NewsRelease

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NASA Enters Space Act Agreement with LONGBOW to Develop Drone Flight Research Corridors

NASA and The Longbow Group, LLC (LONGBOW) are entering a Space Act Agreement (SAA) with the intention of establishing beyond visual line-of-sight (BVLOS) flight-corridors for Advanced Air Mobility (AAM) unmanned aerial system (UAS) flight tests in Hampton Roads, Virginia.

Under this agreement, NASA's Langley Research Center (LaRC) will partner with LONGBOW on the development and assessment of a Concept of Operations (ConOps), supporting infrastructure, data sharing requirements and other factors required to conduct BVLOS operations between LaRC's City Environment Range Testing for Autonomous Integrated Navigation (CERTAIN) range and LONGBOW's Unmanned Systems Research and Technology Center (USRTC) on Fort Monroe, Virginia.

The AAM High Density Vertiplex (HDV) project is endeavoring to both prototype and assess a UAM ecosystem using small UAS (sUAS) as surrogates for larger Urban Air Mobility (UAM) aircraft. Another objective of HDV is to perform the testing, safety risk assessments, documentation, and collaboration with the FAA to enable routine BVLOS flights at NASA Langley.

"NASA Langley is pleased to collaborate with LONGBOW to develop a ConOps for a beyond visual line-of-sight corridor and potential follow-on collaboration. When implemented, these efforts will enable the UAM ecosystem prototype assessment with longer, more complex flight routes, within the HDV subproject for AAM along with establishing operational credit for an array of advanced NASA technologies," said Lou Glaab, HDV tech lead."

Other possible areas of collaborative research include UAS Traffic Management, supplemental data service providers, surveillance radars, meteorological systems, data networks, data and command & control communications.

“One major benefit will be collaborating with Raytheon and Hampton University (HU) to include radar inputs from their Skyler radar,” said Glaab. “This system will be mounted on a HU building in downtown Hampton and is designed to help enable ground-based sense and avoid, and will complement and extend our radar systems we are currently installing at NASA LaRC.”

LONGBOW consists of researchers and supporters from the city of Hampton, Virginia, Raytheon, and Hampton University.

“We are very excited about the opportunity to support this project and work with the researchers at NASA Langley in collaboration with Hampton University, City of Hampton and Raytheon” says Marco Sterk, LONGBOW’s President and CEO. “It takes a community to build a community, and that is so true when it comes to developing a local self-supporting eco-system, involving industry, government and academia.”

The inclusion of HU also enables students to be engaged with local cutting-edge sUAS research, testing and development.

“By our collaboration and support for LONGBOW and NASA we expect this project to not only help our existing local unmanned system businesses, but that it will also attract additional technology companies in the AAM market with their hi-tech jobs to come to our city,” said the honorable Mayor Donnie Tuck, Mayor of Hampton, Virginia.

For more information about Langley go to http://www.nasa.gov/langley