



Evtol drone concepts



AIAA
Joint Section Meeting
Monday, April 15, 2024



Package Delivery Drone

Ms. Vanessa Aubuchon
AIAA Distinguished Speaker
Associate Project Manager of the Transformational Tools and Technologies Project
NASA Langley Research Center
“The Next Aeronautics Revolution”

Location: **Breslin Hall, Second Floor, Room 217**
Hofstra University South Campus
Hempstead, NY 11549

RESERVATIONS REQUIRED
RSVP BY April 13, 2024
to: davidsparis@twc.com
or 516-458-8593

Time: **6:00 PM Social Time**
6:30 PM Pizza
7:00 PM Presentation

Cost for Pizza: \$7 Members and Guests
Free for Students

Imagine going home from work in a pilotless aircraft that takes off vertically from a building rooftop and transitions to forward flight to carry you out of the city to a landing pad in the suburbs. When you get home, you're too tired to cook dinner, so you order your favorite Thai food from a restaurant three miles away and it lands in your driveway fresh and hot. Later that night, you get a stomachache and order some antacids from the pharmacy down the street, which is delivered via a drone to your home in a matter of minutes. Can you imagine a world of convenience and efficiency that is enabled by ubiquitous, autonomous air transportation? We are in the middle of an aeronautics revolution right now, where those scenarios are becoming a reality. This talk will discuss the “Third Wave of Aeronautics,” which is bringing aviation to people's daily lives. NASA, alongside industry and the FAA, is developing the technologies and safety standards to enable faster local commutes, widespread package delivery, cost-effective cargo transportation to rural areas, and more routine connections between regional airports. Advanced Air Mobility targets safe, sustainable, affordable, and accessible aviation that will transform the world's transportation systems. Current manufacturer progress, new enabling technologies, and challenges to realizing this new paradigm will be described.

Vanessa Aubuchon has conducted research, guided development activities, and managed various aspects of projects and programs at NASA for over 18 years. She has an unfettered vigor for learning and development, solving problems, and improving processes. Thus, her career has been filled with experiences spanning space exploration to aviation, in multiple NASA organizations, including headquarters, in positions of researcher, project manager, systems engineer, and branch head. Ms. Aubuchon holds a Bachelor's degree, a Master's degree and is pursuing a Ph.D. in Engineering Management. She has been the recipient of the AIAA Hampton Roads Section Mitcheltree Young Engineer of the Year Award, Orion Exceptional Contribution Award, NESC, and NASA Group Achievement Awards, and multiple NASA Team Awards. She serves as honorary president of the Peninsula Engineers Council, AIAA HRS Council Member, and AIAA Region I Deputy Director for Career and Professional Development, among several other roles on boards and committees. Ms. Aubuchon is also a mother of two young boys and enjoys volunteering as judge and queuer at annual FIRST Robotics Competitions and various other local STEM events.

Directions: Breslin Hall is on the South Campus of Hofstra University in Hempstead. For directions and campus map: <http://www.hofstra.edu/directions>