

Special Interest Articles:

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Renew Your Membership

Students may renew or pay their membership dues online at <http://www.sae.org/students/index.htm> or call SAE Customer Service at 1-877-606-7323.

Graduates, transfer your Student Membership to Professional Membership. Transfer online today at <http://www.sae.org/students/membership/transfer.htm>

Tell Us Your Stories

Do you have information, stories, or pictures that you want to share regarding your team?

Email them to <mailto:CollegiateCompetitions@sae.org>

Free Registration

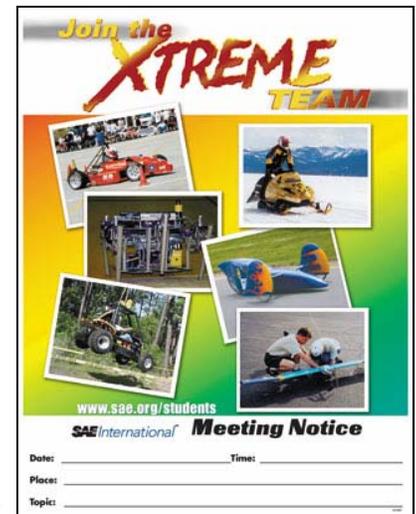
It's true! For the 2005 competition season, we are offering free registration. This is how it will work. First you must submit an article, story, or photo to <mailto:CollegiateCompetitions@sae.org>. That is all that you will need to do. You and your team will then be qualified for a drawing in September of 2004 for free registration for the 2005 event of your choice.

We are looking for any information that you would like to share with us. Do you have a success story? Did you and your team create a new innovation that you would like to share? Do you want to report an event, activity, or update on your team or school? Do you have any entertaining stories or photos? Send them in! Auburn University did for the November issue regarding their "Big Day" and they are now registered for free registration!

Don't delay. This is an excellent opportunity to show-off your team and to qualify for free 2005 registration!

New Posters Online

New meeting notice posters are now available online at <http://www.sae.org/students/collegiate/posters.htm>. There are seven to choose from including Mini Baja, Clean Snowmobile, and Formula SAE among others. They are in two different sizes, 8x10 and 11x17, for your convenience. These posters can be printed out at your leisure to promote your club or branch. They are definitely eye catching and a wonderful resource to gain members and promote your team around campus. Check them out! It just might be you or your team on the posters!



First Event of the Year!

Clean Snowmobile Challenge



Another year, another challenge. It is time for some fun in the sun...or is it SNOW! Hosting the Clean Snowmobile Challenge again this year is none other than Jay Meldrum, Director of Keweenaw Research Center, Michigan Technological University located in scenic Houghton, Michigan.

Houghton, Michigan specifically the Keweenaw Peninsula is a Snowmobiler's dream. Hence why it is the location of this years Clean Snowmobile Challenge. Snow is not measured in inches or counted by days here, instead it is measured in feet and it stays around for months! And the average winter temperature on the Keweenaw Peninsula is a little warmer than expected; approximately 20 - 30 degrees.

Over 200 miles of groomed trails connect to the 2,500 miles of trails covering the Michigan's Upper Peninsula. As far as the course goes this year, organizer Jay Meldrum, states that the endurance run will be ran on local snowmobile trails. The trail from Twin Lakes to Copper Harbor is mainly "Trail #3" although local snowfall and trail conditions will dictate which trail is used. The remainder of the testing will all be done on the private 500 acre test course using snow packed areas groomed by staff. The Keweenaw Research Center is located just off Trail #3, so getting to the endurance trail will be easy.

Posted online now at the CSC webpage, <http://www.sae.org/students/csceventinfo.htm>, is both a draft itinerary of the schedule of events as well as hotel information. It is strongly encouraged that you look over this information, especially the hotel information as we are able to provide you with discounted room rates. Follow the instructions noted on this site. Below is a list including some local restaurants as well as some specialty shops you may want to visit in regards to your snowmobile. Also two websites to check out that can provide you with lots of information are: www.pasty.com and www.mtukrc.org. At the time of the event, the organizer will also provide some handouts that detail the area and local attractions.



Restaurants:

The Ambassador opened from 11am to 11pm; serves sandwiches, pizza, tacos, salads, spaghetti and more.

Ameurasia opened from 7am to 10pm is a full service facility featuring American, European & Asian cuisine.

Downtowner Lounge opened from 11am to 2am is the house of the best homemade chili and burgers in town.

Among the numerous other restaurants there is also in town a **McDonald's, Subway, and Taco Bell.**

Specialty Shops:

Superior Polymer Products, Inc – for adhesives and glue

Dan's Polaris & Victory – for all-terrain vehicles

Evert's Motor Sales, Inc – sales and rentals of snowmobiles

Frank's True Value – appliances and small parts

Automotive Parts & Supplies:

Superior Auto Parts (NAPA)

Precision Automotive

DAL Corp.

WalMart

International News

2003 Mini Baja: South Africa Style

Initiated in 1996 by Dr. Francois Naude and Barry Grobbelaar of the University of Pretoria, the Sasol Mini Baja event has experienced increasing numbers of participants. This year's competition was held in a combination of two places: Gerotek Test Facilities and Zwartkops Off Road Academy. Following the standard SAE competition events held in the United States, the participants faced tests of obstacles, maneuverability, and the great endurance race. In South Africa, the endurance run consisted of a large mud pool, bumps and humps, holes, ditches, sharp turns and lots of dirt. Students however were not only to design their car for the endurance race but also for top speed, acceleration, braking, a draw-bar pulling test as well as a hill climbing test. The hill climbing test reached an incline of 70% (35 degrees). Ultimately the winning car, Pretoria Technikon Car #3, struck the balance and compromise of limited mass versus strength and reliability; meaning the transmission system was designed for gradient climbing ability and top speeds, which are in conflict with one another but can be done. The top finishing teams proved again this year that the standards of the competition are improving every year as students are continually pushing the limits of technology within their limited budget.



From the 2003 Sasol Mini Baja, the top winner Pretoria Technikon Car #3 is sailing the seas to compete at the 2004 Midwest Mini Baja. We look forward to seeing them compete and to see what new innovations they bring to the competition. Also with the registration of the South Africa team, this breaks a record for the US Mini Baja Midwest event by having participants from 6 different continents. These continents include North America, South America, Europe, Africa, Asia, and Australia.

Mini Baja Technical Inspection Documents

We have implemented a change to the Mini Baja technical inspection procedure that we feel will make the process quicker and more effective. Under the new procedure teams are required to "self-inspect" their vehicle, prior to Tech & Safety, using the official Technical and Safety Inspection Checklist. Any problems uncovered during self-inspection must be corrected, and the check list updated, before the inspectors examine the vehicle. On arriving at Tech & Safety the team completed checklist will be given to the inspectors. The inspectors will continue to do a complete inspection to confirm the team's findings. By better identifying and correcting out-of-compliance items before Tech & Safety we should be able to reduce the time spent in rework and re-inspection.

**New
Procedure!**

When you bring your Mini Baja vehicle to Tech & Safety you must bring the following documents:

Technical and Safety Inspection Checklist

The 2004 edition of the Checklist will be posted on the Rules and Important Documents section of the SAE Mini Baja website several months prior to the events. We suggest that you print the checklist and conduct the self inspection only after fabrication and testing is complete and your team feels that no further changes are required. The checklist you give to the inspectors must reflect your vehicle as it is at inspection and must be signed by a team captain and faculty advisor.

Roll Cage Specification Sheet

The Roll Cage Specification Sheet that appears on page 67 of the 2004 Mini Baja Rules must be completed and signed. In addition to the Spec Sheet you must bring the receipts for the steel that you used to fabricate the roll cage.

Where Are They Now?

Jeremy Taylor



**2002 Kettering University
Clean Snowmobile Team**

Recently awarded the 2003 SAE Rumbaugh Outstanding Student Leader Award, Jeremy Taylor is certainly making a name for himself.

Jeremy recently graduated Cum Laude from Kettering University in 2003. He joined SAE his freshman year along with their Mini Baja team. In his sophomore year he was the Co-Team Leader on the Mini Baja team and was also involved with the Ethanol Vehicle Challenge, which no longer exists. Also in his sophomore year, Jeremy was elected as the Vice President of the Kettering University Chapter of SAE. In the summer of 2000, his junior year, he began the role of Team Leader for the new KU Clean Snowmobile Challenge team, where everything had to be organized from the ground up. Their first competition landed them a 2nd place finish in Jackson Hole, WY. He also maintained his role on the Mini Baja team and became the President of the KU Chapter of SAE. During his senior year at Kettering

University, he remained President of their SAE Chapter along with being the Team Leader for their CSC team, which tied for 1st place, and also maintained his role on the Mini Baja team. Did we fail to mention that he also worked as a research assistant in the alternative fuels lab at his school that same year?

"The Society of Automotive Engineers opened up numerous doors for me while at Kettering University. As President of the KU chapter, I met more automotive industry leaders in four years than I had ever imagined I would meet in my entire lifetime. The lessons learned in the student competition teams prove invaluable in everything I do. The teams taught me everything from design and fabrication, to responsibility and managerial skills. These skills are immediately recalled during inter-department teams in my job. It's amazing how I can relate every problem and resolution scenario back to an experience in SAE, whether it be engineering product or resolving personal conflicts. I can honestly say that my experiences in SAE have been incomprehensibly priceless, and I look forward to all that SAE has to offer in my professional career."

Jeremy is currently in the Product Development Department for LuK Incorporated in Wooster, Ohio as a Test Engineer. That is where Jeremy Taylor is now. Please visit <http://www.sae.org/news/rumbaugh-taylor.htm> to learn more about Jeremy and the 2003 SAE Rumbaugh Outstanding Student Leader Award.

Wanted: Supermileage Team Information

Information is needed from the 2004 Supermileage teams. We would like to include your team profile in the 25th Anniversary Program. Team members, sponsors, and a team picture should be included. Also include any other facts about your team such as successes and any new innovations. Please email profiles to <mailto:CollegiateCompetitions@sae.org>. In the subject line, please include key word "Supermileage Profile".



The Failure of Tiny Parts



While there are some spectacular failures: engines going to pieces, wings falling off planes, or welded frames coming apart, more often than none it is something small that lets you down. Isn't it funny how even the tiniest part, which is more often overlooked, is usually the cause of failure taking the entire team out of the competition. A great example: During the 2003 Formula SAE event a team suffered a great loss all because of a tiny part called a C-clip that let go during the competition. A part that is estimated to cost approximately .75¢ was the single cause for this team's failure. Was it overlooked, probably not but I bet that it was the last thing on their mind. After all it is a known fact that we tend to view the larger parts as being the more likely to cause problems due to their complexity. This brought up the question of what is the smallest or most expensive part that ever caused your team's vehicle to fail. Your experience can be from the time your team was building and testing or from when you were actually competing. This question also brings the opportunity for your team to become qualified in the 2005 Competition FREE REGISTRATION Contest. This question is also a great way to share your experience with others portraying the problem and a solution if there was one. So what is the smallest or most expensive part that ever caused your team's vehicle to fail?

Let us know by sending us an article on your team's experience and we will share them in our newsletter. Articles can be one page or longer if you have a lot to say! Email all submissions to <mailto:CollegiateCompetitions@sae.org>. Please fill in the subject line of the email with the title "Failures".

2003 Event Photo Gallery



SAE

Educational Relations
400 Commonwealth Drive
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Kaley Shellhammer

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Visit us online at
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Series Information!

FREE REGISTRATION

Do you have information, stories, or pictures that you want to share regarding your team?

Email them to
<mailto:CollegiateCompetitions@sae.org>

and qualify for a drawing for Free Registration to a 2005 event of your choice!

2004 Sponsor Spotlight

Please contact Corporate Sales at SAE for information regarding sponsorship or visit us online at www.sae.org.



"Henkel – A Brand like a Friend". With brands and advanced technologies, Henkel makes people's lives easier, better, and more beautiful. The products and ingenuity of the Henkel Technologies division can be found on McLaren-Mercedes racing vehicles. You'll find us supporting the 2004 Formula SAE competition. From the track to the highway, Henkel Technologies is racing ahead with the next generation of cars and trucks. Our focus on the future has cemented our role with production automakers and the latest vehicle programs. Henkel Technologies' portfolio of polymeric solutions are trusted throughout the automotive sector.

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Henkel Technologies is a proud sponsor of Formula SAE in 2004 – the premier event for the next generation of die-hard automotive engineers. New in 2004 is the "Best Use of Polymeric Structural Foam Award," recognizing design teams that effectively and creatively use this technology in their vehicle. Structural foams can dramatically improve the mechanical properties of a vehicle body and/or chassis. Stiffness, crashworthiness, and strength may be increased while reducing vehicle weight and NVH. Terocore® is Henkel Technologies' epoxy-based foam that can be injected into the body, chassis, or other structural members. If you'd like more information about Terocore®, contact us at (248) 577-2129.

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