



Milwaukee Section Newsletter

January 2009

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Naval Power Distribution Control and Automation



Sponsored by

***DRS Power and Control
Technologies, Inc***

**Ken Forsell – Mechanical Engineering Manager
Thomas Hooper – Electrical Engineering Supervisor**

**5:30 p.m. Wednesday February 4, 2009
Four Points Sheraton, Brown Deer, WI**



Note: *US Citizenship required for attendance – pre-registration required – credentials will be checked at the door.*

Program Details:

Mr. Ken Forsell and Mr. Tom Hooper will provide an overview and technical challenges of satisfying the Navy. DRS supplies critical machinery and control to many ships in the US Navy fleet such as ship propulsion, power generation, power conversion, power distribution, system automation, motor controls and drives, pumps, propulsion and software, plus field engineering support from equipment design, qualification testing, ship construction through sea and acceptance trials.

DRS is a critical supplier to the recently commissioned USS Freedom. If you were unable to attend the commissioning ceremony, a brief overview of this new class of ship will be included in the presentations. In addition, Mr. Forsell and Mr. Hooper will provide an outline of DRS' contributions to the entire US Navy fleet.

DRS Technologies -

DRS Technologies provides leading edge products and services to government and commercial customers worldwide. Focused on defense electronics, we develop and manufacture a broad range of mission critical systems and components in the areas of communications, combat systems, battlefield digitization, electro-optics, power systems, data storage, digital imaging, flight safety and space. For additional information on DRS, please visit our website at www.drs.com

DRS Power & Control Technologies, Inc. in Milwaukee, is a leading supplier of high-performance power conversion and instrumentation & control systems for the U.S. Navy's combatant fleet. Products include ship electric propulsion equipment, power electronics equipment, high-performance networks, shipboard control equipment and control panels, tactical displays and specialty reactor plant instrumentation and control equipment. The Division designs, qualifies and manufactures products that help people every day on the ground, sea and in the air.

About Finmeccanica -

Finmeccanica is a leading global high-tech company headquartered in Rome, Italy. It has core competencies in the design and manufacture of helicopters, civil and military aircrafts, aero structures, satellites, space infrastructure, missiles and defense electronics.

The company is listed on the Milan stock exchange, has over \$20 billion in revenues and operates around the globe. It employs approximately 60,000 people worldwide, with over 2,000 employees across 32 sites in North America.

Whether flying the President, transporting troops and cargo, securing borders, tracing criminals or enhancing the Navy's capabilities, Finmeccanica products are designed to address safety and security needs for the United States and its allies.



About our speakers:

Ken Forsell Manager – Mechanical Engineering, DRS Power & Control Technologies, Inc.



Mr. Forsell completed undergraduate studies at the Milwaukee School of Engineering, then earned his MSME from the University of Wisconsin – Milwaukee, and has recently completed the Master’s Certificate in Project Management at UW-Madison.

During his 30 year career in industrial automation and motor controls, Mr. Forsell has worked as a design engineer for Cutler-Hammer / Eaton, Telemecanique / Schneider, Furnas Electric Co., and Siemens, and for the last 14 years as an Engineering Manager for Siemens and DRS. He is the inventor or co-inventor on seven US and

foreign patents, has published several technical articles, and is a registered Professional Engineer in the State of Wisconsin. His service with Telemecanique included 2-1/2 years living and working in Paris, France as a member of a new product development team. At Siemens, Mr. Forsell served as leader of a large international team developing new automation and motor control products for global markets.

In his present position with DRS, Mr. Forsell manages the Mechanical Engineering and Mechanical Design Departments, completing hardware design and development projects for US Navy vessels.

Thomas Hooper Mechanical Engineering Supervisor, DRS Power & Control Technologies, Inc.



Mr. Hooper has 27 years in the research and development sector of the power electronics industry. He has worked 15 years as technician then engineer at Louis Allis / MagneTek, followed by the last 12 years as engineer then Supervisor at Eaton / DRS. He has worked on a wide variety of equipment including motor drives, generator controls, power distribution and power converters for the heavy industrial and military industries. His diverse engineering background in all disciplines serves him well in performing his responsibilities as Engineering Supervisor.

Mr. Hooper earned an AAS-EET degree from Michigan Technological University, and then earned his BS-EET from Milwaukee School of Engineering.

Meeting and Presentation at Four Points Sheraton

--- EVENT AGENDA ---

Registration: 5:30 pm
Dinner: 6:00 pm
Program: 7:00 - 8:30pm

--- DINNER ---

MENU:
DINNER PRICES:
SAE Members / spouses: \$22.00
Retirees: \$17.00
Guests / Non-members: \$27.00
Students w/ID \$10.00

--- MENU ---

MENU: *(select one)*

- **Flat Iron Fillet** (8 oz tender top blade steak marinated with mesquite seasoning, charbroiled, and sautéed mushrooms)
- **Almond Crusted Salmon** (Atlantic Salmon topped with crushed almonds and baked with white wine and citron butter)

Included: Choice of soup or salad, Seasoned fresh vegetables, potatoes or rice, freshly baked roll, plus coffee, tea, or milk

Registration:

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

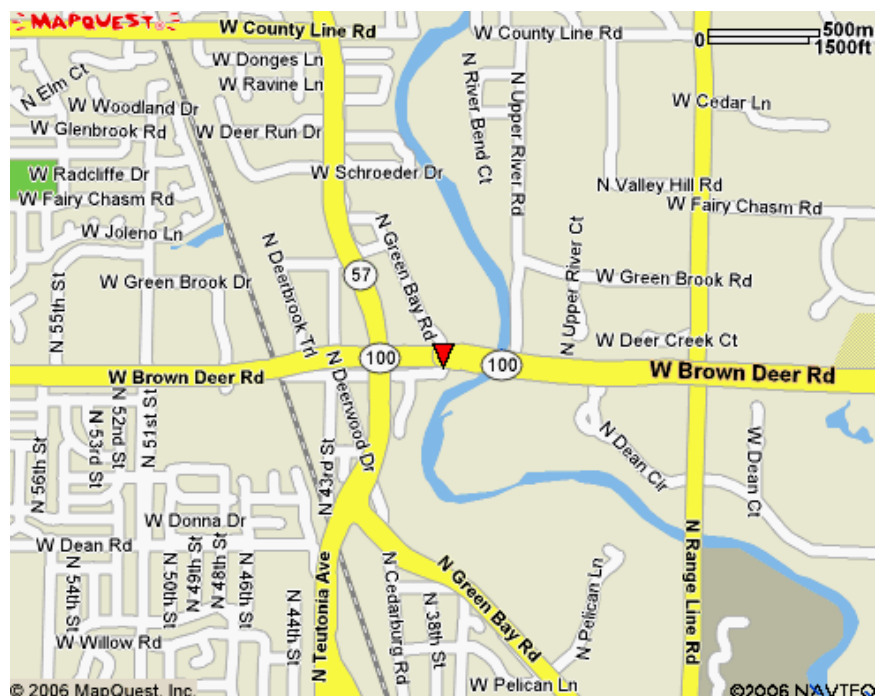
Retirees, students and members without web access may register by phone on the SAE Registration Coordinator – Jim Ryan (262) 636-1634. Note new registration number!

Registration deadline: Monday, February 2, 2009 - 12:00 NOON

Note: *US Citizenship required for attendance – pre-registration required – credentials will be checked at the door.*

Map to Presentation Four Points Sheraton:

***Four Points by Sheraton
Milwaukee North
8900 North Killdeer Court ·
Brown Deer, Wisconsin 53209
Phone: (414) 355-8585***



pursue it...



**DREAMS PURSUED
ARE DREAMS REALIZED.**

At DRS, you can realize a challenging career with endless possibilities. Our success comes from people who care about what they do. As a leading supplier of integrated products, services and support to military forces, intelligence agencies and contractors worldwide, DRS helps shape the future of the global defense landscape—providing tomorrow’s technology, today. *Join our team of talented, motivated individuals who are making a difference.*

www.drs.com/careers

Equal Opportunity Employer
M/F/D/V



CSC 2009 - 10th Anniversary

SAE Clean Snowmobile Challenge at Michigan Tech.

March 16-21, 2009 <http://students.sae.org/competitions/snowmobile/>

Here are some of our accomplishments of student chapters, sponsors and professional contributions have achieved over the past 10 years:

- 3,000 University students across the U.S. and Canada have sought solutions to making cleaner and quieter snowmobiles
- 130 SAE quality technical papers
- More than 20 of the technical papers have been published and presented in SAE technical conferences
- 2 of the 20 papers have been judged as the top 10 at the SAE Small Engines Technology Conference
- Direct Fuel Injection technology introduced in the 2009 Ski-Doo snowmobile was first proven on the winning entry using E10
- The same design came in second place in CSC 2008 running on E85 high ethanol fuel
- Winning snowmobiles meet or exceed 2012 emissions and noise standards
- Demonstrated that half the noise of a snowmobile is related to the track
- Catalytic converters have proven to lower emissions on snowmobiles at CSC
- Noise and emissions have reduced since the inception of CSC at National Parks such. Officials at Yellowstone are big supporters of CSC and acknowledge these reductions.

Please mark your calendars for the week of March 16-21, 2009 – and join us for CSC 2009. The website below has more information regarding teams and updates as we get closer to March. Please have a safe and joyful holiday (and snowmobiling) season!

Best regards,
Jay Meldrum, Sr. – Director, Keweenaw Research Center
Michigan Tech, w 906-487-3178, c 906-281-1069
jmeldrum@mtu.edu www.mtukrc.org

2009 SAE Baja, MGA Proving Grounds, June 11 - 14th 2009 – Sponsors and Volunteers Needed!

Get ready for Baja! This year the competition will be hosted by UW-Madison at the MGA proving grounds in Burlington, WI. Glenn Bower, Mike Christopherson, Jason Bower and Kathryn Christopherson are providing their capable leadership for this competition again. However, they will need the help of many other volunteers to make this event successful. More than 100 collegiate teams from around the country will be here. Please stay tuned with the event by following the competition website at www.baja.wisc.edu. Download and complete the volunteer form, and send to Glenn grbower@wisc.edu or fax (608) 262-3592.

8x 16 Dual Axle Trailer FOR SALE \$4500.00 Pace America Trailer - Summit #SL816TA2. The trailer has been used for Baja and has ~300 miles on it. Proceeds go toward the Collegiate Design Series and Student Grants. Contact Bernard Krauska or Glenn Bower for more details.



www.navyleague.org

Navy League of the United States Since its founding in 1902 with the enthusiastic support of President Theodore Roosevelt, the Navy League of the United States (NLUS) has promoted the need for strength in American sea power. As Assistant Secretary of the Navy and recipient of both the Nobel Peace Prize and the Congressional medal of Honor, Roosevelt fully understood that superior sea power sustains peace, deters war, and protects our economy as well as the freedoms essential to the American way of life.

Navy League Members... are the nation's watchdogs for the sea services and track issues regarding military preparedness, modernization, and all other matters relative to maintaining U.S. strength at sea. Members of the Navy League are also recognized for their integrity, patriotism and community service, especially on the waterfront. Additionally, we conduct educational programs promoting a second-to-none sea service and support for the people who serve and their families.

The Navy League Supports the Sea Services by:

- Educating government officials and American citizens about the importance of strong sea services and important naval issues.
- Sponsoring the Sea-Air-Space Exposition, the largest maritime exhibition of its kind, as well as other forums addressing sea service issues.
- Communicating defense issues with more than 70,000 military personnel and civilians through our award winning magazine, *Seapower*.
- Hosting national awards programs to recognize the exceptional service of active duty and reserve personnel.
- Assisting service members in their transition from the military into private sector employment through the Navy League Hiring Center at <http://www.navyleague.info>.
- Contributing more than \$600,000 annually to our nation's youth through support of the U.S. Naval Sea Cadet's Corps.

Graphics Systems, Professional Engineering Placements and SAE Milwaukee Section Helping to Assist Members with Job Seeking and Retraining

The SAE – Milwaukee Section and Graphics Systems are working on a program to assist SAE Milwaukee Section members who have been recently laid off. Graphics Systems will allow these SAE members to participate in SolidWorks® training at no cost, based upon space available. Training materials will be paid for by SAE Milwaukee Section. In addition, Dale Wiza of Professional Engineering Placements will assist with career and resume coaching.

SAE International also has a provision for unemployed members to maintain their membership at a reduced rate.

For further information, please contact David Pond at Graphics Systems david.pond@gxsc.com, (262) 790-1080 ext 1117, Dale Wiza at Professional Engineering Placements dale@engineeringplacements.com (414) 807-9663, or Bernard Krauska at krauska@execpc.com 262-442-7754. Qualification and proof of membership required. Details to follow.



SAE sponsor Graphics Systems Corporation, located in Menomonee Falls (Milwaukee), WI, is now hiring experienced Mechanical Engineers. In business for over 20 years, Graphics Systems is a leading engineering software provider in the Midwest. They currently have full-time and internship opportunities for engineers working with 3D CAD (SolidWorks), PDM, and FEA software.

➤ **Applications Engineer (Full-Time)**

- **Description:** Serves as a liaison between the customer and the company on engineering matters related to product applications, sales, installation, and services. Uses knowledge of engineering and software skills to promote the sale of company products and services. Provides technical services and support to clients by phone or face-to-face relating to use, operation, and maintenance of products and services.
- **Experience:** Mechanical Engineering Degree, 2+ years of industry experience required.

➤ **Technical Support Engineer (Internship / Full-Time)**

- **Description:** Provides technical services and support to clients by phone or face-to-face relating to use, operation, and maintenance of products and services.
- **Experience:** Working towards or obtained Mechanical Engineering or related degree.

➤ **PDM Applications Engineer (Full-Time)**

- **Description:** Responsible for Pre/Post Sales of Product Data Management activities including, but not limited to: pre-sales software demonstrations, software implementations, customer training, and post-sales support of SolidWorks Enterprise PDM software.
- **Experience:** B.S. in Mechanical Engineering, MIS, Computer Science, or related degree, 2+ years of PDM experience required.

➤ **FEA/CAE Applications Engineer (Full-Time)**

- **Description:** Solves engineering problems in both pre/post sales environments by using SolidWorks Simulation FEA software for technical benchmarks, customized applications, and training sessions. The FEA Engineer also provides technical support to customers to effectively use and interpret engineering analysis.
- **Experience:** B.S. in Mechanical Engineering and 2+ years of experience, or a Master's Degree. Experience with SolidWorks Simulation and/or other FEA programs is required.

If interested in any of the positions above, please submit resumes and questions to:

Adam Kasinskas
Human Resources Specialist
Graphics Systems Corporation

W133 N5138 Campbell Drive | Menomonee Falls | WI | 53051

Phone: 262-790-1080 x1121

E-mail: careers@gxsc.com

For more information on Graphics Systems, visit their website at www.gxsc.com.

Milwaukee Section 2007-2008 Governing Board

CHAIRMAN:

Bernard Krauska
DRS Technologies
email: Krauska@execpc.com
Phone: (262) 442-7754

VICE CHAIRMAN:

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Strattec Security Corporation
email: jrayeske@strattec.com

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Wayne Richter
Heraeus GmbH – Exhaust Catalysts
email: richterway@sbcglobal.net
Phone: (262).377.8145

TREASURER:

Jim Ryan
Modine Manufacturing Company
email: j.w.ryan@na.modine.com
Work: (262) 636-1634

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

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OPEN POSITION

A WORLD IN MOTION (AWIM): Education

Patrick Murray
Muskego High School
email: pmurray@mnsd.k12.wi.us
Work: (262) 679-2300 ext. 4166

CAREER DEVELOPMENT

Dale Wiza
Professional Engineering Placements, Inc.
email: dale@engineeringplacements.com
Work: 414-807-9663

COLLEGIATE ADVISORS:

Glenn Bower, PhD.
UW-Madison
email: grbower@facstaff.wisc.edu
Work: (608) 263-7252

Chris Damm, PhD.

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

Jim Rice, PhD.

Marquette University
email: james.rice@marquette.edu
work: (414) 288-5405

Dear Members and Section Friends,

Thanks from all of the SAE members who have made personal contact with me for their appreciation of their participation in the Commissioning of the USS Freedom in Milwaukee this past November. The recognition really goes to the US Navy League that invited our section to participate. We had more than 90 members, family and friends in attendance. If all goes well, there should be other LCS ships built and commissioned in our area.

This coming month, I am proud to introduce DRS Technologies to the Milwaukee Section and show you what we do for our US Navy. Ken Forsell and Tom Hooper have spent significant effort putting together their presentation. DRS has been a significant vendor for the LCS program. I think you will find it very informative.

A&E Tools has stepped up to be a new sponsor for the section this year. We appreciate the initiative of Bruce Engel, to provide tool sets to the collegiate teams at Student Night. These awards capped off a great event.

The Milwaukee Section is working to assist the Student Chapters, Collegiate Design Series: Clean Snowmobile Challenge and SAE Baja. These students develop such rich experiences from their participation. A secret needs to be made known – key employers and their HR departments descend upon these competitions to recruit talent to their companies. Students that actively participate in the collegiate design series are more likely to be productive contributors more quickly, and leaders in the companies they work for. The opportunities to feed these students, teams and the competition can yield huge dividends to you and your employer. Please consider sponsorship, volunteering or at least attending one of these upcoming events. I know you will be inspired.

I appreciate the last 7 years of participation and growth that I have experienced with the Section Governing Board. This will be my last year as Chairman. Jim Ryan has been nominated to serve as Chairman for this coming year. Josh Rayeske will continue as a board member, but will be active in his role from a distance. He has been tapped by Strattec to accept an international role in their German partner. We wish him safe travels and rich experiences until he returns. Wayne Richter and I will continue to serve the Section as called. We are actively working on our succession plan to help support Jim Ryan in his development as Chairman.

Our next Governing Board meeting will be an invitational on March 11th to share more information about the Milwaukee Section and develop our programs this next year. If you or your company is interested in offering a presentation, or are interested in assisting with a program or Section leadership, please contact me or any board member for more details.

Regards,

Bernard Krauska
Chairman – Milwaukee Section
Krauska@execpc.com



Wayne Richter - Secretary
1588 Woodland Dr
Grafton, WI 53024

Upcoming 2009 Events: 10th Anniversary of the Clean Snowmobile Challenge, Signicast tour and presentation, Harley-Davidson Museum – “Behind the Scenes” (TBD) , Cirrus Aircraft, Mini-Baja®, June Sprints at Road America

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