

**Meeting date: Wednesday 15-Sept-2004****“S.A.E. Month @ Briggs & Stratton”****PROGRAM:****Dinner Meeting & Tour:**

- ◆ **No fuel cells or hybrids tonight!**
- ◆ **Nick Hirsch, President, Advanced Engines Development Corp., will inform us about the future of reciprocating engines, and why their role is (still) so important. Rocket engines, too?**
- ◆ **Tour the Briggs & Stratton facility, museum in Wauwatosa, WI**
- ◆ **Rick Geisheker, Sr. Project Engineer at Briggs, will talk about the air or water cooled BIG BLOCK TWINS developed for the commercial market.**
- ◆ **Welcome Duane Tiede, 2004 SAE President, to Milwaukee!**
- ◆ **Arrive early to attend the (3:30-5pm) Career Enhancement Session**
- ◆ **A gift to every attendee from SAE!**
- ◆ **See the SAE Baja and Formula cars on display, and much more...**

**Location: Briggs & Stratton Corp**  
**12301 Wirth Street**  
**(north of 124th & Burleigh)**  
**Milwaukee, WI 53222**  
**phone: 414-259-5333**

**- - - EVENT AGENDA - - -**

|                            |               |
|----------------------------|---------------|
| <b>Careers Session:</b>    | <b>3:30pm</b> |
| <b>Mtg. Registration:</b>  | <b>4:45pm</b> |
| <b>Tour:</b>               | <b>5:00pm</b> |
| <b>Dinner (approx):</b>    | <b>6:00pm</b> |
| <b>Program &amp; Tour:</b> | <b>7:00pm</b> |

**- - - DINNER - - -****MENU:**

Choose from either Pork Medallions or Chicken – plus mixed greens salad, glazed green beans, rolls, double crust pie and beverage selections.

**COST:**

|                        |         |
|------------------------|---------|
| SAE Members / spouses: | \$15.00 |
| Retirees:              | \$12.00 |
| Guests / Non-members:  | \$20.00 |
| Students w/ID          | \$7.00  |

**Registration:**

Dinner reservations must be received the week before the event. Only charge card pre-payments can be collected online, via <http://milwaukee.sae.org> . Email at: [milw-sae@wi.rr.com](mailto:milw-sae@wi.rr.com) , or phone **(414) 465-6420** and pay at the door.

“No-shows” with reservations will be billed.

50-Year members entitled to 1 free dinner annually.

**Registration deadline: 2:00pm – Friday, Sept 10th**

---

**Topic: Reciprocating Engines Today and Tomorrow****Speaker: <> Nick Hirsch, President, Advanced Engines Development Corporation**

Fuel cells, hybrids, and electric vehicles are media darlings of technology. Yet reciprocating engines, both spark and compression ignition, will remain the principal source of power for at least the next 20 years. The current state-of-the-art technology engines and their major sub-systems – fuel injection, airflow, combustion, and electronic management – will be reviewed. Driven by the demands for cleaner exhaust and greater fuel economy, the advancing technology needs will also be highlighted.

Advanced Engines Development Corp., on Milwaukee's west side, has found that its name is its business. Among his accomplishments in the 21-year-old contract R&D engineering company, Nick Hirsch developed a unique two-stroke diesel engine for use on U.S. Army vehicles. The engine design may also have applications in private, commercial, and construction vehicles. Nick has been employed by and consulted with Milwaukee area small engine companies.

Mr. Hirsch received his BSME from UW-Madison, and accomplished his post graduate work at Marquette, UW-Milwaukee, and the National Defense University, Naval War College. He has 41 years experience designing, developing, and testing engines for vehicles from rockets to motorcycles, and is a retired Colonel of the U.S. Marine Corp Reserve.

---

**Speaker: <> DUANE TIEDE, 2004 SAE President, Vice Pres. of Functional Eng-Retired**

Mr. Tiede graduated from the University of Minnesota with a B.S. and M.S. in Agricultural Engineering. He was with Deere and Company 21 years at both the Moline Tech Center and the Waterloo Product Eng Center. His engineering responsibilities included engine design and noise control, vehicle performance simulation, Manager of Operator Environment, Manager of Technical Services and Manager of Hydraulic Engineering.

In 1988 he joined Case Corporation as Dir of Product Performance and Evaluation. He was later named Executive Director and then Vice President of Engineering for the Worldwide Components Group. He was later responsible for all tractor product programs and then Vice President of Functional Engineering. That role included global responsibility for engines, drivetrains, hydraulics, cabs, electronics, advanced technology, engineering process, engineering analysis, industrial design, standards, and product test. He worked with product teams to develop and implement technology on new and current products.

Mr. Tiede has been active in SAE throughout his technical career at both the section and national level. He has authored technical papers, organized technical sessions, and reviewed papers. He served on the Engine Noise Measurement Subcommittee, the Off Highway Meeting General Committee from 1989 -1992, was General Chairman of the 1990 Off Highway Meeting and on the Off-Highway Continuity/Advisory Committee from 1998-2002. He was a member of the Technical Standards Board from 1991-1994 and served as Chairman of the Standards Planning Committee in 1992, TSB Chairman in 1993-1994, and liaison to the CONAG Council. In 1994 he served on the Development Program Coordinating Committee. He served on the Board of Directors from 1995 - 1998. He served on the Non Financial Audit Committee from 1998-2001 and the Strategic Planning Committee from 1998-2003 where he has been Chairman the past two years.

Duane has served on the College of Engineering Advisory Board at the University of Illinois from 1998-2002. He also serves on the Board of Samaritan Interfaith Counseling Center in Naperville. He and his wife, Connie, have both been active for many years in Young Life and various church leadership roles.

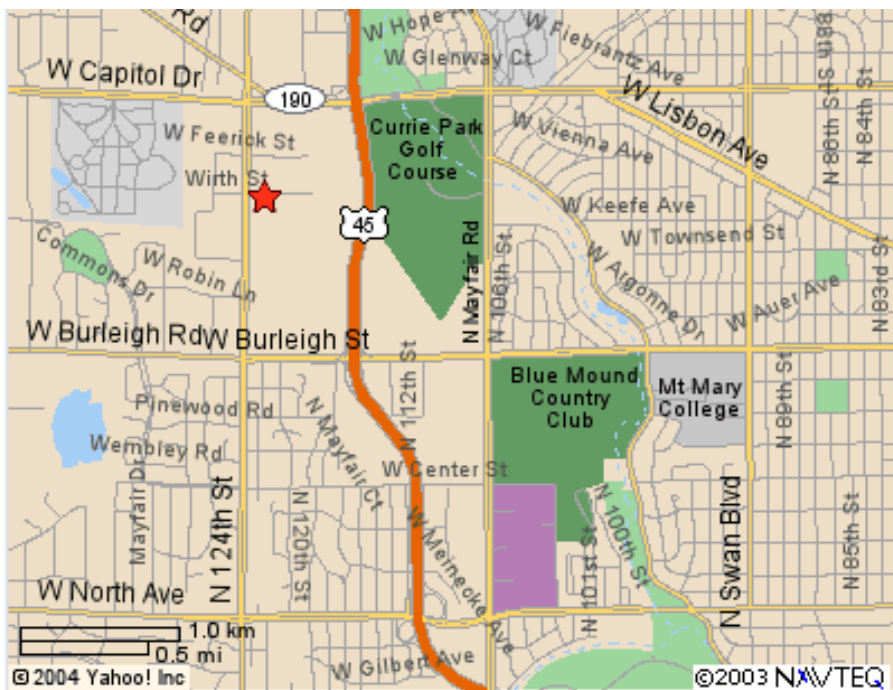
---

**Topic: What makes a commercial engine “commercial quality”?****Speaker: <> Rick Geisheker, Sr. Project Engineer, Briggs & Stratton Corporation**

Mr. Rick Geisheker will speak about Briggs & Stratton’s recently introduced “Big Block” V-Twin. The engine was designed to serve the needs of the commercial engine market. Design intent will be covered and the components chosen for the engines will be shown. These will be contrasted with comparable components used in engines intended for the consumer market. Areas covered in his talk will include the power and torque produced by the engine, as well as starting and charging systems, air filtration, oil filtration and cooling, debris management and serviceability.

Mr. Geisheker received his BSME from Marquette in 1976, and is currently enrolled in the Masters of Engineering in the Engine Systems program at UW-Madison. From 1976-1985 he served as an Application Engineer for Briggs & Stratton, and from 1985 to the present, is the Principal Engineer for design and development of Vanguard V-Twins.

Among his awards and achievements, he contributed to establishing the joint business venture in Japan with Daihatsu for manufacturing V-Twin engines, certified the first Briggs & Stratton engine for C.A.R.B. emission requirements, and developed the first production engine that used a sintered iron cylinder liner.



**MAP :** Briggs & Stratton Corp,  
12301 Wirth Street, Milwaukee,  
Wisconsin 53222

Ample parking should be available. Look for the entrance doors facing west, toward 124<sup>th</sup> street.



---

**Career Enhancement Session**

*From 3:30-5 p.m., Dale Wiza, of Professional Engineering Placements, Inc., and Wayne Richter, of MRI – Germantown will lead a counseling discussion on achieving career goals. The session focuses on the skills employers require in today’s market, elements of an attention-getting resume, and effective interviewing techniques. Following will be Q & A.*

**Dale 414-427-8080, [dale@engineeringplacements.com](mailto:dale@engineeringplacements.com)**

**Wayne 262-255-7155 ext:102, [wrichter@mrgermantown.com](mailto:wrichter@mrgermantown.com)**

**Briggs & Stratton’s Human Resources personnel will also provide information on internal Engineering Co-op and Internship opportunities at Briggs.**

**October 21 Meeting** tour: Mercury Marine “ [ Milwaukee bus trip ] – Fond Du Lac

**November 17 Meeting** tour: Daimler-Chrysler Dealership / the Hot New 2005 Vehicles – West Allis

**January 19 Meeting** tour: Automotive Electronics, Lighting, Security, Sensors – Germantown

**February 17 Meeting** (TBD)

**March 16 Meeting** (TBD)

**April 21 Meeting** tour: Aviation A&E School & Midwest Service Facility – Mitchell Field

**May 18 Meeting** (tentative) Hummer, the “new” family ride

*Upcoming  
Events*

## *Hello Milwaukee Section!*

Mark DeBattista, Section Program Chair here! This first newsletter, the September issue only, is being mailed to all full members. An email distribution to section members having a valid email address will also be carried out. Please inform me if you did not receive your email distribution, so corrections can be made to get emailed meeting info out to you for the rest of the season.

**If you did not receive the email version of this hardcopy, and you have a valid email address listed with SAE National**, please contact me directly, provide your email, and identify this error. I need you to tell me that you are being missed. You can respond to me directly at [mark.d@email.sae.org](mailto:mark.d@email.sae.org) (preferred) or leave a message on the **registration number (414) 465-6420**.

**Members who requested hardcopy newsletters last year, will still receive them in the mail.**

Thank you for your time and attention.

Mark DeBattista  
SAE Milwaukee Section Event Chair

Have a valid email address listed with SAE National?  
Check it at: [www.sae.org](http://www.sae.org) and click **Login / MySAE**

---

### \*\*\*\* 2004 SAE MIDWEST MINI-BAJA \*\*\*\*

A big THANK YOU goes out to all of those who donated their time to make the 2004 SAE Midwest Mini-Baja a success. Special thanks go to Kathryn Foley, Rick Sievert, Dale Wiza, Mark DeMilio, John Jeffords, Jeff Balis, Shawn Ray, Mark Warnke, and Eric Backhaus for providing additional support and organization for the event. In all, 117 cars from schools around the world participated in Jefferson, Wisconsin. The team from SAE Brazil won the overall title with the University of Akron coming in a close second. Full results, photos and additional information can be found at: <http://www.sae.org/students/minibmw.htm>

The Milwaukee Section is set to host the SAE Midwest Mini-Baja again in 2006. As the field of cars continues to grow, more and more volunteers are needed to make the event run smoothly and successfully. Though 2006 may seem far away, pre-planning has already begun. There are many activities over the weekend that require ideas, organization and planning. If you are interested in becoming the captain of one of these activities, or just want to get involved, please contact me at 262-513-4549 or [mikef@huscointl.com](mailto:mikef@huscointl.com).



Mike Freisleben,  
2004 SAE Midwest Mini-Baja Event Chairman

## Milwaukee Section 2003-2004 Governing Board

### CHAIRMAN:

Dale Wiza  
Professional Engineering Placements, Inc.  
email: dale@engineeringplacements.com  
Work: (414) 427-8080

### VICE CHAIR:

Joe Sagat  
Modine Manufacturing Company  
email: j.g.sagat@n.a.modine.com  
Work: (262) 636-1362

### SECRETARY:

Bernard Krauska  
Borg Indak Inc  
email: krauska@execpc.com  
Work: (262) 968-3313

### TREASURER:

Wayne Richter  
email: richterway@cs.com  
Voice: (262) 377-8145

### VICE CHAIR MEMBERSHIP:

Tim Fauser  
Comtel Midwest Co.  
email: tfauser@comtel.com  
Work: (800) 860-2692 x354

### VICE CHAIR MATH/SCIENCE:

Liz Sutton  
Discovery World.  
email: liz@discoveryworld.org  
Work: (414)647-3303 x246

### VICE CHAIR STUDENT ACTIVITIES:

Chris Damm  
Milwaukee School of Engineering  
email: damm@msoe.edu  
Work: (414) 277-7543

### VICE CHAIR PROGRAMS:

Mark DeBattista  
Harley-Davidson Motor Co  
email: mark.d@email.sae.org

### COMPANY REPRESENTATIVE:

Tim Fauser  
Comtel Midwest Co.  
email: tfauser@comtel.com  
Work: (800) 860-2692 x354

### HISTORIAN:

Don Berchem  
Retired  
email: dberchem@milwpc.com

### VICE-CHAIR RECEPTION:

Bill Riebe  
Retired  
Voice: (262) 246-3386  
fax: (262) 246-7290

### Alt SECTION DELEGATE:

Glenn Bower  
UW-Madison  
Work: (608) 263-7252

## - Chairman's Note -

Welcome to a new SAE season! We're working off of our growth from last year with new initiatives, greater participation, improved planning, and now with the SAE 100<sup>th</sup> Anniversary year!

Our board was reconfirmed and stays mostly intact. It is a pleasure to introduce the new members to our Governing Board: Dr. Chris Damm (MSOE)-Vice Chair of Student Activities, Terry Freuhling (H-D)-Publicity Chair, and Liz Sutton (Discovery World)-Vice Chair of Math & Sciences. Continuing on the Board is Joe Sagat (Modine)-Vice Chair; Wayne Richter (MRI-Germantown)-Treasurer; Bernard Krauska (Borg Indak)-Secretary; Tim Fauser (Comtel)-Vice Chair of Membership/ Company Representative; Mark DeBattista (H-D)-Programs Chair and Newsletter Editor; Dennis Webb (Badger Meter)-Vice Chair Activity; Mark Freisleben (HUSCO) - Mini Baja Chair, Don Bercham - Historian; and Bill Riebe - Reception Chair; Glenn Bower (UW) - Delegate, Bill Schultz - At Large; Shawn Ray (GE Med.) Past Chair, and Dale Wiza (Professional Engineering Placements) - Chair.

We will strive to engage younger, newer, and continuing members, by offering opportunities for all of us to challenge ourselves in expanding our territories, and accepting those challenges! It is then that we can better serve our companies, communities, organizations, and foremost, our families!

\* Please welcome our SAE Pres. Dr. Duane Tiede to our September 15th event. Dr. Tiede certainly continues to serve SAE well! We'll also hear from some engine experts, and get a better appreciation for the contributions Briggs & Stratton makes to our collegiate competitions. Prior to the formal meeting, I will be available for a career counseling session for those interested.

\* Remember to re-cycle your old SAE magazines for our students. A deposit box will be available at the meeting, or see Chris Damm.

\* Our first SAE Commercial Vehicle Engineering Congress and Exhibition will be held Oct. 26-28 in Rosemont, IL. Electrical engineering contributions can be shared with Ed Heck, 262-673-9450x104, or: [heck@hedonline.com](mailto:heck@hedonline.com).

\* Our sympathies to the family and friends of Gerald C. Ruehlow, Chief Technology Officer for Generac Power Systems, who died recently of a heart attack. Gerald was a 35-year member of SAE.

Thanks again for the opportunity to chair this fine organization. The Board welcomes your input, concerns, and comments. Let us know how we can best serve you! Keep spreading the word with your colleagues and friends, and stay current with us at <http://milwaukee.sae.org>.

Thank you,  
Dale Wiza, SAE Milwaukee Section Chair



## Meeting Sponsorship

We wish to thank the following organizations for their continued support of the Milwaukee Section:



**Harley-Davidson Motor Co [Milwaukee]**



**Briggs & Stratton Corporation [Wauwatosa]**

For more information on becoming a sponsor, please contact any Section Board member.

Keep current with us on these SAE web sites:

<http://milwaukee.sae.org> for the Milwaukee Section or  
the national site at [milw-sae@wi.rr.com](mailto:milw-sae@wi.rr.com)

For more information on **A World In Motion** call: 724-772-8514, and ask for Darlene Geweth  
email: [awim@sae.org](mailto:awim@sae.org) internet: [www.sae.org/foundation/awim](http://www.sae.org/foundation/awim)