



FPL®

FPLAir Storm Operations

Eric Schwartz

Florida Power and Light Company

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The FPL Air team leads a variety of drone operations that provide valuable information to teams



Under 55lb Operations

Crewed Flight
Ops

Drone in the
Box Ops

FPL Air
One

NEER
LIDAR

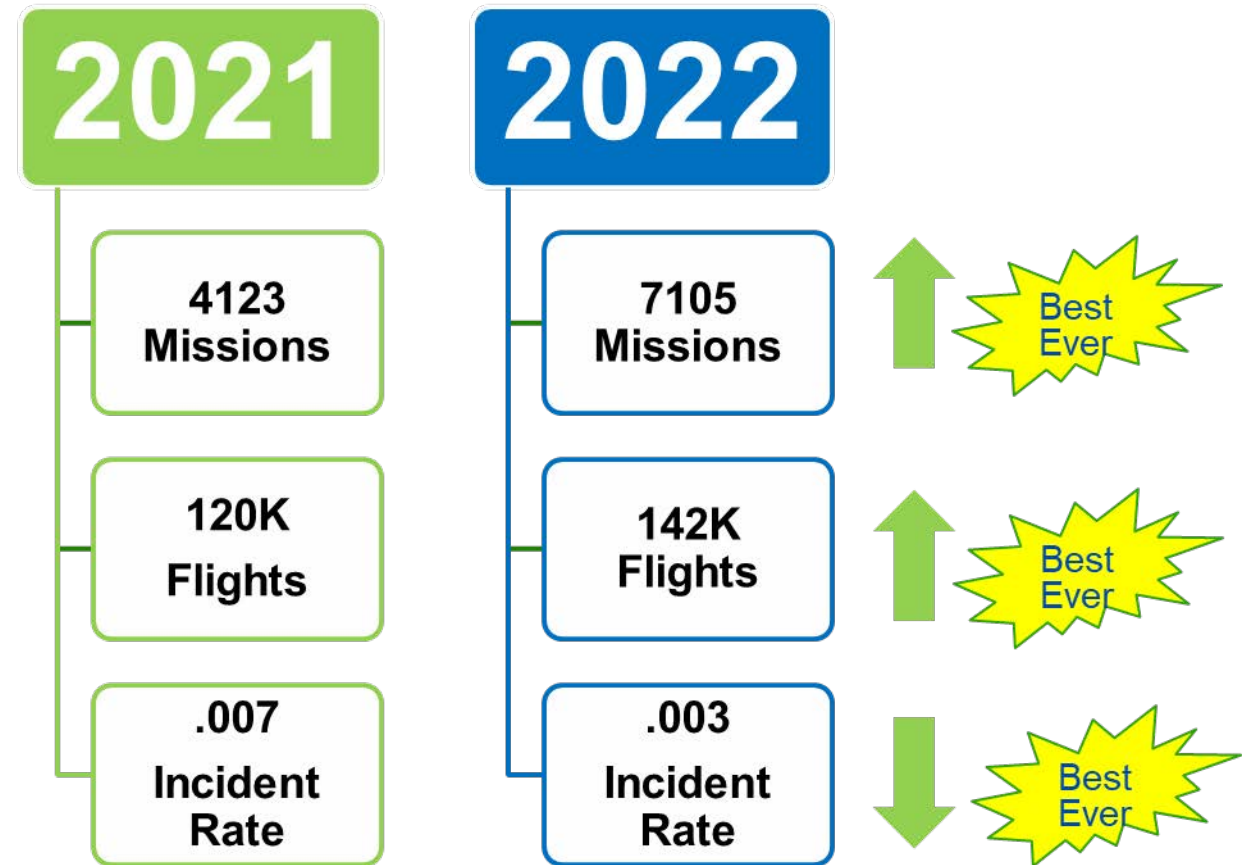
Image
Recognition

Machine
Learning

Blue Sky operations have increased yearly since 2018

Operations Strategy

- ▶ **FPLAir Blue Sky Team**
 - » NEE drone training program
 - › Ground school/flight School
 - » Mission Scheduling
 - › Receiving and assigning missions from customers
 - » Mission review and approvals
 - › “Air Traffic Control”
 - » Safety and regulatory tracking of all flight operations



FPLAir is averaging around 50+ missions a day. With an average of 15 flights per mission, we are overseeing about 500 flights a day

The FPL Air Command Center provides visibility for all drone operations



FPL partnered with the FAA for the company's Safety Plan Program (PSP)

► Operations

- » Critical infrastructure inspections and storm response events

► Integration Goals

- » BVLOS
- » Ops over people
- » One pilot to many UA's
- » Highly automated operations

► PSP Extension

- » FAA has extended the PSP by three years to continue moving projects forward



FPLAir provided valuable insights during storm response

UAS pilot deployment strategy

- ▶ **20+ team members supporting deployment**
 - » Incident Commander, FAA Compliance, Ops Lead, Service Leads
- ▶ **Up to 300 UAS Pilots ready for deployment**
 - » Pre-deployed to expected areas of impact
- ▶ **Supporting Multiple Business units**
 - » Transmission/Substation
 - » Distribution
 - » Vegetation
 - » Marketing & Communications
- ▶ **New use cases implemented**
 - » Staging site scans for insurance
- ▶ **Standard staging site support (Distribution)**
 - » 2 drones for distribution
 - » 1 drone for vegetation
 - » 1 drone for local staging site support



The top ways a UAS Pilot can assist during a storm

1. Assessment at storm landfall location
2. Pre and post storm landfall CA flights (vendor pilots)
3. Navigating flooded areas
4. Accessing damage to facilities due to tornadoes
5. Aerial images of any single transmission/substation structure
6. Any multiple distribution pole failure location
7. Imagery of high vegetation areas
8. Identifying issues at critical crossings (i.e. rivers, intercoastal, highways, etc.)
9. Navigating inaccessible areas due to road washouts, trees on road, etc.
10. Visual verification of major debris areas identified by media

FPLAir



Drone video can be live streamed while communicating with the drone pilot

FPL conducted significant drone flights following Hurricane Ian

Small Drone Deployment

- ▶ 66 Drone pilots deployed
- ▶ 50,000+ Images (Irma had 10,000)
- ▶ New Business Cases
 - » 117 substations flown within 24 hours
 - » 23 miles of inaccessible transmission structures flown



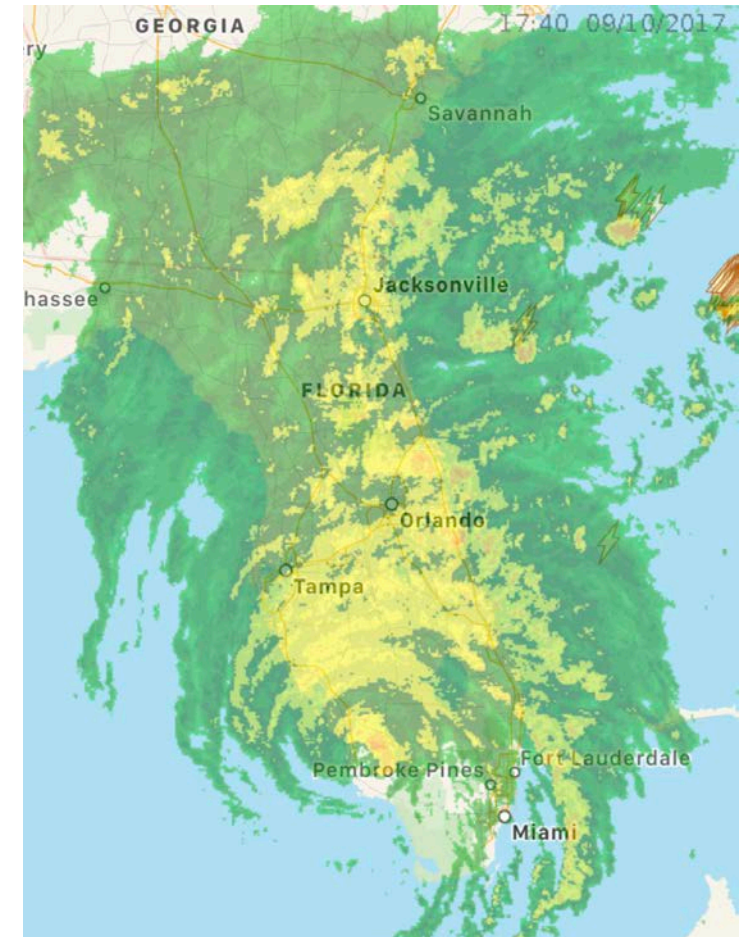
The Why...

Summer 2017

- ▶ 69 total UAS flown
- ▶ 73 total people engaged
- ▶ 1,325 flights flown

- ▶ Average flight time was 13 minutes
- ▶ 286 hours of flight time

- ▶ 7,000+ pictures taken
- ▶ 500+ videos taken

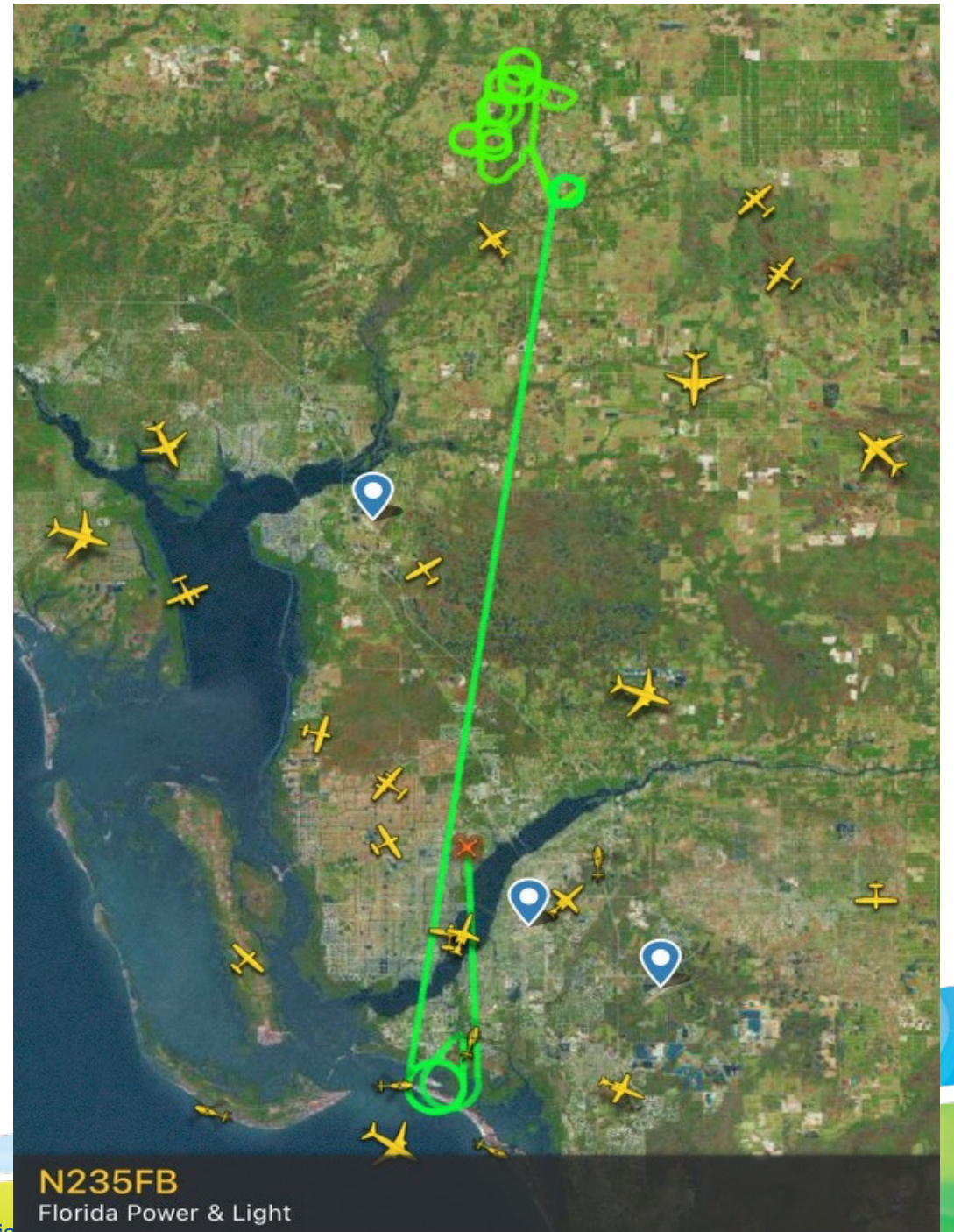


FPL conducted the first-ever operational flight of FPLAir One

- ▶ Obtained first approvals by FAA for commercial drone use of this size for disaster response
- ▶ Seven missions flown
- ▶ Flight hours: 24.5
- ▶ Total distance flown: 2,249



Hurricane Ian



FPL conducted the first-ever operational flight of FPLAir One



An aerial night view of Earth from space, showing the curvature of the planet and a dense network of city lights across a continent. The lights are concentrated in a large, dark landmass, likely North America, with a bright, glowing coastline. The surrounding oceans are dark, and the atmosphere is visible as a thin, light blue layer at the top of the frame.

FPL *Air*