



Virginia Institute for Spaceflight & Autonomy (VISA) at Old Dominion University

AUVSI-HR Advanced Air Mobility Exposition 2023
AAM Academic Research Across the Commonwealth

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Located on the Eastern Shore of Virginia, VISA is chartered to grow the spaceflight and autonomy sectors in the region, and across the Commonwealth through:

- Building partnerships with industry, academia and government,
- Developing a talent pipeline,
- Conducting Sponsored/Directed applied research and technology, and
- Leveraging the expanding space facilities and growing capability to support advances in satellites and autonomous systems, the sensors they carry, and the data they produce

Igniting Growth, Talent and Innovation on the Eastern Shore and Hampton Roads





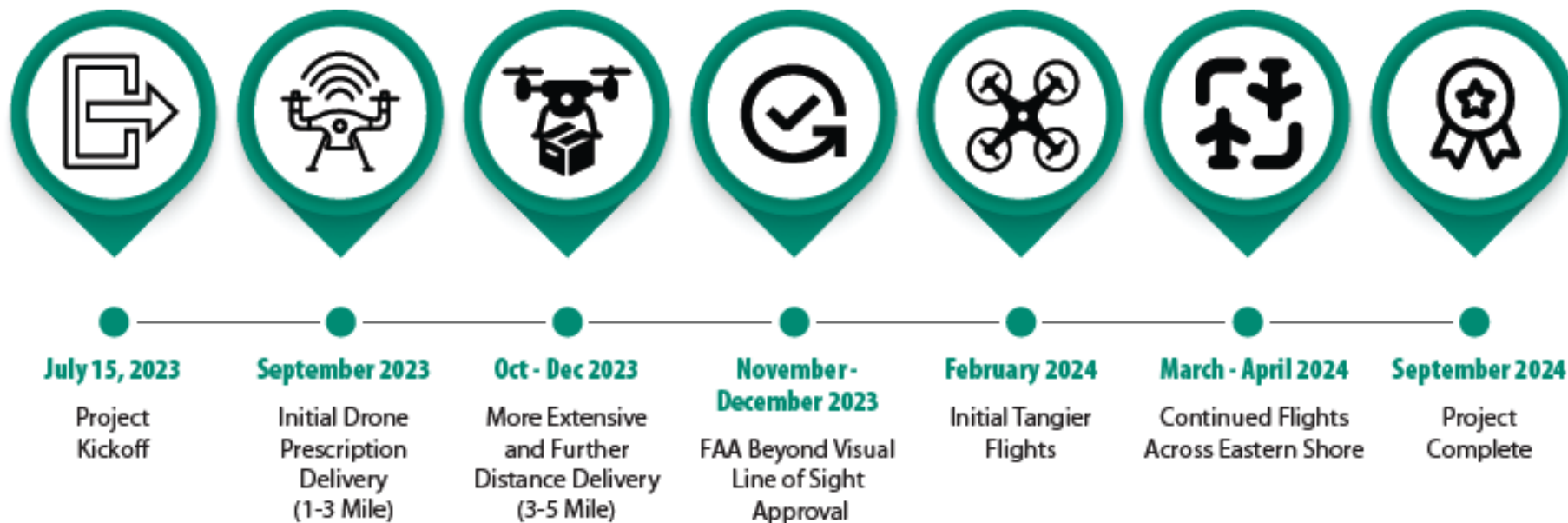
VISA Current “AAM” Activities

- DOT SMART Grant for Medical Package Delivery
- Eastern Shore BVLOS Corridor Planning
- UxS Port Security & Emergency Response
- Partnered with City of Norfolk to develop a commercial Maritime Autonomous System Test site at Willoughby Bay targeted for early 2024 (owned by city and operated by VISA/ODU)



DOT SMART Grant for Medical Package Delivery

TIMELINE

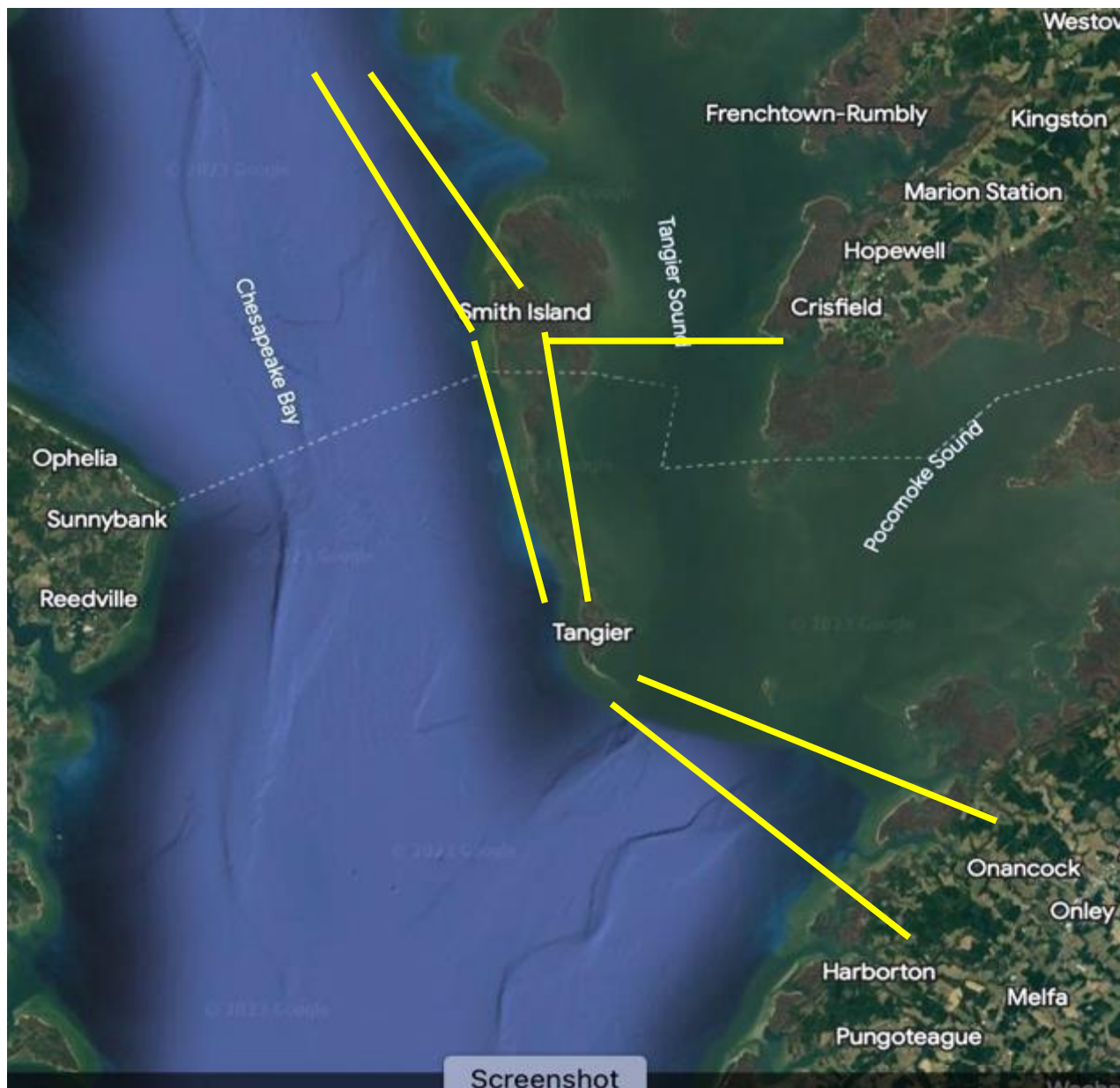


Mod/Sim and Health Informatics activity being conducted in parallel to help assess effectiveness in terms of business case and patient outcomes



OLD DOMINION
UNIVERSITY

Eastern Shore BVLOS Corridor Planning



- Leverages DOT SMART Grant Medical Package Delivery Project by:
 - Providing key information to feed the FAA waiver and COA process
 - Evaluating Command, Control & DSA
 - Evaluating current and historical (ADS-B Data) Drone/Aviation ops in the region
- Looking at both operational applications and R&T
- Collaborating with University of Maryland (UROC, St Mary's County) and University Maryland Eastern Shore (UMES) for multi state corridor.
- Together with VIPC, we are currently collecting data and evaluating low-cost scalable Air Volume Awareness Architectures

UxS Port Security & Emergency Response (PS&ER)



- Partnered with the Unmanned Systems Center at VIPC and VDEM to identify/fund Virginia companies to conduct demonstrations of port safety/security relevant systems (2022-2023)
- All 5 PS&ER Demos considered a success in demonstrating initial feasibility in solving key challenges within the Port
- Working with VIPC and Users of Port to enable additional funding opportunities to solicit new technologies and extend the operational uses of these validated concepts
- Beginning to discuss the next “Challenge Area” for the Region





Other ODU Main Campus “AAM” Activities

- Marine/Coastal Science and Research
- sUAS Capstone Projects (partner with AeroVironment)
- New Institute for Autonomous and Connected Systems (IACS)
- Certificate Program – Design, Development, and Operations of Uncrewed Aerial Systems (under Development)
- Interdisciplinary Minor – Uncrewed Systems Design & Development

