



SEPTEMBER MEETING

Wednesday, 21-Sept-2005

PROGRAM:



- ◆ Hybrid Vehicle Technology and Design
- ◆ Team TerraMax[®] – come hear about it!
- ◆ Military Vehicle Programs, too
- ◆ Join us on the New Product Development and Assembly Facility tours - *a must see!*
- ◆ Visit a static display of Commercial and Military trucks on the Hawthorne Suites parking lot starting at 5:00pm
- ◆ Ride the \$1⁰⁰ Motorcoach {Midwest Limo} from Milwaukee & Meno Falls, round-trip to Oshkosh and the event!
(cost is subsidized by your MKE Section)

Location: LaSure's Banquet Hall
(dinner/talk) Hawthorne Suites
3125 South Washburn
Oshkosh WI 54904
Phone: (920) 651-0796

[If you wish to drive in, meet us at LaSure's]

Tour: OTC [Oshkosh Truck Corporation]
Oshkosh, WI

--- EVENT AGENDA ---

- Bus departs State Fair: 4:00pm sharp**
[Park-n-Ride at I-94 & 76th St, S.W. corner]
- Bus departs Meno Falls: 4:25pm**
[parking lot at S.E. corner of Pilgrim Rd & Main St, east of Schlotzsky's restaurant]
- Mtg. Registration: 5:30pm**
[at LaSure's Banquet Hall]
- Welcome & Dinner: 5:45pm**
- Program: [to follow]**
- Tour (approx): 8:00-8:45pm**

--- DINNER ---

MENU:

NO Selection Required.

Dinner Buffet – Turkey, Ham, Beef Tips, mashed potatoes, buttered noodles, Wisconsin blend veggies, tossed salad, fruit salad, desert and beverages.

DINNER PRICES:

SAE Members / spouses:	\$20.00
Retirees:	\$15.00
Guests / Non-members:	\$25.00
Students w/ID	\$5.00

Registration:

Bus seat & dinner reservations must be received one week before the event. Only pre-payments made with a charge card can be completed online via <http://milwaukee.sae.org>.

Pay-at-the-door registrations are email: milw-sae@wi.rr.com or by phone on the SAE Registration Line (414-687-3032).

Please be thorough. "No-shows" with reservations will be billed. 50-Year members entitled to 1 annual free dinner.

Registration deadline: noon – September 15th, 2005

Topic: Hybrid Vehicle Technology and Team TerraMax®
Speaker: <> Chris Yakes, Chief Engineer Advance Products Group

Mr. Yakes will discuss Oshkosh Truck propulsion vehicles (hybrids), and will talk about DARPA Grand Challenge TerraMax vehicles and systems.

Hybrid Vehicle Technology

Oshkosh is a leader in the development of next-generation hybrid propulsion systems in tactical defense trucks.

ProPulse® is an unmatched hybrid electric drive system that provides dramatic benefit for military fleet performance:

- Improves fuel economy by up to 40 percent over conventional power trains in harsh terrain.
- Smaller logistics footprint. Since the system uses no batteries none ever need to be replaced. Rather, ultra-capacitors are used for energy storage. Therefore, less fuel is needed to supply ProPulse-equipped trucks.
- On-board generator. The system acts as an on-board generator, providing enough electricity to power a city block, airfield, hospital or command center.
- Reduced heat signature. The truck can sit silently, draw on the ProPulse system to power equipment, and yet generate no heat signature since the engine doesn't need to be running.
- Advanced safety technology. Unlike some other systems, users can discharge all stored energy from the truck, so maintenance personnel can work in complete safety.

Team TerraMax®

- Oshkosh Truck, a leading manufacturer of off-road vehicles for the military, Rockwell Collins, a leader in aviation autonomy, and the University of Parma, Italy, an experienced developer of real-time vision systems for the automobile industry, are Team TerraMax.

They will compete in the 175-mile 2005 DARPA Grand Challenge. All the vehicles will be completely autonomous. No driver. No remote controls. No humans.

Topic: OTC Military Programs - Specifically U.S. Army Vehicles
Speaker: <> Jim Van Sistine, Deputy Director Army Programs

Oshkosh Truck is currently manufacturing a wide variety of specialty trucks and truck bodies for the US ARMY. The following is a brief list of some of the vehicles manufactured by Oshkosh; HEMTT (Heavy Expanded Mobility Tactical Truck), HET (Heavy Equipment Transporter), and the PLS (Paletized Load System). Each of these vehicle families requires engineering groups to constantly design and improve the product line to meet higher and higher performance standards set by the US ARMY. Tonight's discussion will center around some of the current issues facing OTC engineering. Presently, two of the largest issues are the demand for vehicle armor and for remanufacturing of the existing fleet for future use.

Tour: NPD and the South Plant Manufacturing Line

The tour will consist of two facilities (located next to each other), the NPD (New Product Development) where all of Oshkosh Trucks prototype and pilot vehicle builds happen. NPD also houses many of the Engineering groups that service the entire corporation.

South Plant Manufacturing is the main assembly line for all the vehicles constructed in Oshkosh. It is known for its "flexible manufacturing" capability. This means that the assembly line can produce any one of the many vehicle types to be manufactured at any time. Looking down the line you will see, in no particular order, military vehicles, fire rescue and commercial vehicles all manufactured on the same assembly line at the same time.



MAP :

LaSure's Banquet Hall
 3125 S. Washburn Road
 Oshkosh, WI 54904

From Milwaukee:

- Take 41/45 north to Hwy 44 exit (South Park Ave)
- Turn left (west) onto Hwy 44
- Take first left (south) after overpass onto Washburn (west frontage road)
- LaSure's & Hawthorne Suites is on the right

From Madison:

- Hwy 26 north to Oshkosh
- Turn left (north) onto Washburn before I-41
- LaSure's & Hawthorne Suites is on the right

From Green Bay:

- Take I-41 South to Hwy 44 exit (South Park Ave)
- Turn left (west) onto Hwy 44
- Take first left (south) after overpass onto Washburn (west frontage road)
- LaSure's & Hawthorne Suites is on the right

Additional maps (for the Milwaukee motorcoach departure/return sites) are shown on Page 5.

GOT MAIL? Do you receive the Milw Section Email Newsletter?

In September and December 2005, SAE Milwaukee Section members will receive a hardcopy mailing of the newsletter. Student members will not receive the hardcopy. All members who have provided SAE National with their email address will also receive the email newsletter. If you are not presently receiving the newsletter via email and you would like to be, please respond to me directly at mark.d@email.sae.org (preferred) or make a phone call to the registration line (414-687-3032) and leave me a message. Thank you!

Mark DeBattista, Section Program Chair



Milwaukee Section 2005-2006 Governing Board

- Chairman's Note -

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Happy New Year! Welcome to the beginning of our 2005-2006 Milwaukee Section year and the first of our member events. Our busy summer will soon be behind us and we'll begin to plan for fall and winter. Football is on our minds and the memories of our summer spent, enjoying whatever we liked to enjoy, fades away. Part of the fall season will be gearing up for our section events. As your new chairman, I'm looking forward to meeting as many of our section members as possible. Please approach me to share your thoughts. Use our Board members to toss ideas off of, and visit our section web site often to view information and see what will be occurring. One very important goal of our Board is to make sure that we offer value to our members. We've grown our section's membership over the last couple of years. Our effort now is to make sure that you are receiving what you expect from your Milwaukee SAE Section.

Let me share a few sentences about myself. Number one, I'm a father with four children under the age of 14. My personal life is filled with their sporting and school events. Both my wife and I believe that our children, through their friends, have introduced us to many adult friends. I am looking forward to a similar opportunity as your SAE Section Chairman. Professionally, I am employed by Modine Manufacturing in Racine as a Program Manger and I'm involved in engine component programs. Products like oil coolers and exhaust gas regeneration coolers presently occupy most of my time. I graduated from the University of Wisconsin - Milwaukee in 1989 with a BSME degree.

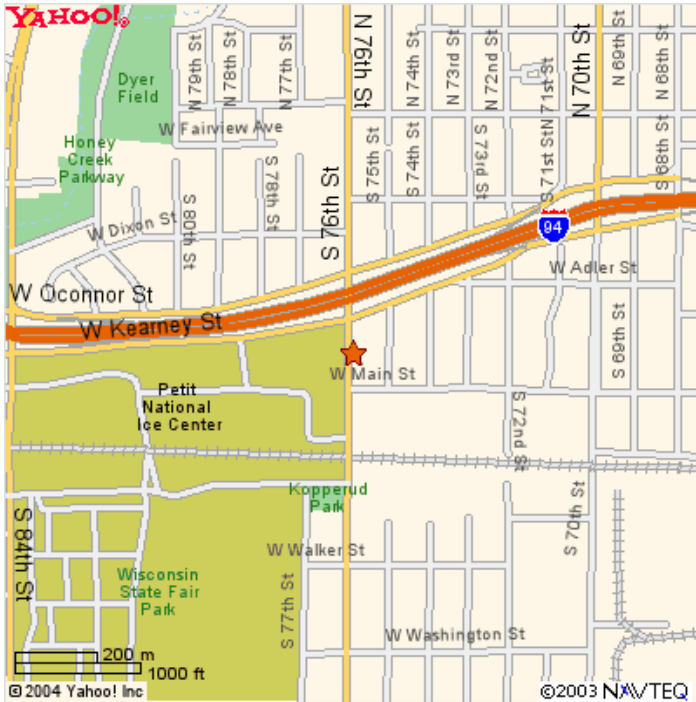
We have a very active section year planned. We kick off the season with a visit to OTC - Oshkosh Truck Corporation. Members can board a coach for the trip north. We'll follow that meeting with a visit to Harley-Davidson in October. Mark your calendar for November 1-3, when the SAE Commercial Vehicle Show will take place in the Chicago area. We'd like to join Chicago's section members and enjoy the show together. In December we may schedule a social event for the Holidays and involve our significant others. If you enjoy snowmobiles or want to learn more about them, join us in upper Michigan at the Clean Snowmobile Challenge in March. Mini-Baja will be hosted by our section next summer. Please help us get ready for this event. We need support from our section members and most importantly our corporate community. This is the single most important event for section this year, and members have an opportunity to welcome student teams to southeast Wisconsin from all over the world. Contact me for information regarding our Mini-Baja Committee.

I don't want any of us to forget about our section's involvement with *AWIM - A World in Motion*. We need to continue to plan events at local schools. Liz Sutton, our Vice Chair of Math and Science can help us achieve this goal. Please get in touch with Liz or me if you know of an elementary or middle school that you feel would benefit from this program.

There is much more in store! Please contact the Board with your feedback, questions or other input. We need your support to achieve our goal of making sure that we provide value to all of our members. On behalf of our Section Board, I would like to thank all of you in advance for your support!

Best regards,
Joe Sagat

Additional Milwaukee MOTORCOACH Maps:



[MAP](#) :

State Fair Park-n-Ride
Departure time: 4:00 pm

Due to our required traveling time the bus must leave promptly at 4:00 o'clock, with a return time at approximately 10:30pm

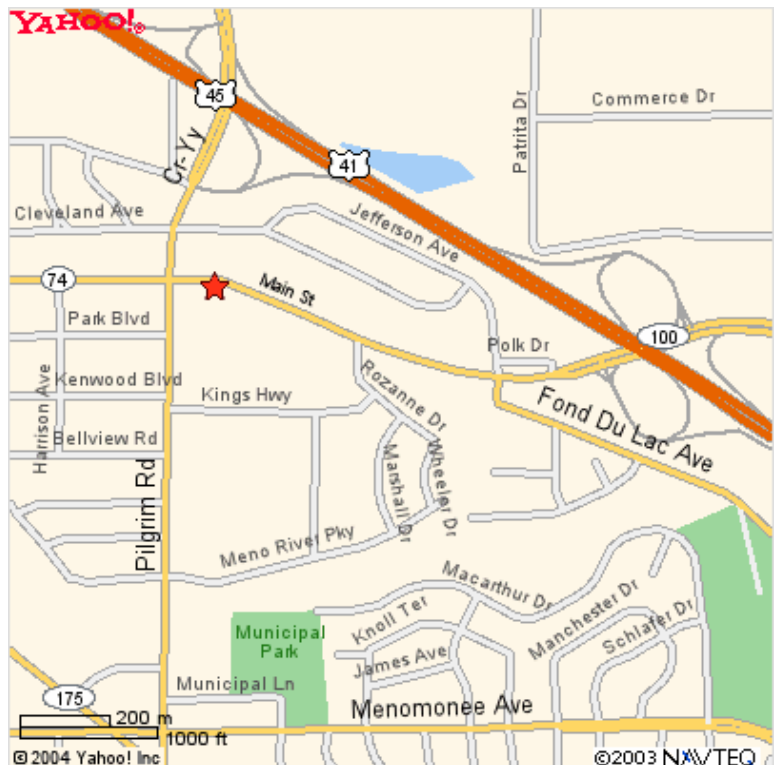
Location is the southwest corner of W. Kearney Street & 76th Street., just south of I-94. From the west, exit the freeway at 84th Street. Go straight at 84th St. (the stop & go light), and continue east to the entrances on the right.

[MAP](#) :

Menomonee Falls parking lot
Departure time: 4:25 pm

A gas station is on the southeast corner of Pilgrim Rd and Main Street. Schlotzsky's is east of the gas station. The motorcoach will stop in the open part of the lot, to the east of Schlotzsky's.

Easy access off of the freeway is southbound, at Pilgrim Road, or westbound via the Main St (Hwy 74) off ramp.



October 13 Meeting tour: Harley-Davidson Powertrain Plant, Pilgrim Road facility – Menomonee Falls

November 16 Meeting tour: Poclain Hydraulics facility – Sturtevant

January 19 Meeting Patent Law and Liability meeting – Milwaukee

February 15 Meeting (tour) MATC Diesel Engine Event – Milwaukee

March 13-18 Event (trip) Clean Snowmobile Challenge 2006 – Houghton, MI

March 16 Meeting Bruno Independent Living Aids – Waukesha

April 19 Meeting SAE Student Night – UWM Milwaukee Campus

May 18 Meeting (tentative) Family Night, the “new railroad” in the USA, location TBD

*Upcoming
Events*

Meeting Sponsorship

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

 **Oshkosh Truck Corporation [Oshkosh]**

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

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

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

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