



Upstate Medical University Air Upstate Drone Team Conducts Its First Beyond Visual Line of Sight (BVLOS) Flight

Upstate Medical University completed a key test flight for its drone program that advances the university's goal of transporting time-sensitive materials, drugs and lab samples by drone throughout the region.

Air Upstate, the university's drone program, flew its first beyond visual line of sight (BVLOS) flight from the pilot at Oneida County's FAA-Designated New York Unmanned Aerial System (UAS) Test Site at the Griffiss International Airport in Rome, N.Y., to New York's Homeland Security Training Center in Oriskany, N.Y. on May 22. The 18.6-mile round-trip flight took 18 minutes and 20 seconds.

The flight was supported by AX Enterprize, Oneida County UAS Test Site, Causey Aviation Unmanned, Crown Consulting, and RigiTech, a leading innovator in drone technology. An Eiger drone by RigiTech was used for the flight.

The BVLOS flight advances Upstate's drone program's goal of providing on-demand transport capability for the efficient, timely, and safe transport of time-sensitive materials, drugs, blood products, and lab samples.

"There are many practical and financially sound applications for drones, but the most crucial for Upstate is the ability to expedite care for our most vulnerable patients," said Mark Zeman, Upstate's chief information officer. "Our autonomous machines department has ambitious goals, and thanks to the dedication and leadership of our team and partners, who made this BVLOS flight possible, we've achieved a significant advancement in health care using unmanned drones.

Zeman noted that drones will address the size and rural nature of the region served by Upstate by overcoming significant transport challenges in providing timely and quality care throughout the region.

"Our primary motivation for this technology is its use to enhance the patient experience, especially for those in our surrounding communities," he said.

“Causey Aviation Unmanned (CAU) is excited to work with Upstate to serve their patients in new ways. We appreciate Upstate’s commitment to innovation and leadership in healthcare,” said Jeff Causey, CEO. CAU is one of the first five UAS Air Carriers certified by the FAA.

The partnership with the NY UAS Test Site exemplifies Air Upstate’s focus on understanding and experiencing flying in airspace that includes manned aircraft using cutting-edge UAS Traffic Management (UTM) tools that provide the Air Domain Awareness for the safe separation between their drone(s) and manned aircraft.

The NY UAS Test Site is one of seven FAA-designated UAS test sites. It is the only test site at a towered airport, surrounded by Class D airspace with an FAA Certificate of Waiver or Authorization with the ability to execute simultaneous manned and unmanned operations.

The NY UAS Test Site and its UTM capabilities are managed and operated by AX Enterprize (AX), a UAS-centric technology team.

“AX is excited and honored to partner with Air Upstate’s drone delivery program and support its flight operations with advanced UTM tools that will support the safe integration of their drone delivery platform into the National Airspace System (NAS),” said AX co-owner MC Chruscicki.

Air Upstate, AX, and its partners will work with the FAA to build the safety case to enable daily BVLOS deliveries.

“This significant accomplishment paves the way for everyday healthcare drone delivery to clinics and underserved communities in a more timely and reliable manner,” said Oneida County Executive Anthony J. Picente Jr. “Upstate Medical University’s Air Upstate drone program is a recognized leader in healthcare drone delivery and Oneida County is happy to partner with them to advance the capabilities of the industry.”