



Milwaukee Section Newsletter

March 2008

www.saemilwaukee.org



**Student Night at Milwaukee School of
Engineering
Thursday, April 3, 2008**

**“Filling the Gap”
Between Academics and Industry**
Keynote by
Bill McEathron – Mercury Marine



Milwaukee Section Student Night –

Student Chapters from MSOE, UW-Madison, UW-Milwaukee, Michigan Tech, Marquette and Northern Michigan University will be making presentations on their SAE Collegiate Design Series projects as part of the 2008 Milwaukee Section Student Grant Program.

About Milwaukee Section Student Night –

This year's Student Night is hosted by Ian Rokser, President of the MSOE-SAE Student Chapter, and Dr. Christopher Damm, Assistant Professor and Faculty Advisor at MSOE. Ian is a senior in Mechanical Engineering and is considering graduate study this coming year. Dr. Damm was our keynote presenter at this past year's Milwaukee Section Lecture Series.

The Student Night is our showcase of student engineering talent and their projects in the Collegiate Design Series including:

- **Aero Design®**
- **Clean Snowmobile Challenge TM**
- **Formula SAE® Series**
- **Baja SAE® Series**
- **Supermileage®**

This is an excellent opportunity to network with a group of engineers that have taken extra steps to develop an experience that puts them beyond academics. These men and women will present their stories of how they conquered technical challenges, developed practical skills, created an intuitive confidence, grew as leaders and prepared them to be productive engineers. (and having a lot of fun in the process)

Section members are invited to view student displays, ask questions, review their presentations and influence how \$5000 in grant offerings will be distributed.

Please invite your Human Resources staff and hiring managers to attend. Several international companies have discovered that SAE student experiences have translated very well into the workplace. Students are also looking for internships, senior design projects and research work.

You may also find a way for your company to help a collegiate chapter develop a competitive edge by using your products in their projects. MotoTron is a great case study to demonstrate how a Design Series project and build a business and brand awareness.

Bill McEathron Biography:

Bill is an 87' BSME graduate from MSOE and a 2005 MBA graduate of UW-Madison. He was involved in SAE all four years of his tenure at MSOE and held many positions in the group, including student chapter president. During his senior year at MSOE, he started working for Force Outboards and assumed a full-time position as a project engineer upon graduation. Eventually consolidated with the Mercury Marine organization in 1991, he has held a variety of engineering management positions, including a three year ex-patriot assignment in Europe. Currently, he is the Director of Small Outboards at Mercury Marine. For the past five years, Bill's team has led two game-changing projects for Mercury in both China and Japan.

Bill currently resides in Fond du Lac, Wisconsin and has been married for 19 years to Lori. They have two children, ages 15 and 16 and they currently reside in Fond du Lac, Wisconsin. Bill spends his past time leading a FIRST robotics team for Fond du Lac area teens.

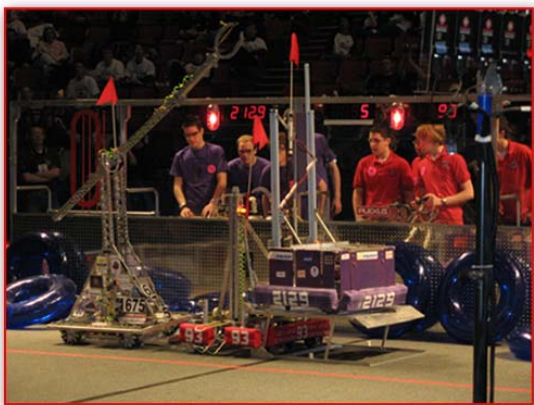
Bill and his wife helped the "Fondy Fire" earn "Rookie Team of the World" at the Georgia Dome this past year. For more information regarding the FIRST robotics competition, go to:



**March 13-15th, US Cellular Arena,
Milwaukee**

<http://www.wisconsinregional.org/p2007.htm>

<http://www.fondyfire.us/>



“... if any high school student is at all remotely interested in engineering, I would highly recommend coming on Saturday, March 15th ... it is an absolute blast!” - Bill McEathron

- - - EVENT AGENDA - - -

Vehicle Displays	5:00-6:00 p.m.
Registration:	5:00pm
Dinner:	6:00pm
Program:	6:45 - 8:30pm

- - - DINNER - - -

MENU:

DINNER PRICES:

SAE Members / spouses:	\$20.00
Retirees:	\$15.00
Guests / Non-members:	\$25.00
Students w/ID	\$10.00

- - - MENU - - -

MENU:

- **Buffet menu selection of Chicken Parmigianino, Roast Beef with a Cheron Sauce, Baby Red Bliss Potato, Fresh Broccoli Spears, Green Beans Almandine, Caesar Salad, Fresh Spinach Salad, Fruit Salad, German Chocolate Cake.**

Registration:

Only pre-payments made with a **charge card** can be completed online via <http://milwaukee.sae.org>

Retirees, students and members without web access may register by phone on the SAE Registration Coordinator – Jim Ryan (262) 636-1634. Note new registration number!

Registration deadline: Monday, March 31, 8:00 a.m.

***Directions to Milwaukee School of Engineering – CC Building,
Ground Floor***

From the North

- Take I-43 south to downtown Milwaukee.
- Exit at McKinley Ave. and go left / east at the stop light. Drive east on McKinley, which will become E. Knapp St., for six blocks.
- Take a right on N. Broadway and take Broadway to the specific building or parking lot on campus.*

From the South

- Take I-94 West/I-43 North to downtown Milwaukee.
- Exit at McKinley Ave. and go right / east. Drive east on McKinley, which will become E. Knapp St., for six blocks.
- Take a right on N. Broadway and take Broadway to the specific building or parking lot on campus.*

From the West

- Take I-94 East to downtown Milwaukee.
- When you arrive downtown, follow I-794 East.
- On I-794 East, drive in the far left lane and exit at Jackson/Van Buren, this is a left hand exit.
- Veer left onto Van Buren St. Follow north through downtown for seven blocks.
- Turn left on State St. and follow to the specific building or parking lot on campus.*

*Parking lot is located off Broadway, north of State Street.

Future SAE-Milwaukee Programs:

<i>March 10-16</i>	<i>Clean Snowmobile Challenge at Michigan Tech</i>
<i>March 14</i>	<i>Milwaukee Section meeting at Houghton, MI</i> <i>“Altair Engineering” with Michael J. Kidder</i>
<i>April 14-17</i>	<i>International Congress, Detroit, MI</i>
<i>April 22 or 23 (TBD)</i>	<i>Cummins Filtration, tour and presentation</i>
<i>May</i>	
<i>June 20-22</i>	<i>SAE – Milwaukee at the June Sprints, Road America</i>
<i>July 28 – Aug 1</i>	<i>SAE International Gathering at EAA, Oshkosh, WI</i> <i>Presentation by Mike VanStaagen www.the-jet.com</i>
<i>September 9-11</i>	<i>Small Engine Technology Conference - Milwaukee</i>

Act now!

SAE has funds available for college students!

Apply by April 1, 2008 for the SAE scholarships and loans listed below.

[Yanmar/SAE Scholarship](#) - This scholarship awards a \$2,000 scholarship to a student who is pursuing a course of study or research related to the conservation of energy in transportation, agriculture and construction, and power generation, with emphasis placed on research or study related to the internal combustion engine. Applicants must be citizens of North America. Established by Yanmar Diesel America Corporation.

[SAE Long Term Member Sponsored Scholarship](#) - Several \$1,000 nonrenewable scholarships are awarded annually to SAE student members who actively support SAE, the collegiate chapter or the local SAE Section and its programs. Student grade point average is not a determining factor within the scope of this scholarship. This scholarship is supported through generous contributions from long-time members of SAE.

[New! SAE/David Hermance Hybrid Technologies Scholarship](#) - This scholarship awards a \$2,500 nonrenewable scholarship to a U.S. citizen enrolled full-time as a sophomore in a U.S. university. Applicants must plan to pursue an engineering career in the field of Advanced Technology Vehicles which include hybrids, fuel cells, alternative fueled vehicles, advanced powertrains, etc. Scholarship made possible through the generous support of Toyota.

[Doctoral Scholars Forgivable Loan](#) - A number of \$5,000/year forgivable loans are available for PhD students in North America who plan to teach engineering at the university level upon graduation. For each year of eligible teaching, one year's loan is forgiven. Applicants must be citizens of North America.

Questions? Contact Marge Milligan at SAE, milligan@sae.org, phone 1-724-772-7158.

Related Scholarships for Consideration

[NASA Aeronautics Scholarship Program](#) - Apply by March 17, 2008

Administered by the American Society for Engineering Education (ASEE), approximately 20 two-year undergraduate, and 5 two-year with an option of a third year graduate scholarships will be awarded to students pursuing aeronautical engineering and related fields. Total allocated award amounts are up to \$40,000 for undergraduates and up to \$125,000 for graduates. These funds will go towards tuition and related costs, as well as to provide paid summer internship opportunities at a NASA research center.

Don't forget to check out the [SAE Career Center](#) and search for entry level job openings and internships, upload your resume, receive email alerts, and access career tips to help you get ahead in the mobility industry.

Milwaukee Section 2007-2008 Governing Board

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Dear Members and Section Friends,

Thanks to Jeff Ehlers, Jeff Konopacki, Blake Suhre and Eric Bradley of MotoTron. They presented a great story of their product line and what they have done to take a complex control algorithm development process and created the Motohawk and controller solutions. They gave credit to their partnership with colleges such as UW-Madison and the Collegiate Design Series as catalysts to their product development and marketing strategies. If you were unable to attend, I am sure that they would be happy to talk to you about your project applications.

It is not too late to join us at the Clean Snowmobile Challenge. A **technical program summary** is attached for the event. The secret about this competition is its informality, opportunity to engage with the students and learn more about leading edge challenges related to E85, Flex-Fuel, Biofuels and hybrid technologies. The event is more than a collegiate competition. It is a gathering of other technical and industry professionals here in our section. For more details regarding the Clean Snowmobile Challenge, you can contact Jay Meldrum at jmeldrum@mtu.edu or the Keweenaw Research Center website:

<http://www.mtukrc.org/snowmobile.htm>

Michael J. Kidder of Altair Engineering will be making the Friday March 14th, Milwaukee Section program at CSC this year. Come and join us for the snow – we hear they have some up there too.

This coming month, the nomination committee will be presenting the slate of officers for this coming year. As most organizations, we are always looking for leadership and contributing talents. If your company is encouraging “Engaged Leadership”, “Servant Leadership” or other community service programs, please consider SAE as your development option. This coming year we have many new ways to engage – Small Engine Technology Conference, and hosting the Mini-Baja competition this spring. Feel free to contact any board members to learn more.

On behalf of the governing board, I would like to thank you for your continued support of the Milwaukee Section, attendance at monthly meetings and leadership you provide to our industries, schools, universities and communities.

Regards,

Bernard Krauska
Chairman – Milwaukee Section.
saemilwaukee@gmail.com

Meeting Sponsorship



www.evschevrolet.com



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

Keep current with us on these SAE web sites:

www.saemilwaukee.org for the Milwaukee Section or

the national site at www.sae.org

For more information on **A World In Motion** call: 724-772-8514, and ask for Darlene Geweth

email: awim@saе.org internet: www.sae.org/foundation/awim

Interns Needed – ???????

Please let us know if your company is hiring interns, summer help or entry level engineers. We will be hosting a resume exchange at this Student Meeting event.



Contact Jay Meldrum for details on how you or your company can volunteer, participate in student career development sessions or participate in any technical programs. jmeldrum@mtu.edu

Date/Time	Schedule	Meeting Place
Monday, March 10		
12:00 pm	Teams Arrive and Set Up	KRC/T3
12:00 pm to 5:00 pm	Registration of Teams & Volunteers	
12:00 pm to 5:00 pm	Turn in Snowmobile Description Form	
2:00 pm to 6:00 pm	Pre- Technical Inspection	
6:00 pm to 7:00 pm	Technical Demonstration	KRC/T3
	Fire Extinguisher Safety	
	Hawk Technologies, Jay Ruohonen	
	<i>Refreshments and food will be provided</i>	
Tuesday, March 11		
7:30 am	Judges Meeting	KRC/T3
8:00 am to 11:00 am	Final Technical Inspections and Fueling, ISR	KRC/T3
	Technical Demonstrations	KRC/T3
	Thermal Imaging	
	ThermoAnalytics, Inc.	
11:00	*Grand Opening Event*	KRC/T3
Noon	Electric Sled Range Test	KRC/T3
Noon	Endurance Run to Copper Harbor	KRC/T3
2:00 pm	<i>Late Lunch</i>	<i>Mariner North, Copper Harbor</i>
6:00 pm	Return to KRC	
7:00 pm	<i>Volunteer's Reception</i>	<i>Joey's Seafood, Houghton</i>
	<i>Refreshments and food will be served</i>	
Wednesday, March 12		
7:30 am	Judges Meeting	ATDC
8:00 am to 5:00 pm	Student Design Presentations	ATDC
10:00 am to 11:00am	Technical Presentation	
	Engine Tuning Procedure	KRC/T3
	Land & Sea Corporation, Dick Locke	
8:00 am to 5:00 pm	Teams fix sleds	KRC/T3
8:00 am to 5:00 pm	Make-Up Endurance Miles	KRC/T3
Noon	<i>Lunch on your own</i>	
2:00pm to 3:00pm	Technical Presentation	KRC/T3
	Catalyst Chemistry	
	Emitec, Inc., Marcus Downey	
4:00 pm to 6:00pm	Student Resume Exchange	Copper Country Mall
6:00 pm to 8pm	*Snowmobile Public Display*	Copper Country Mall
	<i>Light refreshments will be served</i>	



Thursday, March 13		
8:00 am	NGK/NTK Cold Start Event	Outside KRC/T3
9:00 am to Noon	Noise Event	KRC T3
9:30 am to 5:00 pm	Polaris Subjective Handling Event	KRC/T3
1:00 to 4:00pm	Technical Demonstration In Service Emissions Sensors, Inc., Dave Kalen	Outside KRC/T3
9:30 am to 5:00 pm	Emissions Event	KRC/T5
Noon	<i>Pasty Lunch</i>	KRC/T3
2:00 pm to 3:00 pm	Electric Sled Draw Bar Pull	KRC/T3
6:00 pm	<i>KRC Beef Bar-B-Que served</i>	KRC/T3
Friday, March 14		
7:30 am	Judges Meeting	KRC/T3
9:00 am to 5:00 pm	Continue Emissions Event	KRC/T5
10:00 am to 11:00am	Technical Presentation Sound Quality Head Acoustics, Inc., Mike Stephan	
Noon to 6:00 pm	Open time to enjoy the Keweenaw Keweenaw Sled Tours/Ski Hill at Discounted rates/ Everts, Dans Polaris, MTU Ski Hill	KRC/T3
6:00 pm to 7:00pm	SAE Milwaukee Section Meeting Invited Speaker Mike Kidder, VP Altair Engineering <i>Refreshments and food will be served</i>	ME-EM 112
7:00 pm to 9:00 pm	ME-EM lab tours	
Saturday, March 15		
8:00 am	Judges Meeting	KRC/T3
8:00 am to 10:00 am	Emission Testing (if necessary)	KRC/T5
10:00 am	*Polaris Acceleration event*	KRC Test Course
11:00 am	*Polaris Objective Handling event*	KRC Test Course
Noon	Judges Meeting to Review Scoring and Penalties	KRC T1
6:00 pm	<i>Awards Banquet</i>	MUB Ballroom

*** Public Viewing Opportunities***