

DARcorporation News

August 2017

InterDrone

September 6-8, 2017
Las Vegas, Nevada

DARcorporation will be exhibiting at InterDrone for the first time this September in Las Vegas! We will be in the South Hall (booth #118), on the far left.

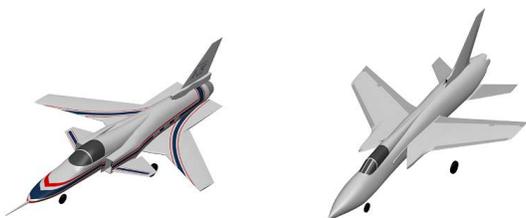
DARcorporation engineers are capable of performing detailed aerodynamic design and analysis on any propeller. Flow characteristics around the propeller rotor can be accurately analyzed and the optimal propeller layout can be determined to ensure superior drone performance.

In addition to our consulting services, we will be showcasing [FlightStream®](#), a high fidelity aerodynamics software tool perfectly suited for UAV designers. We hope you will stop by our booth to discuss how we can assist with your UAV design project!

New CAD Models!

DARcorporation has CAD models available in 3 categories: Airplanes (\$99), Weapons (\$49) and Miscellaneous (\$19.95). The recently added models are:

- Grumman X-29
- Republic F-105 B Thunderchief



All models are available in multiple file formats created by DARcorporation aerospace engineers. Check out our new aircraft models and 91 more in our shop!

Shop! 

Advanced Aircraft Analysis 3.8

Advanced Aircraft Analysis (AAA) 3.8 has 209 new features and this list is still growing! A summary of the newest features are listed below.

- Engine weight is now split up per engine type

Featured Services

[UAV Design and Analysis](#)

DARcorporation has collected and analyzed a large number of commercially available drones and recognized the potential for significant improvement in the area of propeller performance and efficiency, as well as in structural design. Optimizing propeller blades by performing a detailed aerodynamic analysis will ensure that the drone flies longer, farther and more efficiently. Optimized structures will offer the same benefit. The extensive expertise DARcorporation has in aerodynamics and structures can provide any drone with a substantial improvement in propeller performance and overall quality.

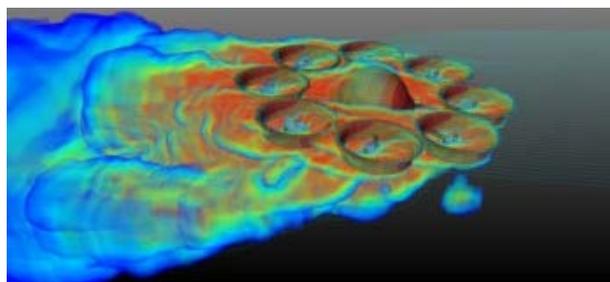


Figure: Octocopter CFD Analysis

[Airfoil Aerodynamic Testing](#)

DARcorporation now offers 2D airfoil wind tunnel testing. Our newly developed test rig can test airfoil and flap configurations up to a maximum lift coefficient of 6.0 at a Reynolds number of 1.0 million. The lift, drag and moment are measured versus angle-of-attack during each test. The drag is also measured using a traversing pressure rake, which provides very accurate drag results. This test rig enables DARcorporation to quickly characterize 2D airfoils with flaps and leading-edge devices through the linear and nonlinear angle of attack range. It is also possible to characterize active flow control.

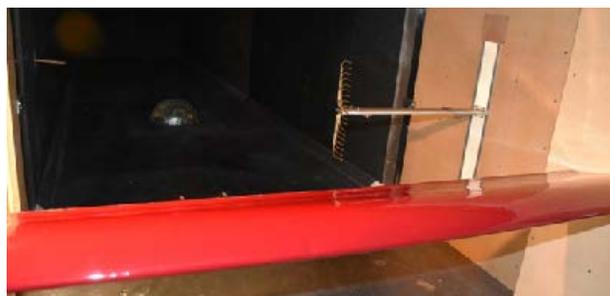


Figure: Traversing Pressure Rake

- Weight is updated more iteratively throughout AAA
- DARcorporation weight methods are added
- Drag reduction due to winglets is now possible to model by adding pylons with a negative drag coefficient
- Performance module is able to analyze hybrid engine configurations
- Hingeline locations are allowed to be negative for hingelines in front of the moving surface
- Inlets and Ducts can be separately defined
- Fuel tanks can be separately defined
- Numerical entries in tables are now exported as numbers instead of textstrings

Visit our [website](#) for the complete listing of new features and software release date information.



This email was sent to [-Email-] because you have purchased items or requested information from DARcorporation. If this e-mail was sent to you in error or you want to be removed from our mailing list, please click [unsubscribe](#) to notify DARcorporation. Copyright © 1991-[[extract_year(date_current())]] DARcorporation. All rights reserved. [Privacy Statement](#).