

June 19 - 20, 2025
Hollywood, FL



Internal Use of sUAS (drones) at FDOT

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District 4

Transportation Symposium
Website



1

How did we get started?



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2

2

How did we get started?

Emergency Response

- Provide advanced scouting
- Debris sizing
- Telling our story



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3

3

How did we get started?

Emergency Response

- Started with CO based Advanced teams
- Expanded to District Teams
- Now in our 3rd Year



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4

4

Documenting Recovery



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5

5

Storm Recovery Inspection



**Before
Milton**

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6

Storm Recovery Inspection



**After
Milton**

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7

7

Storm Recovery Inspection



**Video
Inspection
by Drone**

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8

8

Improving our Storm Response

• **Biggest Challenge?**

- Getting Video back to the EOC
- Live Stream vs. uploading

• **Best of both solutions**

- LiveU – broadcast news solution
- Solves the need for recording to rewatch and live streaming
- Bonding cell data and any other transmission source.



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9

9

The Importance of Drones at FDOT

From humble beginnings in emergency response, drones or small unmanned aerial vehicles (sUAVs) are now enhancing the efficiency of various critical tasks at FDOT.

Usage of sUAS at FDOT

- | | |
|--------------------------------|-------------------------|
| • Emergency Response | • Maintenance |
| • Traffic Monitoring | • Construction Projects |
| • Bridge/Structure Inspections | • Surveying & Mapping |

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10

10

A traffic signaling story



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11

A Bridge Inspection story



Photo: 8549-M04 (Element:Env: 854604 Open Gearing)

Far Leaf: Both Rack gears bounce on both Pinion gears and floats after a full opening that emits noises indicating an imbalance of the leaves. The noises stop after the Racks and Pinion are stationary. The abnormal movement/bouncing occurs for approximately 7 seconds after full openings.

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12

12

A Bridge Inspection story



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13

13

Our Internal Fleet

- **Skydio – Quadcopter sUAS**
 - 2Plus
 - X10
- **FotoKite – Tethered sUAS**
- **Ascent Aerosystems Spirit coaxial sUAS**



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14

Staffing Our Teams

- Volunteer Members
- Each District organizes a team
- Central Office organizes teams
- Part 107 encouraged
- Non-Part 107 can spot



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15

15

FDOT Drone Response Team Training



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16

16

Where are we going?

We are looking to establish a more formal program.



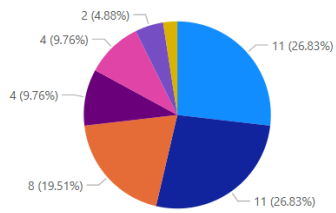
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17

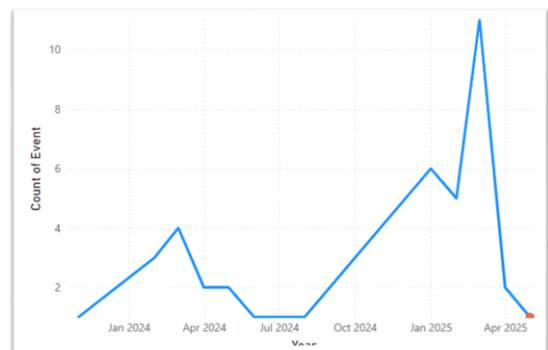
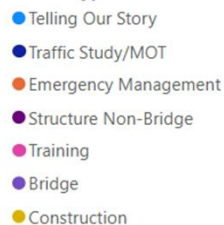
17

Missions in District 4

Count of Event by Missiontype



Missiontype



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18

Flying for FDOT

Section 934.50 of the Florida Statutes mandates that governmental agencies can only use drones from manufacturers that meet specific security standards.

These standards are outlined in **Florida Administrative Code Rule 60GG-2.0075**.

It is the responsibility of the Consultant to ensure that they also comply with these requirements.

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19

Questions/Discussion



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20

Safety Message

Don't skip the basics...

- ✓ Pre-Flight Safety Check every time before launching
- ✓ Confirm battery health/charge
- ✓ Update Drone Firmware
- ✓ No sustained flight over traffic or people



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21

21

Contact Us



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22

22

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 Please be sure to **certify your attendance** before leaving this event or no later than **Monday, June 30**, in order to receive PDH/CEC. Detailed instructions are available on the Transportation Symposium website.

Transportation Symposium Website

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