What Will the Skies of the Future Look Like?

• Moderator:
  • Heather Hasper, Senior Aviation Planner, DHJ Alaska

• Speakers:
  • Bobby Walston, Director of Aviation, North Carolina Department of Transportation
  • Matt Metcalfe, Managing Director, Deloitte
What Will the Skies of the Future Look Like

National Governor’s Association Transportation Technology Workshop
Washington, D.C.

Bobby Walston, P.E., Aviation Director, North Carolina Department of Transportation
June 4, 2019
Kitty Hawk, N.C., December, 17, 1903

Wilbur and Orville Wright complete the first sustained powered flight in a heavier-than-air machine.
NCDOT UAS Program Goals

**UAS Innovation** – Creating knowledge and integration of UAS technologies for public and private use and benefit.

**UAS Safety** – Providing the nation’s safest environment for drone operations.

**UAS Government Integration** – Maximizing state and local agency use of UAS technology to improve public services and operations.

**UAS Economic Development** – Developing a world-leading UAS economy.
UAS Knowledge Test & Permitting

• First and only state to have a UAS commercial and government permitting program
• Required by NC General Statute
• Must pass Knowledge Test to obtain permit
• Entire process online
FAA UAS Integration Pilot Program
One of 10 U.S. teams selected to pilot UAS use cases
NCDOT UAS Integration Pilot Program

- **FIRST:** Medical package delivery over people (August 2018)
- **FIRST:** Routine commercial medical package delivery over people (March 2019)
- **FIRST:** Routine food package delivery (Coming Summer 2019)
- **FAA ADDED:** Transportation infrastructure inspection (Fall 2018)
North Carolina’s First Coordinated Drone Support of Disaster Emergency Response
Disaster Response Results

- **Missions**
  - 15 drone teams
  - 260+ missions
  - 8,000+ videos and images
  - Live streaming of real-time data to emergency responders
  - 7 supported agencies (NCDOT, NCDPS, NCDEQ, N.C. National Guard, U.S. Coast Guard, FEMA, and FAA)

- **Recognition**
  - Major national/international media coverage and government/industry presentations
  - 2019 AUVSI XCELLENCE Humanitarian Award
Post Hurricane Drone Video
Vision: NCDOT maximizes the use of UAS or drones to improve project delivery and operations while enhancing safety and saving tax dollars.
NCDOT Integration Components

- Policy
- Promoting and supporting drone use across NCDOT
- Providing operator training and certification
- Advising procurement
- Providing fleet management
NEXT STEPS
Unmanned Traffic Management
Urban Air Mobility (UAM)

- Infrastructure Inspection
- Routine Medical Package Delivery
- Routine Food/Parcel Package Delivery
- Unmanned Traffic Management
- Autonomous Ambulatory Services
- Single Pilot Cargo Aircraft
- Unmanned Cargo Aircraft
You’re Invited!

North Carolina Drone Summit & Expo

- Inaugural Summit in 2018
  - 400+ attendees
  - Industry and government leaders presented
  - Flight demos and exhibitors

- 2019 Summit: Aug. 11-13
  - Defense industry focus
  - Grandover Resort and Conference Center, Greensboro, N.C.

www.ncdronesummit.com
North Carolina: Forever First in Flight

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