

Aeronautics Division Report to the MassDOT Board

March 20, 2024

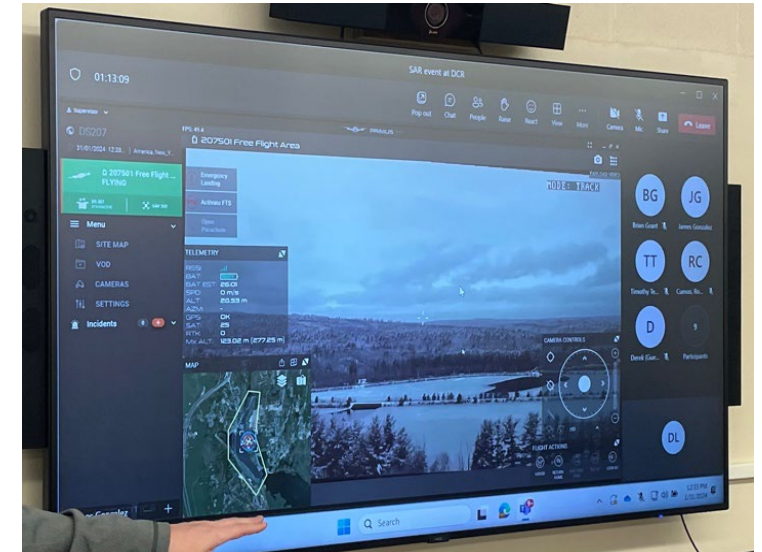


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Search & Rescue Demonstration

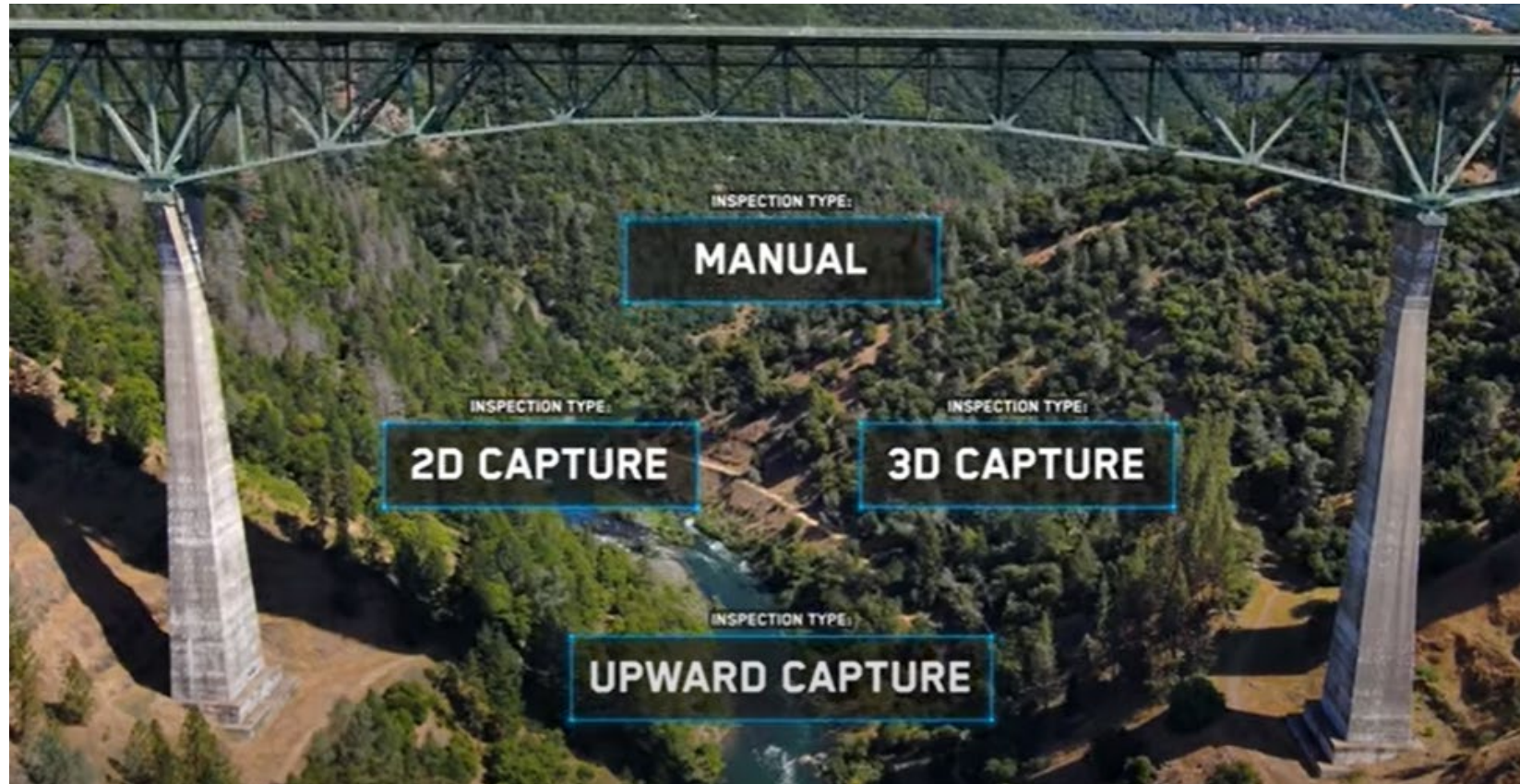
"Drone in a Box" Demonstration Missions Conducted by American Robotics (AR)



- "Drone in a Box" pilot program
- AR holds simulation exercise with DCR to prove Search & Rescue capabilities
- Lessons learned

MassDOT Highway Bridge Inspector Drone Training Program

Aeronautics Division Partnership with Endicott College & MassAutonomy



Objective: A comprehensive approach to UAS utilization at MassDOT to enable safe and efficient UAS upskilling training to support the existing bridge inspection program

MassDOT Highway Bridge Inspector Drone Training Program Cont'd

Aeronautics Division partnership with Endicott College & MassAutonomy

Training Program Topics

(CBT, Exercises, Classroom, Simulator, Field, Testing, Check Ride)

FAA Regulations & Airspace Overview

Collecting UAS Photos and Videos

MassDOT Drone Regulations & Policy

Introduction to Complex Operations

Basic Flight Instruction

Ethical UAS Operations

Mission Planning

Data Management & Indexing

Collecting Geographic Data

Drone Program Management

Inaugural Cohort: 12 Highway Bridge Inspector Trainees

Kick-off: 2 Feb 2024 – Graduation: 7 June 2024

Future training will expand beyond bridge inspectors to other state and quasi-state agency operators

Capital Improvement Planning Process

FY 2025 – FY 2029 Capital Improvement Planning is Well Underway



- Capital planning is a collaborative process
- Emphasis is placed on addressing safety, environmental, and design standard deficiencies
- Selected projects are prioritized and programmed into the FAA and MassDOT' CIP

NASAO Legislative Conference – Washington D.C.

National Association of State Aviation Officials Members Meet to Discuss Aviation Priorities

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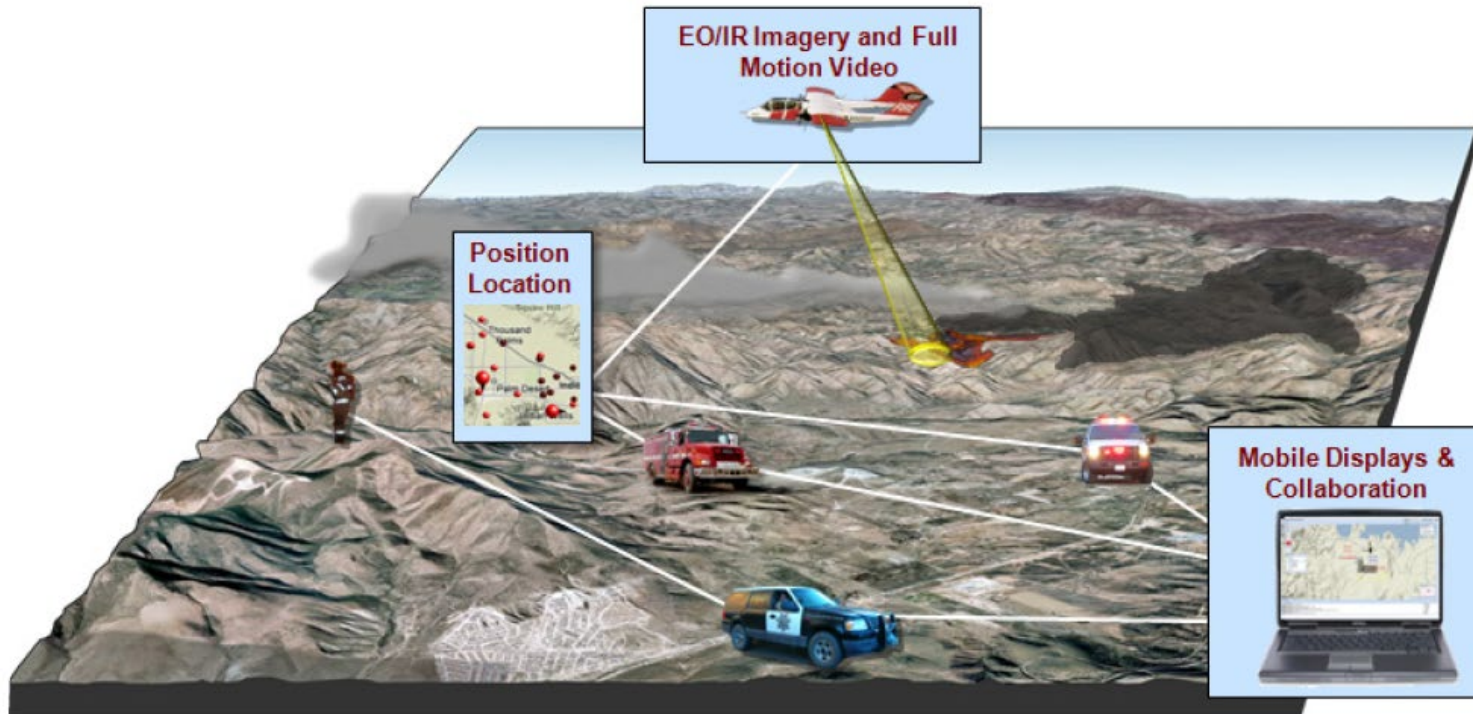


- Congress working to enact a new long-term authorization for the FAA
- FAA Administrator, Michael Whitaker, addressed attendees on top FAA priorities
- 2024 AASHTO Council on Aviation Legislative Roundtable

NATO SPS: Next-Generation Incident Command System

DHS Science & Technology, MIT Lincoln Laboratory, NATO, Bosnia & Herzegovina, & Aeronautics

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- The Next-Generation Incident Command System (NICS) for NATO Members and Partner Countries
- Aeronautics Administrator, Dr. Jeff DeCarlo, addresses *"The Role of Technology in Civil Protection: Strengthening National Resilience"*



Figure: NICS combines sensors with communications and visualization technologies in a net-centric architecture to enable real-time, shared situational awareness during response operations

Thank You

