

SAE MILWAUKEE

An SAE International Section

Upcoming Events

- March 6th-11th - Clean Snowmobile Challenge
- March 22nd - Generac

Future Events

- April - UW-Madison Engine Lab (with ASME)
- May - Synerject

February 2017 SAE Newsletter

March Events:

GENERAC®

March 22nd

5:00 PM

Broadlands Golf Course

North Prairie, WI



March 6th-11th

Houghton, MI

About Generac

Generac Power Systems, Inc. is a leading global supplier of backup power and prime power products, systems and engine-powered tools. Back in 1959, Generac's founder was committed to designing, engineering and manufacturing the first affordable backup generator. Fifty-seven years later, the same dedication to innovation, durability and excellence has resulted in the company's ability to expand its industry-leading product portfolio into homes and small businesses, on job sites and in industrial and mobile applications across the globe.



Generac offers single engine backup and prime power systems up to 12 MW and paralleled solutions up to 100 MW, and uses a variety of fuel sources to support power needs for their customers. Generac is proud to be named, in back-to-back years, the Frost & Sullivan 2014 and 2015 North American Natural Gas Generator Set Company of the Year.

Generac looks forward to hosting the SAE Milwaukee Section and providing an overview of the company, the power generation industry and trends across the markets they serve.

About the Presenter

Generac Chief Marketing Officer Russ Minick began his career at Generac in 2011, when he joined the company as executive vice president, Residential Products. In 2014, his role was expanded to include sales management of all Generac products throughout North America. He was appointed to his current role in August 2016.

Minick has been instrumental in leading the company's targeted marketing processes for its residential products, which includes the dealer-focused PowerPlay in-home selling solution for Generac home standby generators as well as the company's infomercial that has aired nationally in various iterations since 2013. These activities continue to support Generac's 75 percent market leadership position in home standby power and its approximately 9 percent compound annual growth rate (CAGR) in organic sales of residential products.



Prior to joining Generac, Minick was president and CEO of Home Care Products for Electrolux and president of The Gunlocke Company at HNI Corporation for three years until 2006. Before that he held senior leadership roles in sales, marketing, product development and operations for True Temper Sports and Ford Motor Company.

He is a graduate of the University of Northern Iowa and holds a bachelor's degree in marketing.

About the Presentation

Generac was established in the town of Wales in 1959, where for many years it largely produced small portable generators for Sears Roebuck & Co. Today, from the company's headquarters in Waukesha, Generac is a multinational provider of power generation systems and outdoor power equipment serving markets from residential to industrial. Russ Minick will discuss the company's history, its road to market leadership in power generation, its future and overall industry trends. Prior to that, attendees will have the chance to tour Generac's Eagle facility — one of the company's several Wisconsin manufacturing plants and the site where Generac manufactures several models of liquid-cooled stationary generator sets.

About the Event

Event Agenda

Registration	5:00-5:30pm
Tour.....	5:45-6:45pm
Dinner.....	6:45-7:15pm
Presentation, Q&A.....	7:15-8:15pm

Registration Fees

SAE Members	\$25
Retirees	\$20
Students	\$5
Non-members	\$35

Registration

Registration Deadline: March 17

Maximum Attendance: 125

Ways to Register:

- Online with a charge card via www.milwaukeesae.com
- By phone: 262-770-0252 (Wayne Richter)
- By email: richterway@sbcglobal.net (Wayne Richter)

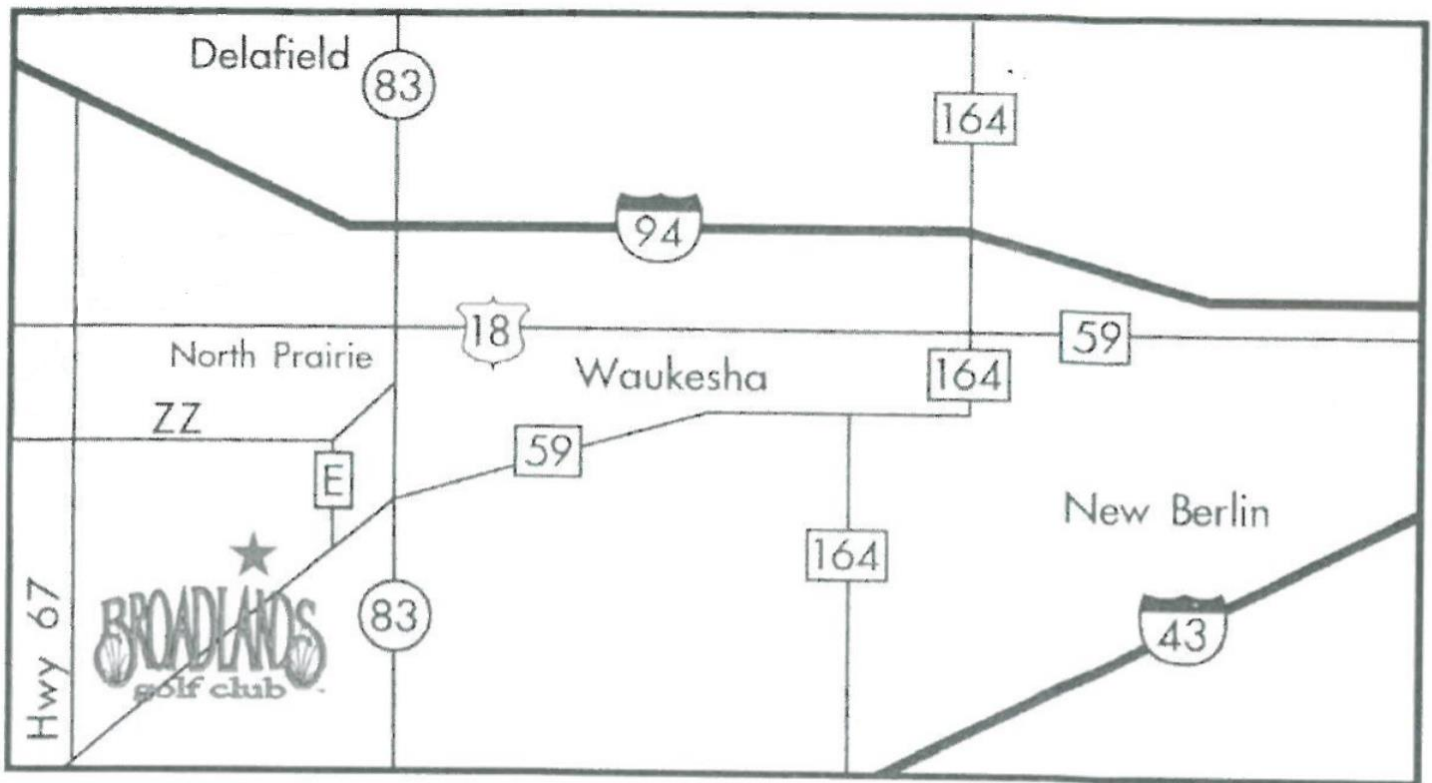
Registration required – no walk-ins allowed

Generac and SAE Milwaukee reserve the right to deny plant tours to employees of Generac's competitors. We thank you for your cooperation and understanding.

SAE Milwaukee would like to thank Generac for their generous support of the upcoming SAE Student Night in November 2017.

Directions

Shuttle buses will be used to transport attendees from Broadlands Golf Club to Generac's Eagle facility for tours.



Directions to Broadlands Golf Club

Broadlands Golf Club, 18 Augusta Way, North Prairie, WI, 53153

From I-94: Take the Hwy 83, Wales/Hartland exit. Follow Hwy 83 south 4.5 miles, turn right on County E and follow for 4.5 miles, turn right on Hwy 59 and follow ½ mile to Broadlands entrance on right. Clubhouse is on top of hill to the left.

From I-43: Take Hwy 83, Mukwonago exit. Follow Hwy 83 north for 8 miles to Hwy 59, turn left on Hwy 59 (west) and follow 3.5 miles to Broadlands entrance on right. Clubhouse is on top of hill to the left.

From Lake Geneva: Take Hwy 12 west to Elkhorn. Follow Hwy 67 north to Eagle. Turn right on Hwy 59 (east) and follow 4.8 miles to Broadlands entrance on left. Clubhouse is on top of hill to the left.

Clean Snowmobile Challenge – March 6-11

If you haven't experienced a Clean Snowmobile Challenge yet, please consider, as you'll then look forward to the following year's event too! Many attend this Collegiate Design Series event for just a couple of days: take in some snowmobile riding, share engineering wisdom with students, be inspired by the student's creative ideas for versatile engine performance, or to serve as a judge (riding, reviewing of papers, etc.). See the schedule of events on the next pages.

To judge papers, Jay Meldrum, the CSC Director says, "SAE has a new method of downloading the papers and filling out the judging form. Once you fill the form out and submit it I will have access to it. No need to send it and it will also sum the numbers. If you can contribute time to review papers, please respond to this email with how many papers 4, 8, 12, 16, or 20. See attached info.

Thanks again for your contribution to competition-based engineering education."

Best regards,

Jay S. Meldrum, Sr.

Director O: 906-487-3178 C: 906-281-1069

***The UP has 233.5" of snow to date, 33" on the ground, as of 2/28!**

If you'd like to learn more, please contact Dale Wiza, 414-807-9663, or dalewizaengplacements@outlook.com. Or watch a video at <http://www.superiorideas.org/projects/clean-snowmobile>





Clean Snowmobile Challenge 2017 Schedule of Events

Date/Time	Schedule	Meeting Place
Monday, March 6		
8:00 am to 7:00 pm	Teams Arrive, Registration opens Turn in Snowmobile Description Form IC and ZE Final Technical Inspections	KRC/T3 KRC/T3
5:30pm to 6:00 pm	Fire Safety Presentation Hawk Technologies/Ansul/Superior National Bank	KRC/T3
6:00 pm to 8:00 pm	“Early Volunteers” Reception	<i>Joey’s Seafood, Houghton</i>
Shop open until Midnight	<i>Pizza for students in the shop</i>	
Tuesday, March 7		
7:30 am	Judges Meeting	KRC/T3
10:00 am	Gage Products IC Fueling *Grand Opening Event* Electric Sled Range Test	KRC/T3 KRC/T3
3:00 pm – 5:00 pm	Endurance Run to Copper Harbor <i>Late Lunch and discussion about</i> <i>Future CSC competitions Sponsored by Horiba Instruments</i> Return to KRC – Shop open 5pm until Midnight	KRC/T3 TBD
Wednesday, March 8		
7:30 am	Presentation Judges Meeting	KRC Bldg 69
8:00 am to 5:00 pm	IC Design Presentations	KRC Bldg 69
8:00 am to 5:00 pm	AVL Lab Emissions Event Sensors Inc. In-Service Emissions	T5 T5
10:00 am to 11:00 am	Technical Presentation/Chalk Talk	TBD
8:00 am to 5:00 pm	Make-Up Endurance Miles	KRC/T3
Noon	<i>Lunch for the Presentation Judges</i> <i>Courtesy of Michigan Tech Career Services</i>	KRC Bldg 69
Noon	<i>Lunch in the shop Cincinnati Chili</i> <i>Courtesy of The PCB Group</i>	KRC/T3
Student Registration ends at Noon		
1:00 pm to 3:00 pm	Electric Sled Draw Bar Pull	KRC/T3
4:00 pm to 6:00pm	Networking with Industry	Copper Country Mall
6:00 pm to 8pm	*Snowmobile Public Display* <i>Light refreshments will be served</i> <i>Courtesy of the Michigan Tech Graduate School and Career Services</i>	Copper Country Mall
Shop open until Midnight		KRC/T3



Clean Snowmobile Challenge 2017 Schedule of Events

Thursday, March 9

8:00 am to Noon	PCB and HEAD acoustics Noise Event	KRC T3
8:30 am to 5:00 pm	Polaris Subjective Handling Event	KRC/T3
8:30 am to 5:00 pm	Emissions Events (continued)	KRC/T5
10:00 am to 11:00am	Technical Presentation/Chalk Talk EMITEC- "Catalyst Technology"	KRC/T3
Noon	<i>Pasty Lunch</i>	KRC/T3
1:00 to 4:00pm	ZE Design Presentations	KRC Bldg 69
5:00 pm to 7:30 pm	SAE Milwaukee Section Meeting Presentation TBD	
Announcements for Special Awards Finalists Mandatory Attendance		DOW 641
<i>Dinner provided for Registered Students and Volunteers Provided by Michigan Tech MEEM Department</i>		

Shop open until Midnight

Friday, March 10

7:30 am	Judges Meeting	KRC/T3
9:00 am to 5:00 pm	Emissions Events (continued)	KRC/T5
10:00 am to 11:00am	Technical Presentation Sound Quality HEAD acoustics, Inc.	KRC/T3
Noon	<i>Beef Bar-B-Que</i> <i>courtesy of the Iowa Snowmobile Association</i>	KRC/T3
1:00 pm to 6:00 pm	Open time to enjoy the Keweenaw Mt. Ripley Ski Hill, Dollar Bay Motorsports Dan's Polaris, Houghton Powersports, M&M Powersports	
5:00pm to 6:00pm	VIP Tours of MEEM Building MEEM	
6:00pm to 8:00pm	VIP/Volunteer Reception	TBD
Shop open until Midnight	Sleds Outside by Midnight	<i>Students dinner on your own</i>

Saturday, March 11

8:00 am to 8:30 am	NGK/NTK Cold Start Event	Outside KRC/T3
8:30 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
	ZE Acceleration + Load Test	KRC Test Course
Noon	Judges Meeting to Review Scoring and Penalties	KRC T1
6:30 pm	*Awards Banquet* <i>Banquet Meals for the students courtesy of the PCB Group</i>	<i>MUB Ballroom</i>

*** Public Viewing Opportunities***

Graduate Spotlight – Charlie Scanlon

Hello SAE Milwaukee! I am honored to have the opportunity to write you as a recent graduate now living in San Jose, California. The weather in this part of the country certainly makes the winters more bearable, but experiencing what this Silicon Valley area has to offer has also helped me to appreciate just how special the Milwaukee area is, and how proud I am to hail from there.

I began my first year at MSOE with a laser focus on achieving a career in the Automotive Industry, my involvement with the school's SAE chapter began almost immediately. As a freshman, the only program that offered full participation to me was the Supermileage competition vehicle. While it didn't have the flash of the Formula Hybrid program, or the grit of the Baja team, I quickly found my passion ignited by the challenge of pushing a different facet of the automobile to an extreme; not speed, not capability, but efficiency.

During my second year with the program, I took responsibility for project management, which I continued for the third and final year I spent on the vehicle. I am proud to see today that the team is thriving and giving young students the opportunity to put their engineering education to practice. I found this to be the single most valuable form of education I received during my time at MSOE, which is saying a great deal, given the school's merits for a premium education! My involvement with SAE also extended to the school's student chapter, which I was the Program Manager and Chairman of two years. Working with the MSOE Chapter was particularly gratifying as I was able to help it grow, reach out to members of the Chapter, and get students involved with the automotive community (and vice versa).

After graduation, I was fortunate enough to find employment as a Quality Engineer at Tesla Motors, Inc. – a dream job, no doubt! Tesla was a young company at the time, and still is. The flexibility this youth offered, combined with light-speed pace that is Silicon Valley made it the perfect job for learning a great deal in the industry. I've had the chance to work with the brightest minds in their fields on a variety of disciplines – in my 2.5 years, I've worked on interior trim, closures mechanisms, exterior fit, media systems, and the driver assistance system that we call "Autopilot". Tesla is a special place to work, and in my time here, I have watched us achieve our initial mission to "Accelerate the world's transition to sustainable transport."



All good things must come to an end, however, and as the adventure of life continues, I find myself taking advantage of the early stages of my career to "itch" the startup bug. I will be parting ways from Tesla to join a small team at a company called Faraday Future, which is not too different from what Tesla was 8 years ago. I am excited to make a big impact on a company still in its infancy and pursue career growth of my own in the process. If life is about adventure and learning, then we must take risks and make mistakes to meet those ends. Someday I look forward to bringing my experiences back to a career in Milwaukee, home of many businesses which I brag about daily – Milwaukee Tool, Snap-On Tool, Caterpillar, Harley Davidson, and Johnson Controls, to name a few!



Cheers to all, and thank you for giving me the opportunity to share my experiences with all of you!

-Charlie Scanlon

Marquette University Baja Update

On February 18th, Marquette University's Baja team placed 1st out of roughly 40 teams in Michigan Tech's Blizzard Baja event. This is Marquette's first-ever 1st place finish in a Baja competition. An award of \$500 was presented to the team for their victory. In addition to their 1st place finish, Marquette received the Nexteer Automotive High Performance Award for fastest lap – in fact, Marquette recorded the 3 fastest laps at the competition this year! Congratulations to Marquette on their win!



Milwaukee Section 2016-2017 Governing Board

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SAE Board Member Shadow Program

Members, your board of directors has created a new way for you to get involved in the activities of the SAE Milwaukee Section!

Do you like the service and support that your SAE Milwaukee Section provides to you? Do you have some fresh ideas to make your section better? Or.....would you like to just get involved?

If you would like to participate but do not know how to get started, we have the program for you. This new program allows you to shadow a board member to learn the details of what they do for this section. With this opportunity you can investigate/help a position that interests you without jumping in with both feet. This will allow you to participate to the level you are comfortable with, find the position that suits your talents and/or interests, or to serve in a committee with others.

We would like to invite you to Shadow a Board Member.

If you are interested in this opportunity, please contact Randy Hoffman at (920) 397-6644.



SAE Milwaukee STEM/AWIM program

Inspiring Today's Students to Become Tomorrow's Engineers and Scientists

OUR K-8 STEM EDUCATION SOLUTION, A World in Motion (AWIM), is a teacher-administered, industry volunteer-assisted program that brings science, technology, engineering and math (STEM) education to life in the classroom for students in Kindergarten through Grade 8. Benchmarked to the national standards, the AWIM program incorporates integrated STEM learning experiences through hands-on activities that reinforce classroom STEM learning.

Program Highlights & Benefits

- It's interdisciplinary in nature, which helps students learn to make meaningful connections among disciplines
- All activities correlate with the Next Generation Science standards and the Common Core standards
- It builds bridges between corporations and classrooms by giving teachers, volunteers, and students the opportunity to work together and learn from each other
- More than 72,000 curriculum/challenge kits have been provided; over 4.5 million students participate; more than 30,000 volunteers.



Industry Support & Volunteers

- Industry support is essential to this program. Corporations and their employees can influence the ways in which youth are prepared to meet the future by sponsoring schools in their communities. By doing so, schools can qualify to receive free or low cost AWIM program Challenge kits.
- Industry volunteers provide students with first-hand impressions and information about careers in their chosen profession and serve as an in-classroom resource for teachers.

Accordingly, Johnson Controls has been supporting certain Milwaukee county schools by providing the kits and volunteering hours over the past 8 years. This year, the “Jet Toy” challenge will be held for three Elementary schools – Atwater, Lake Bluff, and Kluge – proudly in collaboration with SAE - Milwaukee Section and broader SAE members as of the volunteers to enrich the students’ hands-on experience.

The program will be started in early February.

For more information on volunteering, please contact Negin Salami:

negin.salami@jci.com

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