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Unmanned Aircraft System Program Update

State Transportation Board Intermodal Committee

Presented by:
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Division of Intermodal
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Federal Aviation Administration (FAA) Unmanned Aircraft System (UAS) Policy

- FAA adopted UAS Regulations in August 2016
  - Regulations for commercial uses of drones over .55lbs
  - Regulations for hobbyist use
- Planned update 2020
- Including Georgia, 23 states have implemented UAS policies

Phantom 4 Quadcopter
(Most GDOT UAS vehicles are this type)

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UAS Policy

- Adopted November 7, 2017
- Ensures compliance with FAA Rules and Regulations
- Consistency in uses and documentation, and assure safety
- Requires licensing of UAS Pilots
- FAA registration of UAS aircraft
- Sets minimum FAA compliant flight requirements

Standard Operating Procedures

- UAS purchase process
- Training process
- Remote pilot in command and visual observer requirements
- Pre and post flight operation requirements and inspections
- Flight documentation

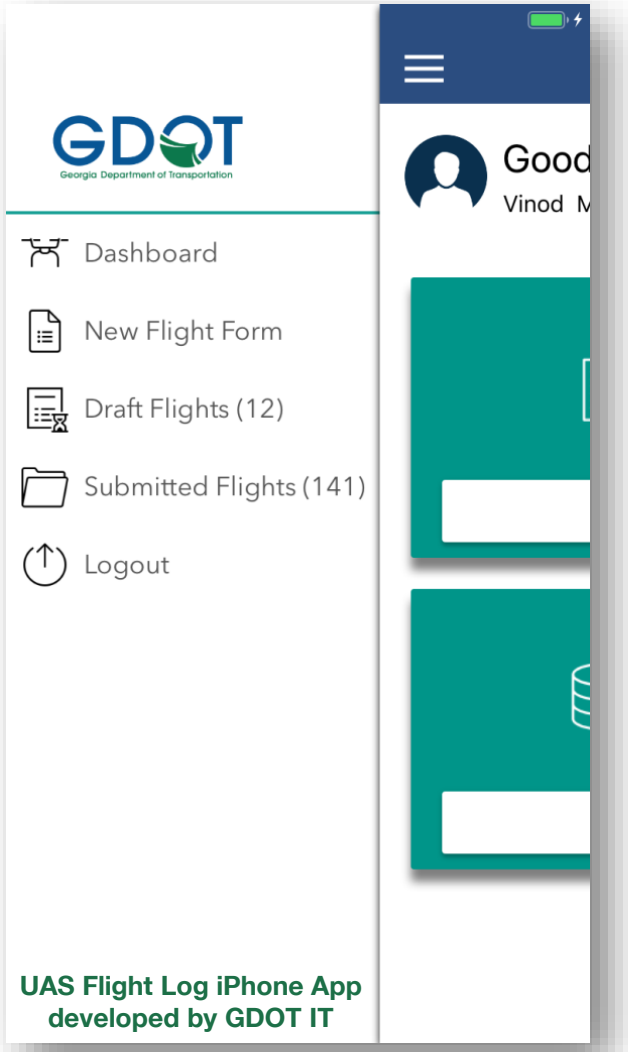
FAA Limitations/Restrictions on UAS Use of Airspace

- Cannot fly within 5 miles of an airport without prior notification to airport and air traffic control
- Must keep the aircraft within sight
- Maximum altitude of 400 feet
- Maximum speed 100 mph
- May not fly over people, traffic, stadiums and sporting events

Source: FAA

FY 19 Accomplishments

- Received FAA Authorizations for simplified approval to fly in controlled airspace during emergencies
- Implemented pre & post flight reporting mobile phone app
- Implemented contract requirements for contractors using drones on GDOT projects
- Developed and implemented training for GDOT UAS pilots including visual observer & night operations
- Expanded UAS use at GDOT



UAS Flight Log iPhone App developed by GDOT IT

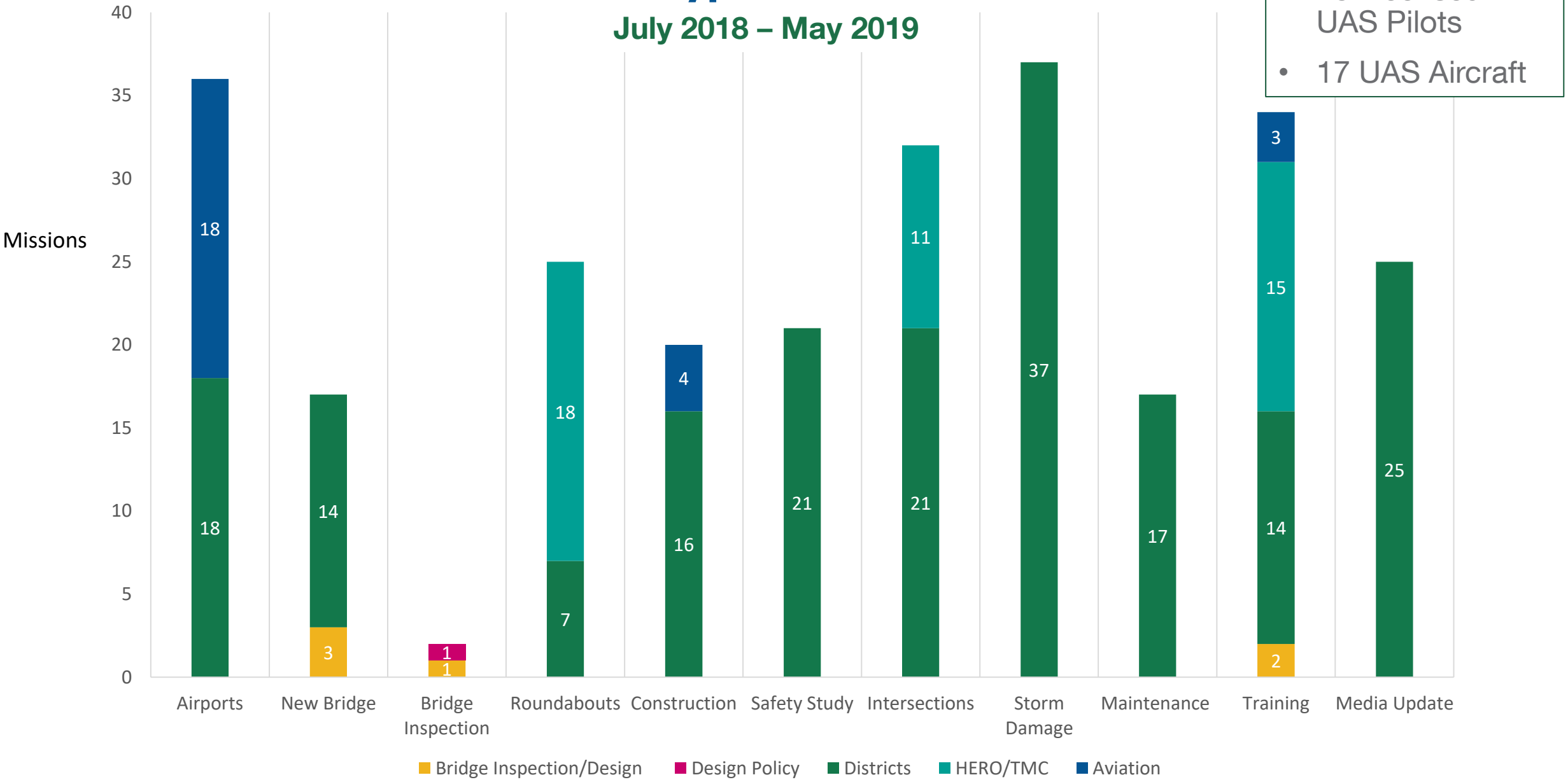
Current Uses

- Traffic operations, bridge maintenance, operational issues
- Project documentation and imagery
- Emergency conditions assessment
- Bridge inspection and safety studies
- Traffic operation and congestion studies

UAS Mission Types and GDOT Offices

July 2018 – May 2019

- 18 Licensed UAS Pilots
- 17 UAS Aircraft



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Project Documentation

I-16 @ I-75 Interchange Macon, GA

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Emergency Condition Assessment

Hurricane Michael Recovery

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Incident Management

Rockslide in White County

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Bridge Inspection and Safety Studies

Hurricane Irma, Sidney Lanier Bridge

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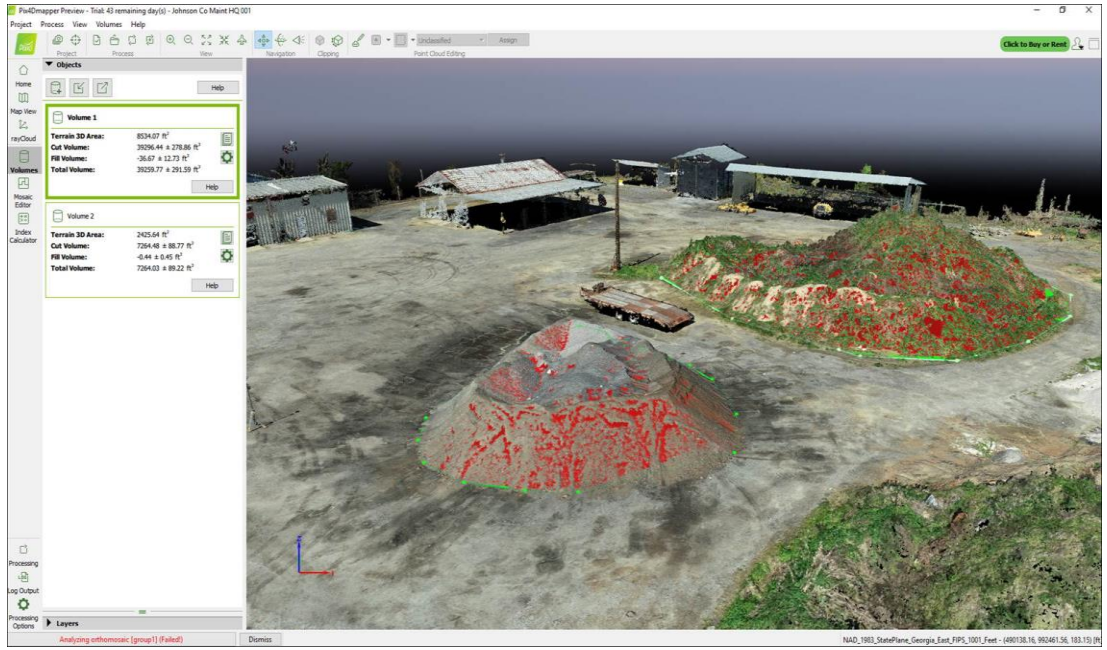
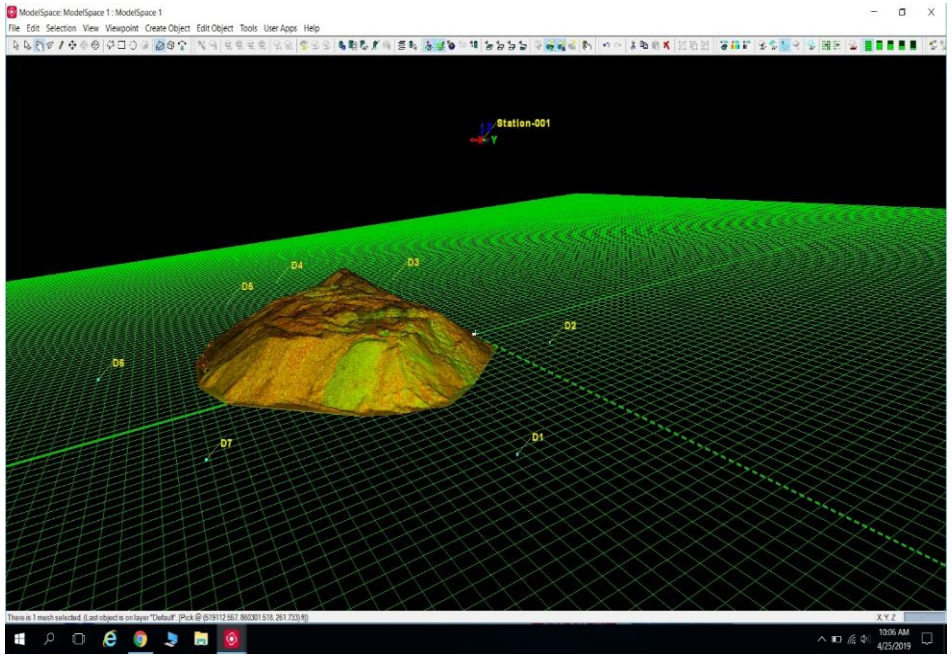
Potential Uses for UAS

- Visualization and volume estimates of material or obstructions to be removed
- Pavement condition monitoring
- Project mapping to reduce survey time/cost
- LIDAR mapping for survey data

Material Volume Measurements



UAS Survey map and volume estimate



LIDAR map

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Questions?