

## Airspace study shows favorable conditions for medical drone deliveries between Virginia Eastern Shore and Tangier Island

Data-driven analysis of historical aerial traffic and density along the proposed route confirms the region's suitability for pioneering drone operations.

RICHMOND, VIRGINIA, UNITED STATES, December 13, 2023 /

EINPresswire.com/ -- A comprehensive airspace analysis is making the safety case for seeking Federal Aviation



Administration (FAA) approval for Elevating Health Care Access (EHCA) to operate beyond line of sight medical drone deliveries between the Virginia Eastern Shore and Tangier Island in the Chesapeake Bay. The initiative is supported by the Virginia Innovation Partnership Corporation (VIPC), the Virginia Institute for Spaceflight and Autonomy (VISA) at Old Dominion University,

"

Virginia has been a trailblazer in developing innovative drone applications to serve the citizens of the Commonwealth. We're pleased the URSA study shows the delivery route is safe and efficient."

Tracy Tynan, Director, The Virginia Unmanned Systems Center at VIPC DroneUp, Riverside Health System, and the Accomack-Northampton Planning District Commission.

Unmanned Systems Robotics Analysis, Inc. (URSA) conducted the study of the planned operation area by examining airspace considerations, special use airspace, proximate aerodromes and a series of other diverse factors to evaluate operational risk. The approach closely follows the FAA's guidance for Safety Risk Management (SRM) used to evaluate unproven drone operations for waiver or authorization approval. The full study is located on <a href="https://www.VIPC.org">www.VIPC.org</a>.

"The proposed medical drone delivery route from the Virginia Eastern Shore to Tangier Island is a data-driven,

risk mitigation-based scenario, balancing strong public need with low operational risk," says David Kovar, the CEO of URSA and one of the study's authors. "We appreciate the opportunity to work with Virginia to advance the state of the art for developing supporting materials for FAA

waiver applications."

Utilizing Automatic Dependent Surveillance-Broadcast (ADS-B) data from January 2022 to December 2022, the study also analyzed historical aerial traffic and density. Aircraft equipped with ADS-B automatically transmit their position for accurate airspace awareness.

According to the study, the area is largely devoid of aircraft below 400 feet and complicating airspace or operational factors, thereby reducing overall risk. It also says risk could be further mitigated by primarily navigating over farmland and the Chesapeake Bay to avoid populated areas and ground hazards. The region's generally flat geography, absence of relevant terrain obstructions, and the relatively mild climate with average temperatures above freezing collectively provide favorable conditions for routine drone operations.

"Virginia has been a trailblazer in developing innovative drone applications to serve the citizens of the Commonwealth," says Tracy Tynan, director of the Virginia Unmanned Systems Center at VIPC. "We're pleased the URSA study shows the delivery route is safe and efficient, and that it recognizes Virginia as an ideal location for drone deliveries because of its robust economy, suitable topography and favorable weather conditions."

EHCA successfully launched in October, employing drone technology to enhance healthcare accessibility by delivering medications directly to patients within a two-mile radius of the Riverside Shore Memorial Hospital on the Virginia Eastern Shore. Funded through the U.S. Department of Transportation's SMART Grants Program and supported by a \$75,000 grant from VIPC, the project aims to expand its operations to Tangier Island next year.

"The proposed medical drone delivery route to Tangier Island addresses public needs while demonstrating a harmonious integration of technology and safety," says John Costulis, deputy director of VISA. "This data-drive airspace analysis was done in a way that is familiar to the FAA so that it might become a standard approach for providing data in support of drone delivery waivers."

About Virginia Innovation Partnership Corporation (VIPC) IVIPC: Connecting innovators with opportunities. As the nonprofit operations arm of the Virginia Innovation Partnership Authority (VIPA), VIPC is the commercialization and seed stage economic development driver in the Commonwealth that leads funding, infrastructure, and policy initiatives to support Virginia's innovators, entrepreneurs, startups, and market development strategies. VIPC collaborates with local, regional, state, and federal partners to support the expansion and diversification of Virginia's economy.

Programs include: Virginia Venture Partners (VVP) | VVP Fund of Funds (SSBCI) | Virginia Founders Fund (VFF) | Commonwealth Commercialization Fund (CCF) | Petersburg Founders Fund (PFF) | Smart Communities | The Virginia Smart Community Testbed | The Virginia Unmanned Systems Center | Virginia Advanced Air Mobility Alliance (VAAMA) | The Public Safety Innovation Center | Entrepreneurial Ecosystems | Regional Innovation Fund (RIF) | Federal

Funding Assistance Program (FFAP) for SBIR & STTR | University Partnerships | Startup Company Mentoring & Engagement. For more information, please visit <a href="www.VirginialPC.org">www.VirginialPC.org</a>. Follow VIPC on Facebook, Twitter, and LinkedIn.

About URSA Unmanned Robotics Systems Analysis, Inc. (URSA) is dedicated to creating software and systems that enhance safety and security across various domains, including air, land and sea. URSA's Airspace Awareness Platform specifically delivers crucial insights into unmanned systems activity, playing a pivotal role in ensuring safety and security on the ground and in the sky. More information is available at <a href="https://www.ursasecure.com">www.ursasecure.com</a>

About VISA The Virginia Institute for Spaceflight and Autonomy (VISA) at Old Dominion University, located on the Eastern Shore, is chartered to grow the entrepreneurial ecosystems for space flight and autonomy. The Institute is the hub to leverage Virginia's world-class assets in space launch, autonomous systems, modeling and simulation and data science to solve real-world problems, such as those being explored by DroneUp and Riverside Health. Through industry, academic and governmental agency partnerships, VISA's vision is to create an environment of research, technology, commercialization, and educational opportunities to grow the spaceflight and autonomous systems industry. For more information, go to www.visaatodu.org

Angela Costello, Vice President of Communications Virginia Innovation Partnership Corporation (VIPC) angela.costello@VirginiaIPC.org Visit us on social media: Facebook Twitter LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/673658652

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.