



NORTH CAROLINA

Department of Transportation



NCDOT UAS Update

Ben Spain
June 23, 2021



Overview

- Who we are
- What we offer
- What's next



Who are we?

- NCDOT – Division of Aviation
- UAS Specialists
 - Air Force pilot & computer scientist
 - Photogrammetrist & drone pilot specialist
- Standup ops center in case of disaster
- Day job: integrate drones at DOT and across NC

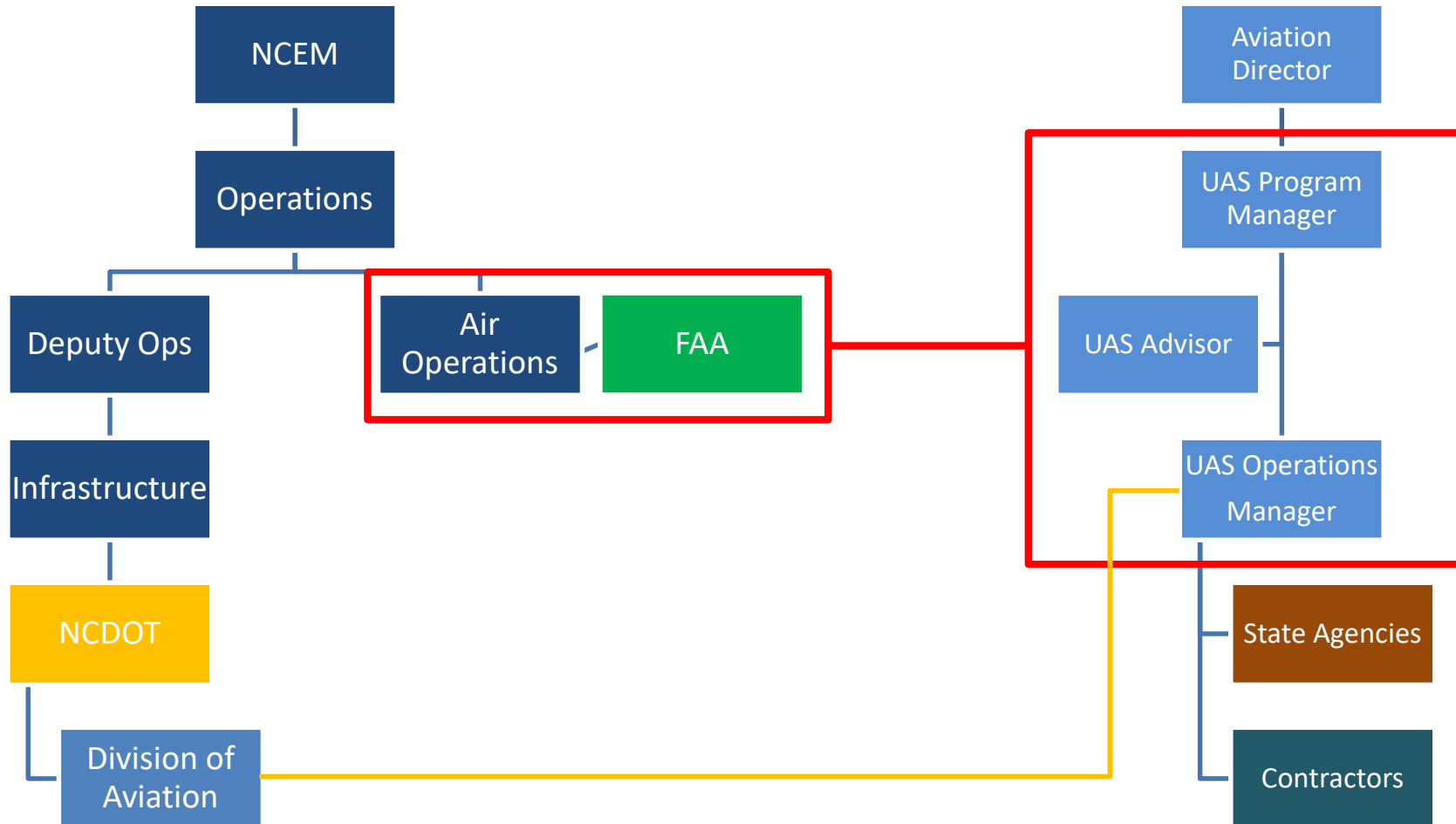


UAS Program Office Roles

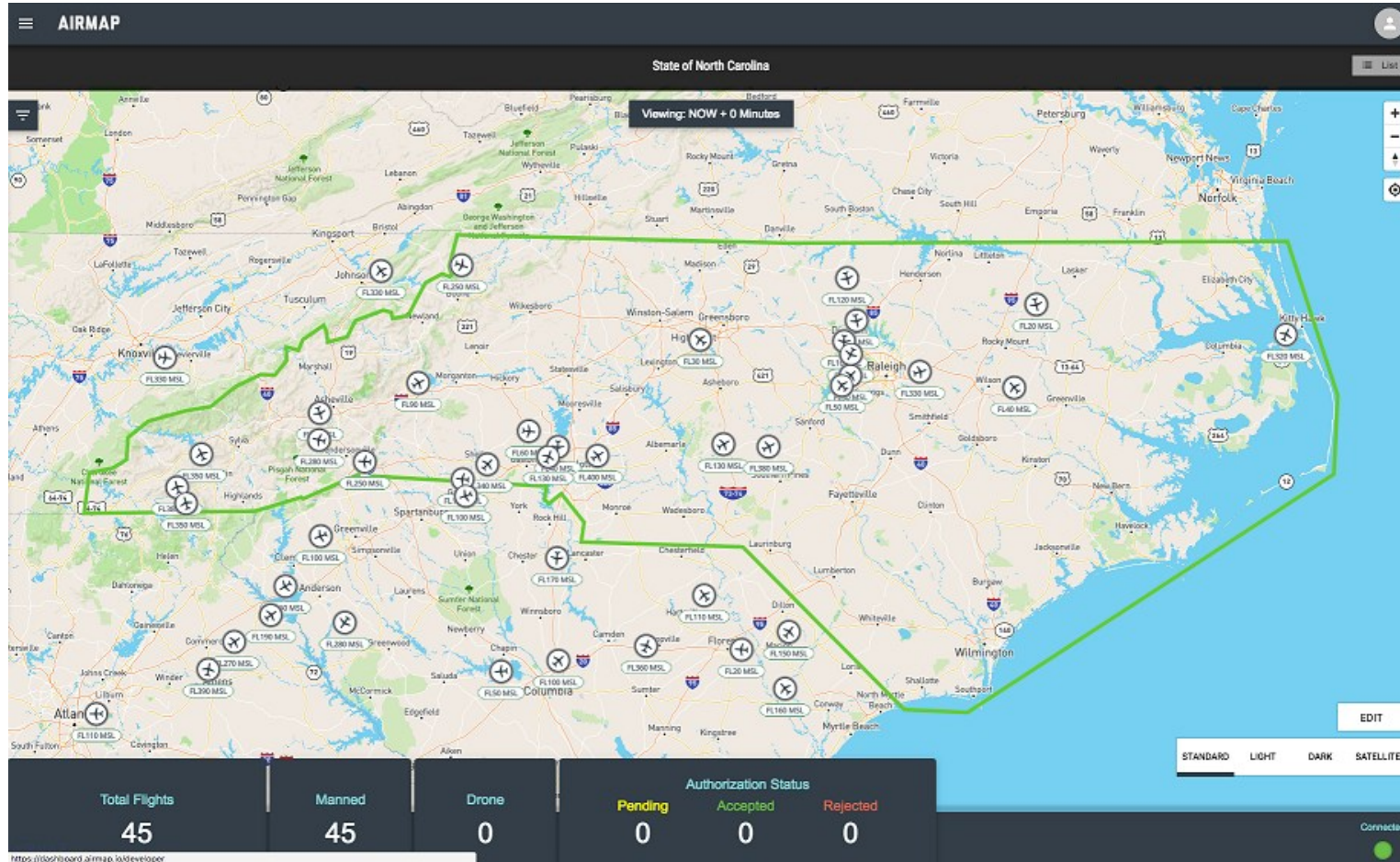
- **Advise** the Air Ops Coordinator and SERT on UAS matters
 - Appropriate use cases
 - Manned/unmanned deconfliction
- **Manage** UAS operations
 - Intake mission requests, assign to teams, track to data delivery
 - Aid UAS teams as required



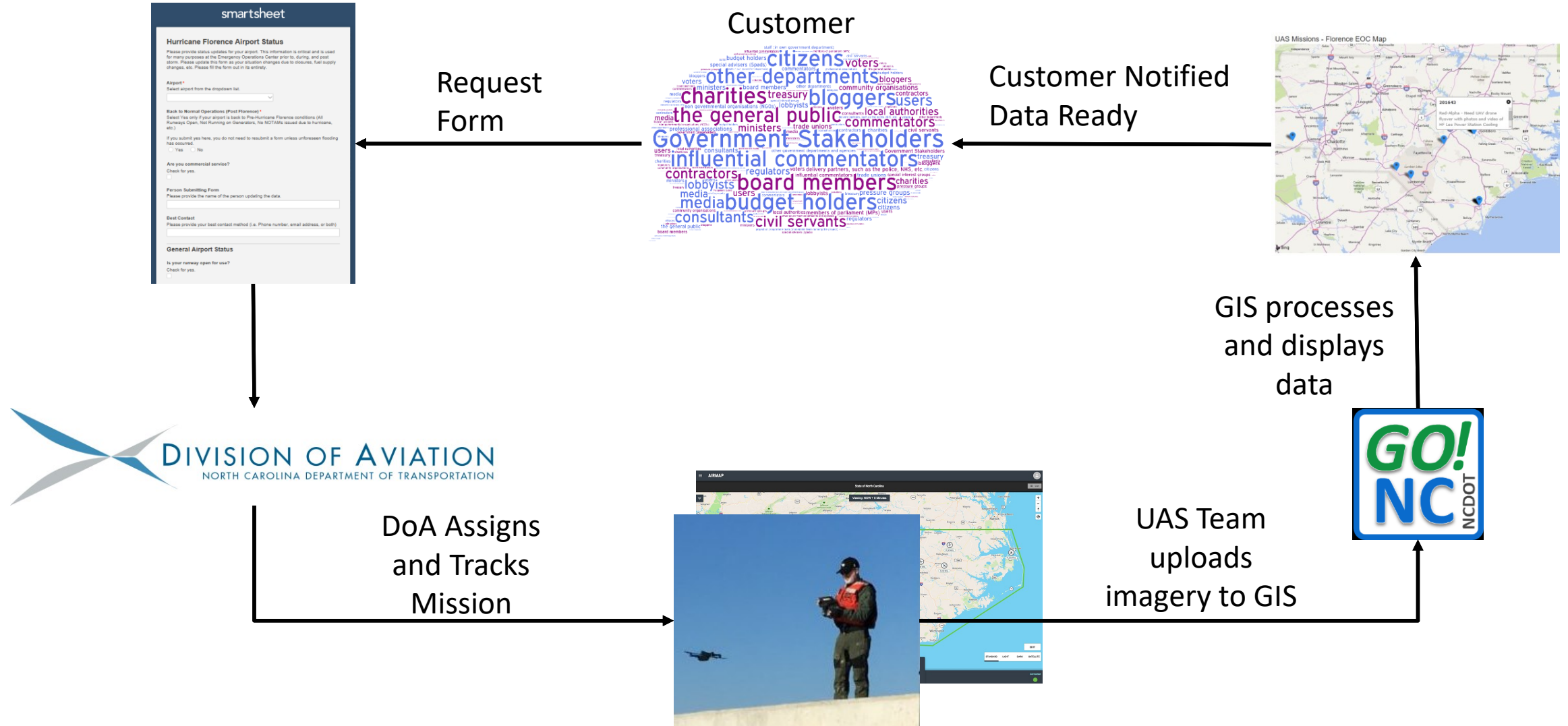
NCEM & NCDOT UAS Response Team



Unmanned Traffic Management



UAS Mission Workflow/Process

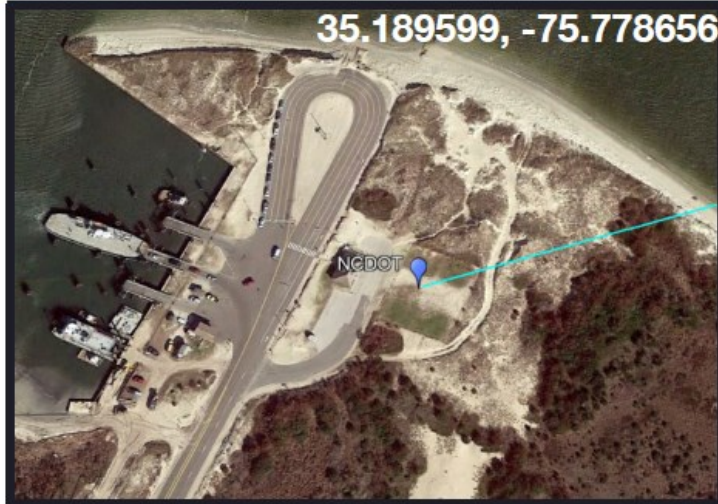


What's next?

- OBX BVLOS waiver w/ Volansi approved today
- Enables long-range ISR and package delivery between Hatteras and Ocracoke



35.189599, -75.778656



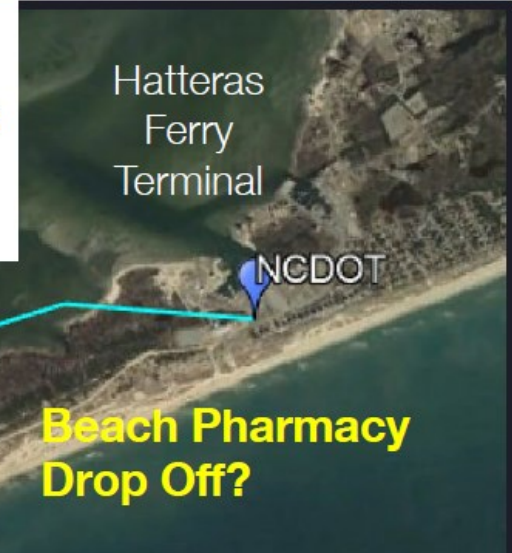
Benefit:

The current ferry route from Hatteras to north Ocracoke follows channels that are regularly dredged. Storm surge can shift sand within the Hatteras Inlet. Using a UAS public safety agencies and deliver critical supplies (medicine, parts, etc...) to the island quicker than the ferry and cheaper than a manned aircraft.

Hatteras Ferry Terminal

Beach Pharmacy Drop Off?

NCDOT

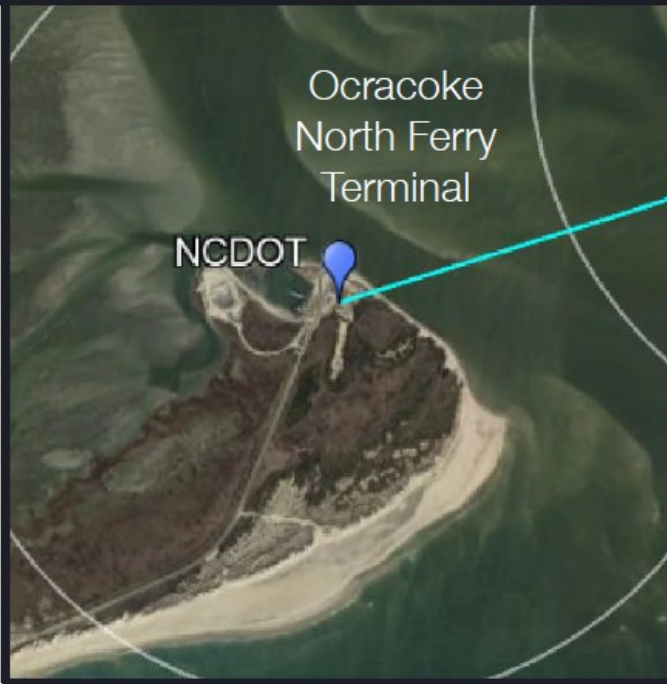


3.9 NM

Ocracoke North Ferry Terminal

NCDOT

Visual Observer (1 SM VLOS)



35.206692, -75.702568



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2021 TerraMetrics

Questions?