

Design • Analysis • Research

**June 2021** 

### **Announcements**

## DARcorporation welcomes Ian Sheppard and Dan Hastert to our team!



lan Sheppard, a 2016 graduate of the University of Kansas, is an expert in laser trackers, single-line laser scanners, industrial robot programming, and system integration. He is a great addition to our growing team of aerospace engineers. In his first few weeks at DARcorporation, lan has been utilizing his skills testing motors and rotors as well as designing landing gear for two of DARcorporation's aircraft design projects.



Dan Hastert recently relocated to Lawrence from California. Dan is a mechanical designer and draftsman who has been utilizing his fabrication skills at DARcorporation. In addition to setting up the prototype shop, Dan has been instrumental in fabricating propellers, ducted fans, outer skins and other components for DARcorporation's UAV design projects.

## Skye-MAVRIK

DARcorporation's Skye-MAVRIK is a foam aircraft used as a testbed for wing sections and data acquisition hardware and software. The Skye-MAVRIK began as a SonicModell Skyhunter and is modified outboard of the tail booms to accommodate different wing sections and motors. This new configuration consists of five motors and propellers, four on the wing as well as the original pusher. The aircraft can be flown using the pusher alone, allowing study of the stall characteristics of the wing sections in power on and power off scenarios. These tests can be used to verify analysis done on other projects. The Skye-MAVRIK is also equipped with an avionics suite including data acquisition software and hardware, an in house developed air data boom and other test equipment. The Skye-MAVRIK has completed its first flight test, successfully flying in the pusher configuration. Future tests are planned including utilizing the blown wing configuration and performing stall maneuvers.



# **In-House Training Facility**



Coming Soon: We are excited to announce in-house training for Advanced Aircraft Analysis, FlightStream®, FAR 23 LOADS. Aircraft Performance Program SharkCAD Pro-AP. Experienced and aircraft designers with extensive software knowledge will be offering beginner and advanced levels of training as well as demonstrating new software features. facility will seat up to 12 students who will have access to their own computer. Our goal is to be fully operational by January, 2022. The training finalized as COVID-19 restrictions are lifted. Updates will be provided in future newsletters and on our website.

## **Bookstore Summer Discount!**



Receive a 20% discount on Roskam titles by using code Summer-21 at shop.darcorp.com (Exp 7/30/21)

- Airplane Design I-VIII (sold as a set or individually)
- Airplane Aerodynamics & Performance
- Airplane Flight Dynamics & Automatic Flight Controls: Parts I & II (sold as a set or individually)
- Lessons Learned in Aircraft Design







