

# SAE MILWAUKEE

An SAE International Section

## Upcoming Events:

Hayes Performance Systems  
Mequon, WI  
October 2023

Modine Manufacturing  
Racine, WI  
November 2023

Milwaukee SAE Student Night  
December 2023

## September 2023 Newsletter:

### Aircraft Engine Design *Hosted by:*



September 13<sup>th</sup>, 2023  
5:00pm

### Location:

DeltaHawk  
2300 South Street  
Racine, WI 53404

## Event Details:

### Event Agenda

**Registration** ..... 5:00-5:30pm  
**Presentations/Q&A** ..... 5:30-6:30pm  
**Plant Tour/Dinner** ..... 6:30-8:00pm

### Registration Fees

**SAE Members** ..... \$35.00  
**Retirees** ..... \$25.00  
**Guests/Non-members** ..... \$40.00  
**Students** ..... \$10.00

## Registration

**Registration Deadline:** September 8<sup>th</sup>

**Maximum Attendance:** 100 attendees

### **Ways to Register:**

- Online with a charge card via
- [SAE Milwaukee website](https://sae-milwaukee-section.square.site/) or <https://sae-milwaukee-section.square.site/>
- By phone: Garrett Herning –856-313-0581
- By email: Garrett Herning –[sae@c2cintegration.com](mailto:sae@c2cintegration.com)

## About DeltaHawk:

DeltaHawk was founded in 1996 by Doug & Diane Doers and John (JP) Brooks. Doug was an experienced military and civilian pilot and mechanical engineer, Diane had extensive business experience, and JP was an experienced military pilot and American Airlines Captain. Together, they had the vision to create a modern engine that was cleaner, more efficient, and required less maintenance along with bringing improved performance and higher reliability to General Aviation.



This highly ambitious project turned out to be substantially more difficult and much more costly than they imagined, but their stubborn perseverance drove them to continue towards their goal, long after most others would have given up. Through many years of dedicated effort, averaging only 2-3 employees, progress was slow, with lack of funding being the major impediment to both engine completion and achieving FAA Type Certification.

In 2015, Al and Chris Ruud became aware of DeltaHawk's situation, so with their shared vision, dedication, perseverance and financial support the engine achieved FAA Type Certification in 2023.

## About the Event:

Join the Milwaukee SAE Section at DeltaHawk for a discussion around the many constraints on aircraft engine design and the problems that need to be solved as they have brought their engine to the market and recently received FAA Certification.

There will also be tours of DeltaHawk's extensive test and development areas followed by dinner and social hour.



## Presenters:



*Dennis Webb*

Mr. Webb joined DeltaHawk in 2005. He is a senior-level executive with a successful track record in general management, engineering, sales and marketing, manufacturing, and international operations, in both public and private companies. His professional career began with Johnson Controls, Inc., where he held various positions in engineering, management, sales, and global marketing. Mr. Webb holds a Professional Engineer (PE) license, is an FAA Designated Engineering Representative (DER) and is also an instrument-rated pilot. Mr. Webb has a degree in electrical engineering from the University of Missouri-Rolla and has completed an Executive Program at the University of Virginia Darden School of Business.



*Aaron Foege*

Mr. Foege joined DeltaHawk in 2017 and shifted to smaller two-stroke compression ignition engines after spending 12 years with Progress Rail, a subsidiary of Caterpillar. He supported power cylinder component development on two- and four-stroke EMD engines, later becoming the technical lead for two-stroke natural gas fuel system conversion kits. He holds 34 U.S. patents in these fields. He received his BS in mechanical engineering from the University of Illinois at Urbana-Champaign and completed a Master of Engineering in engine systems through the University of Wisconsin-Madison.

## Parking Instructions:

Please park in the South Lot and follow sidewalk up to the Lobby entrance.

## Directions:

### *Directions from Milwaukee:*

From I-794 E, keep right at the fork to continue toward Exit 1B. Keep left at the fork to continue on Exit 1B, follow signs for Interstate 43 S/Interstate 94/US 41/Chicago and merge onto I-43 S/I-94, E/US-41 S. Keep left to continue on I-94E. Take exit 322 for

WI-100/Ryan Road. Keep left at the fork, follow signs for WI-100 Ryan Rd E. Turn left onto WI-100 E/W Ryan Rd (continue to follow WI-100 E). Turn right onto WI-32 S/S Chicago Road (continue to follow WI-32 S). Turn right onto South St (destination will be on the left).

### *Directions from Chicago:*

Take the exit onto I-90 W/I-94 W toward Wisconsin. Keep right at the fork to continue on I-94 W, follow signs for Milwaukee/Interstate 94 W/Edens Expressway. Take the I-94 W exit toward Milwaukee (toll road). Continue onto I-94 W (toll road). Keep left at the fork to stay on I-94 W (toll road). Keep left at the fork to stay on I-94 W (partial toll road, entering Wisconsin). Take exit 329 for County Hwy K toward Racine/Franksville. WI-38 S/WI-38 Trunk S/Northwestern Avenue. Keep right into roundabout, then stay left onto WI-38 S/WI-38 Trunk S/Northwestern Avenue. WI-38 S/WI-38 Trunk S/Northwestern Avenue turns left and becomes Rapids Dr. Turn left onto Mt. Pleasant St. Turn left onto South St (destination will be on the left).



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## Section News .....

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<https://www.facebook.com/MilwaukeeSAE/>

Join our Mailing List:

<https://www.milwaukeesae.com/contact-us/>

*Our Milwaukee Section activities are planned by a dedicated group of professionals. Consider volunteering for a board position and help us out. Gain valuable resume experience and be part of the premier technical society in the Milwaukee area.*

### Current Open Governing Board Positions:

Webmaster

Newsletter Editor

Vice Chair of Membership

Communications Chairperson

Contact us at [saemilwaukeesection@gmail.com](mailto:saemilwaukeesection@gmail.com) if you are interested in volunteering and join us at our next board meeting.

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