, SAR, live burns, etc)
- Putting it all together



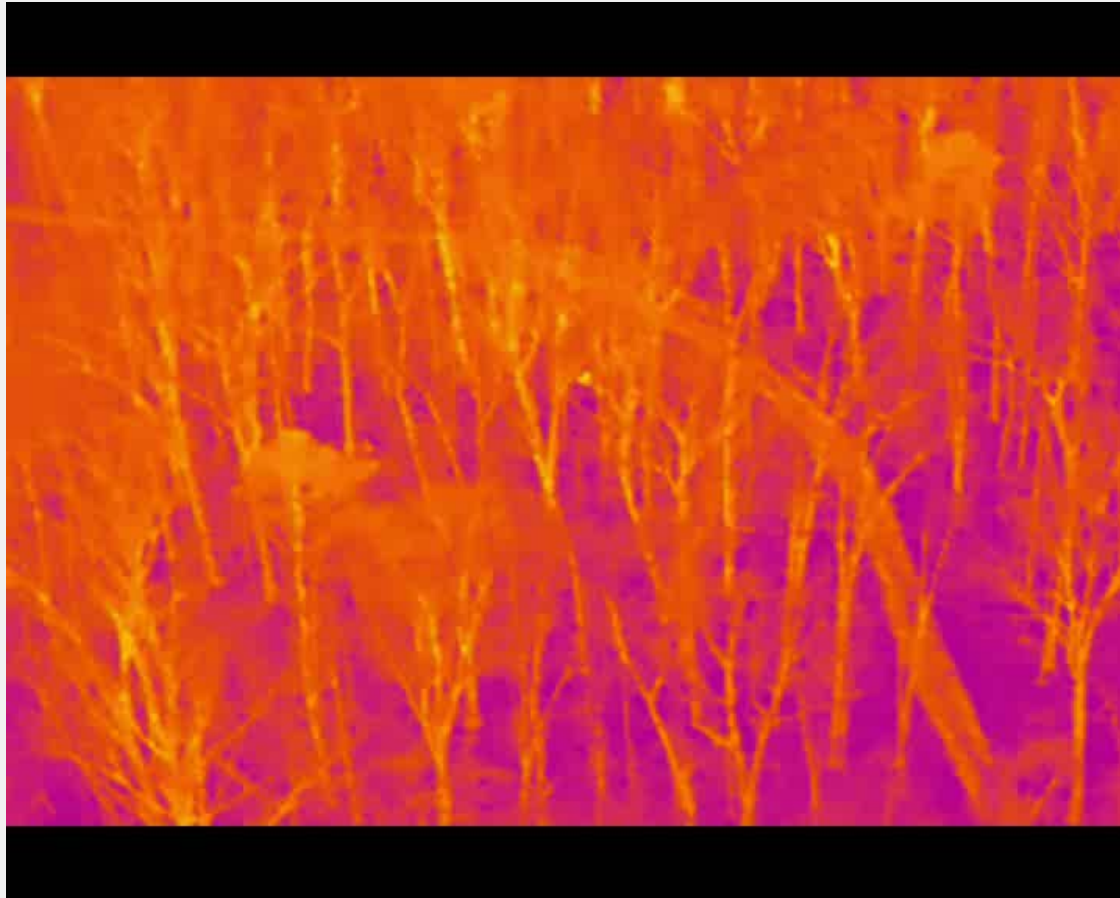
# TOWER TRAINING



# THERMAL TRAINING



# MISSION





# RANDOLPH COUNTY SHERIFF'S OFFICE DRONE PROGRAM





# RCSO DRONE PROGRAM



- Drone is a DJI Phantom 3 Professional.
- Started testing the drone program in early Sept of 17.
- Nov 5th 17 SAR Mission for missing dementia patient.
- Nov 6th went public with drone program after finding missing dementia patient.
- We fly under the FAA part 107 provisions.

## WHAT ITS USED FOR

Randolph County  
SHERIFF'S OFFICE



AVIATION UNIT

- Main goal is to protect our citizens, solve cases and fight crime from above.
- Search for suspects who have escaped custody or committed a crime.
- Crime scene photography/Videography.
- Tactical missions.
- Search for contraband.
- Helping other agencies .

# RCSO SAR MISSION 11/5/2017



# SAR MISSION DEBRIEF

RCSO was the **FIRST** in North Carolina and the third in the country to successfully find a missing person with a drone, according to NCGAT at NC State University.

- Great communication between the deputies on the ground and the PIC, Adam Krolfifer.

- Quick mission, only 25 min from launch to locate.

- What we could have done better?

1- Should have called out a visual observer.

2- Should have started a grid pattern search.



## FUTURE OF PROGRAM

Randolph County  
SHERIFF'S OFFICE



AVIATION UNIT

- **More education for our citizens.**
- **Obtaining a COA (Certificate of Authorization).**
- **Educating our staff about what the program can and cannot do.**
- **Training new pilots and visual observers.**
- **Keep interest in the program both in the public and interoffice.**
- **More missions under our belt**
- **Work with other agencies to better our program.**