

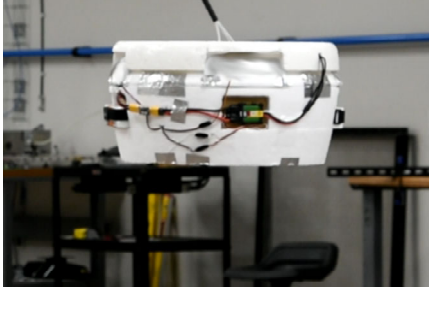
Wind Machine Analysis

DARcorporation recently completed an independent analysis of additional wind machines for Orchard-Rite, a Yakima, Washington based leader in the development of wind machines used to prevent frost damage in orchards. The velocity, mass flow rate, momentum at the blade disk and air flow rate for each of the wind machines were used by Orchard-Rite as quantifiable values to evaluate and compare the performance of various wind machines.

[Orchard-Rite Pure performance...WIND MACHINES](#)



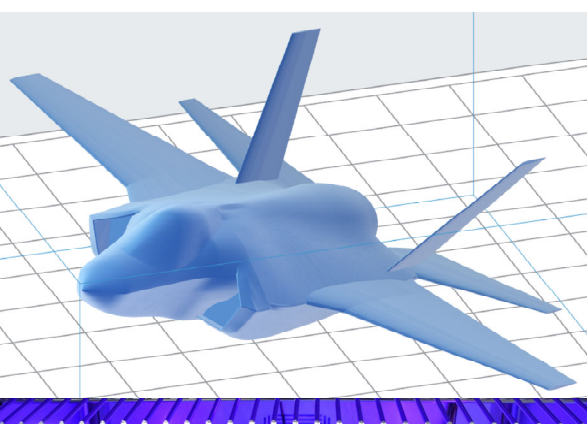
Flying Ducted Fan



The flying ducted fan is a DARcorporation designed and manufactured dual-rotor ducted fan. Using our rapid prototyping capabilities, the flying ducted fan was designed, built and flying in less than a month! It is coupled with our in-house flight control system to facilitate rapid prototyping of different conceptual aircraft designs. The primary objective of the flying ducted fan is to demonstrate the capabilities of novel control methods for VTOL transitions and develop the associated control algorithms.

[Flying Duct Test](#)

3D Printing and Rapid Prototyping Services



DARcorporation engineers are able to assist with your designs, rapid prototyping and additive manufacturing (3D printing) projects. Whether it be a new prototype or multiple models, DARcorporation has the expertise and knowledge to rapidly accelerate this process, saving time and development costs.

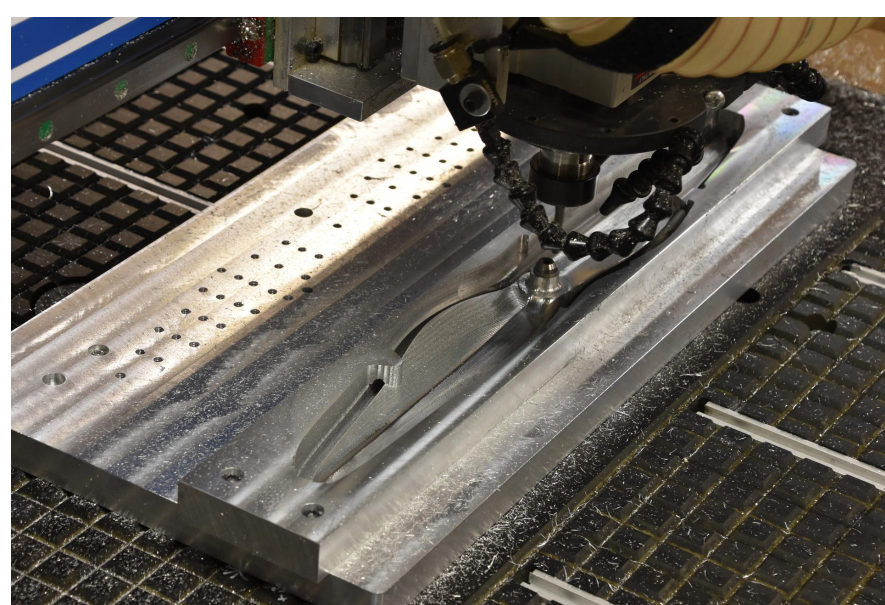
Utilizing Formlabs resin printers featuring SLA (stereolithography) technology, DARcorporation can produce functional, high-quality prototypes as well as end-use parts using industrial-quality resins from Formlabs' extensive materials library. Our SLA printers can rapidly deliver models with crisp, clean and accurate features for presentation-ready parts with a very high-quality surface finish (25 micron/0.001 inch layer resolution). The variety of available resins allows customization of the desired material properties as well as reducing the time needed to produce your model.

From manufacturing spares of your out-of-production parts to optimizing new rapid tooling jigs for injection molding, DARcorporation can assist with any of your design needs.

[For additional information and inquiries, please contact 3dprinter@darcorp.com](#)

Propeller Manufacturing

DARcorporation engineers recently added aluminum propeller machining to our manufacturing and prototyping services. The propeller shown was designed in-house and machined with the CNC router. This process allows for higher dimensional accuracy and thinner blades than can be produced with wood. This method can be used for rapid prototyping of propellers allowing short cycle times for design, manufacturing and testing which allows for production of larger diameter propellers than can be printed on the 3D printer.



FlightStream® 2023.1



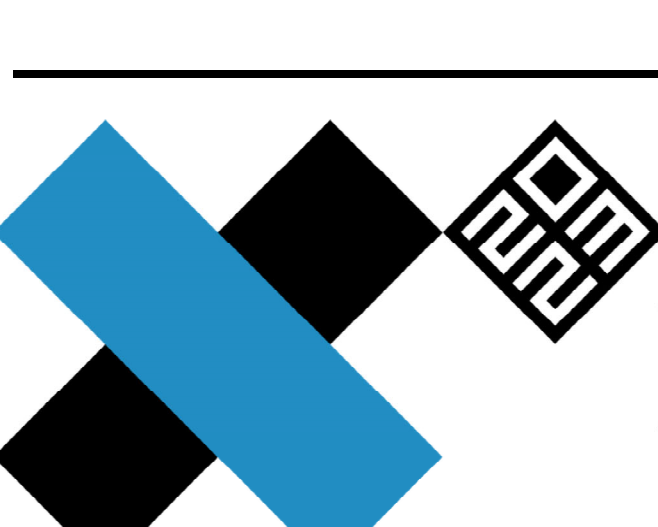
DARcorporation is proud to announce the release of FlightStream® 2023.1!

New Features Include:

- Massive computational speedups and memory reductions without sacrificing accuracy
- Aeroacoustics toolbox added
- Flight control system module added
- Automatic turbulent boundary layer log-law velocity profiles
- Component Cross Section (CCS) file format supports multiple new types of control surface designs
- Completely overhauled CAD user-interface and graphics
- Enhanced capability allows for users to extract 2D sectional data from 3D simulations that includes the effects of boundary layers and flow separation

[Release Notes](#)

On The Road Again!!!



XPONENTIAL™

DENVER, CO
MAY 9-11, 2023
Visit us at #3848

[Booth Map](#)



Oshkosh, WI
July 24-30, 2023

[Booth Map](#)

Short Courses with DARcorporation President, Dr. Willem Anemaat



Edwards Campus
12604 Quivira Rd Overland Park, KS 66213
May 15-19, 2023

[Registration and More info](#)

DARthVader Gotcha Day!



Six years ago (4/19/2017) DARthVader adopted us! He was homeless, hungry and in pretty bad shape. After a few days at the vet getting fully vaccinated, neutered and his tail amputated, DARthVader became a member of the DARcorporation family. He has serious attitude and loves living the good life: sitting on keyboards, crashing staff meetings, joining Zoom calls and has an international following. Happy Gotcha Day DARthVader!

[DarthVader Facebook](#)

[DARcorporation LinkedIn](#)

[DARcorporation Facebook](#)

[DARcorporation YouTube](#)

Please like our DARcorporation Facebook page, follow us on LinkedIn and visit our YouTube Channel, which offers software training tutorials and videos of projects and testing.

A validation study of AirShaper software

DARcorporation engineers put the cloud-based CFD tool AirShaper through its paces and compared it to [FlightStream®](#) and STAR-CCM+, two well-established simulation tools DARcorporation uses in-house.

[AirShaper Blog](#)



Frequently Asked Questions

All DARcorporation software programs have a Frequently Asked Questions (FAQ) page on our website. If you do not find what you need, please reach out to us for assistance. We will then add your question and resolution to the FAQ pages.

[AAA FAQ](#)

[FlightStream FAQ](#)

[FAR 23 LOADS FAQ](#)

[Shark FAQ](#)

[Contact DARcorporation](#)



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