

Special Interest Articles:

- 2004 FSAE Registration
- Aero Design East Dates
- Mini Baja West Needs Hosts
- Briggs & Stratton Engine Orders

**FREE
REGISTRATION**

Do you have information, stories, or pictures that you want to share regarding your team? Email them to CollegiateCompetitions@sae.org and qualify for a drawing for Free Registration to a 2005 Event of your choice! Please see page 5 for details!

Record Breaking FSAE 2004 Registration



A couple of days before 2004 registration opened Bob Sechler, Educational Relations Manager, asked how long it would take for Formula SAE to fill up. We were all sure that it would go faster than last year and guessed at about 6 or 7 weeks. We were wildly mistaken. As everyone knows, Formula registration closed in just over 8 days. Last year it took 103 days before the last slot was taken. We're not making any predictions for 2005, but the trend line is clear.

A number of teams have asked us why Formula is limited to 140 entries and why we don't have a waitlist. **Our Answer is:** Competition operation is like engineering design in that it has to balance a lot of constraints while bringing in the product on time and on budget. All competitions have to work within their budget, event site capacity, and availability of other facilities, schedules, volunteers, competing activities, safety considerations, etc. The 140 team limit is not an arbitrary number, it's based on how many vehicles we can judge, and run, in the space and time we have available. Over the years we've made a lot of changes to accommodate more and more teams with our objective always being to accept as many teams as possible while keeping Formula SAE challenging, worthwhile and fun.

Admitting one more team is not a simple matter. Some parts of the event, for example presentation judging and generator capacity, come in blocks, so that an extra team may mean recruiting another group of judges and finding an additional room or renting a bigger generator. One more team makes every part of the event run longer and puts more strain on the schedules and volunteers. So we have to set a manageable limit and after a lot of discussion we fixed it 140 teams.

A waitlist wouldn't get more teams into the event. If we were to create a waiting list we would have to set the registration limit at a reasonable operating level of 120 cars. You can be sure that only the first 20 cars on the list would have any chance of a slot. So teams beyond 140 would still be excluded. Under the **NO WAITLIST POLICY**, all 140 registered schools are guaranteed a spot and no team is committing time and money in the hopes of an opening.

Hopefully the registration problem will only exist for one more year since we have set 2006 as the target date for the first Formula SAE West. With two competitions there should be space for every team that wants to compete. FSAE West is still in the early planning stage and exactly what happens, and when, will depend on bringing together the right combination of sponsors, funding, volunteers, site and schedule.

As for 2005, FSAE will still have a registration cap. Registration for all 2005 Collegiate Design Series events will open on Monday, October 5, 2004. **My suggestion: set your alarm clocks now!**

Aero Design East Dates

We apologize for the confusion regarding Aero Design East dates. The final dates for the competition are: April 16 - 18. Please understand that it is SAE's policy not to schedule over Easter weekend and Memorial Day weekend and we also avoid scheduling multiple events during the same time period. We apologize, however in some instances we are forced to schedule over the EIT exam weekend. Please visit http://forums.sae.org/access/dispatch.cgi/aerodesign_pf for more information.



Mini Baja West is Looking for a Few Good Hosts

If you've read far enough into the Mini Baja rules you may have noticed that there are no hosts for Mini Baja West after next year. The Portland Section is hosting West in 2004, but after that nothing. As things stand now, we do not have a host for 2005 or later. So if you're interested in Mini Baja, especially if you participate in Mini Baja West, please consider hosting the competition. It's our goal to have the West scheduled at least 3 or 4 years in advance as we're able to do with East and Midwest, but to do that we need some universities or industries to step forward and put up their hands.

If you'd like information on becoming a host we would be happy to send you the current edition of the Mini Baja Organizer's Manual. Please email CollegiateCompetitions@sae.org with your request.



Process Changes For Engine Requests



Last year you may remember not receiving your engine until late February or early March. Unless you are one of the last teams to register and order an engine this will not be the case this year. In recent communications with a representative from Briggs & Stratton, it was decided that the existing process needed to change due to time constraints and schedule conflicts. Starting this month, all current orders that have been placed since the beginning of registration will be forwarded to Briggs & Stratton for order fulfillment. In recent years, the practice was to wait until the registration closed and then send the orders for processing. To make sure this new course of action is as simple as possible, weekly updates of engine orders will be emailed for faster processing and shipping to those contacts supplied. So, in many cases, you may have your engine before Christmas Break!

Also another effort that will be made regularly is the checking of shipping addresses. In order to eliminate the possible mistakes in shipping the engine to a PO Box or incomplete address, the address and contact will be double checked at SAE before sending the order to Briggs & Stratton. Please note: this may require staff contacting you and needing a fast response.

**ACTION
REQUESTED!**

Changes to Team Website Links

With our staff changes, come changes to the website. During a recent surf through the team website links located on the SAE Collegiate Design Series Website, it was evident that less than half of the team websites have been updated for the past several years. In an effort to keep the team website links current for all of the SAE university competition participants, a unanimous decision was made to delete all of the team websites currently being hosted on SAE's website. We will be keeping this an active link for **updated** team website links to be re-posted. We are asking that if your team link is up to date with the 2003 competition event results and the mentioning of the upcoming 2004 event to please forward, via email, your team website link for review and upload to CollegiateCompetitions@sae.org. You will be notified via a returned email whether your link is approved or disapproved for the uploading onto the SAE Collegiate Design Series website. In effort to keep our website and the links it hosts up to date, there will be a "cleaning of house" every year to delete those team websites that are not keeping updated information on their link.

International News!

In every issue of this newsletter, we will feature an international event. This month we are featuring FSAE-Australasia. The event is soon approaching in early December in Tailem Bend, South Australia.

For 2003, there are a total of 21 teams competing including six international teams. The international teams representing the U.S. are Rochester Institute of Technology, Georgia Tech., and Auburn University. Other international teams are Chalmers University – Sweden, University of Braunschweig – Germany, and Tokyo Denki University – Japan.

Congratulations to the University of Wollongong! They were the first international team ever to win the Formula SAE competition held in Pontiac, Michigan. We will all be looking to see if the University of Wollongong can finish their year with a win at the 2003 FSAE-A.



2003 University of Wollongong Team



Japanese FSAE Teams Exhibit at Tokyo Motor Show
October 2003

Supermileage Celebrates 25 Years!

This year is a special year for Supermileage. We are celebrating its 25th Anniversary! The event will be held at the Eaton Proving Grounds in Marshall Michigan on June 11-12th. Once again, we would like to thank Briggs & Stratton and Eaton Corporation for their support.

We want to hear from you about your experiences at Supermileage. If you are competing this year or have competed in the past, tell us about your vehicle, your team, your great ideas, and your results. Email your stories and photos as soon as possible. You may end up in the 25th Anniversary of Supermileage booklet to be distributed at the event in June or in our monthly newsletter. Remember, all submissions to the newsletter are eligible for the drawing for Free Registration for a 2005 Event!

Congratulations to last years top three teams. Homestead High School took home first place with a mileage of 1343.32. Also above a thousand was Chisago Lake High School with a mileage of 1015.91. The first University to place was the University of British Columbia with a mileage of 927.96. In June, we'll see if Homestead High School can stay at the top for the third consecutive year or if another team will steal their glory!

We look forward to seeing you at this monumental competition in June. It is going to be one for the record books!



"A Passion For Performance"



High Performance Vehicles, that is the subject of a 2 ½ day special conference during the SAE World Congress & Exhibition, Cobo Hall Detroit, Michigan, March 8-12, 2004 – this conference takes place March 9 – 11.

Keynote address on High Performance Vehicles – A Passion for Performance will be given by Robert Lutz, vice chairman of GM Product Development and also invited is the chairman of GM North America. There are several panel sessions such as The Team Approach to Designing High Performance Vehicles organized by John Coletti, SVT, Ford Motor Company and High Performance Engineering from the European Experts featuring representatives for the leading European design and engineering firms that specialize in the design and development of high performance and racing vehicles. Other sessions include New Vehicle Engineering – The Ford GT which will feature six technical presentations on various aspects of the development of the new Ford GT. This will be organized by Csaba Csere, Editor, Car and Driver Magazine. The Design of the Next Corvette and Cadillac XLR – GM Performance Leaders is organized by Dennis Simanaitis, Technical Editor, Road & Track Magazine, Dave Hill, GM Performance Vehicles, and Dave Leone, Chief Engineer, Cadillac XLR/GM.

A complete schedule of complete events will be posted in early November. Attendance at this "mini-conference" is open to all registered attendees for the SAE World Congress. SAE members, **including student members**, attend at no charge. Seating for these events will be limited. Please arrive early. Check the following website for updates on this program: <http://www.sae.org/congress>

Auburn University's Big Day

You know that the Collegiate Design Series is making a splash on campus when even the Athletic Department takes note. Auburn University's football team invited the college's Formula SAE team, SAE Mini Baja team, and Ladies Mini Baja team onto the field during its game with Mississippi State University. The announcer proclaimed some SAE team highlights, and video from the 2003 Competitions was shown on the scoreboard. Shown left, the Ladies Mini Baja team takes the acclaim of the crowd. Auburn won the football game 45-13. Mississippi State will get a chance for revenge when its Mini Baja team takes on Auburn's two teams at Midwest Mini Baja, June 3-6 in Milwaukee.

*Right: Auburn Universities Ladies
Mini Baja Team
Article and photo submitted
by Peter Jones, Faculty Advisor*



Silly Putty in the Design Report?

A couple of year's ago RIT developed what could best be described as an automatic paddle system for their Mini Baja car that used that wonderful product "Silly Putty" as the recoil damper. One of the Formula teams designed their intake system to incorporate a stainless steel bowl from K-Mart. There must be hundreds of other examples of teams putting ordinary items, well ordinary if you think "Silly Putty" is ordinary, to unexpected uses. Has your team used anything in a way that the manufacturer never imagined, or maybe only saw in a bad dream? If so let us know. We'll gather the most interesting, shall we say, "alternate uses" and put them into an article in a future issue.

Right: Supermileage uses duct tape!





Editorial...

Editors: (left to right) Valerie Isles and Kaley Shellhammer

First and foremost, let us introduce ourselves to you as your editors of the Collegiate Design Series Newsletter. New to the department we are Valerie Isles and Kaley Shellhammer.

Valerie Isles: I am a 2003 graduate of Robert Morris University with a Bachelor of Science in Marketing. Before SAE, I was a Marketing Assistant and Customer Service Representative for a local manufacturing company. I assisted them with sales presentations, travel arrangements, trade show materials, company newsletter, and marketing plans among other things. Shortly after graduation, I came to SAE to work with the Collegiate Design Series Program. I look forward to working with all of you at the upcoming competitions and I wish all of you the best of luck!

Kaley Shellhammer: I am a 2000 graduate of University of Pittsburgh with a Bachelor of Arts in Communications. After graduation, I landed a position with SAE's affiliate PRI working with representatives from companies in the Aerospace Industry on a daily basis providing them charted data used for presentations, writing/publishing a newsletter, creating/developing of special projects, and document control. For a change of pace, I chose to join the SAE Collegiate Design Series Program. I am looking forward to working with the organizers and students in making this a great year for competition!

What is the purpose of this newsletter? We, the Education Relations Department of SAE, decided that it would be a great tool to use for interaction with you in reporting updates on events, activities, success stories, new innovations created during the development stages of your project that could prove to either be useful or entertaining. This newsletter may be the idea and project of two editors, Valerie Isles and Kaley Shellhammer; however it is going to be a newsletter for the students by the students. We would like our content to be specific to what you want to read, so we would like to hear from you some suggestions on what you would like to read about. Feel free to contact us at CollegiateCompetitions@sae.org. We look forward to hearing from you and incorporating any and all ideas.

Free Registration! That is what your team may receive if you submit an article detailing any information regarding your teams project. Tell us your story! Example of article topics may include what you use your vehicle for, besides the competitions, or what new innovation you as a team created and whether it has contributed to a success or a complete disaster. Photos will also be accepted as long as there is detailed information to go along with it. Your team or school will be put into a drawing, to be held September of 2004, that will allow you a chance to win a guaranteed reserved spot for the 2005 competition season. To rephrase this again, this is a **"FREE, GUARANTEED REGISTRATION"** for the event of your choice. Good Luck and we hope to hear from you soon!



Educational Relations
400 Commonwealth Drive
Warrendale, PA 15096

Editors:
Valerie Isles
Kaley Shellhammer

PHONE:
Valerie 1.724.772.4079
Kaley 1.724.772.8533

FAX:
1.724.776.0890

E-MAIL:
CollegiateCompetitions@sae.org

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

Email them to CollegiateCompetitions@sae.org

Visit us at www.sae.org for more Collegiate Design Series Information!

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>

2004 Sponsor Spotlight



With over 10 years as a product sponsor and seven years as a Gold Sponsor, Hoosier Racing Tire is proud to join the FSAE competition again for the 2004 May competition. Hoosier is located in Lakeville, IN, which is south of South Bend, IN, the family owned company continues to produce high quality racing tires used throughout the world. Hoosier Tire offers over 700 different types of racing tires, which includes racing slicks used on FSAE cars. Involvement with the FSAE students is very important to our company.

By introducing the Hoosier brand to up and coming race car engineers, these students will take their experience with them using the highly competitive race tires built here in the USA.

Hoosier Tire offers a direct sell discount to all FSAE students here in the US and international students. FSAE students are encouraged to visit Hoosier's website at www.hoosiertire.com then choose Road Racing to find the FSAE web page. All information about purchasing, pricing and sizing is located on this web page.

During the May competition, Hoosier Tire provides on site sales and service using one of its Hoosier dealers, Tom Reichel with Mid-Atlantic Motorsport. He has been providing quality service and support for several years. Tom also sells wheels to FSAE students, so if you have any questions, please contact him by phone, 574-243-5553 or email him at:

hoosier-tom@worldnet.att.net

Hoosier Tire is also proud to be an awards sponsor for the autocross competition, offering free tires to the teams with the top three fastest laps of the day. If you have any questions about our product, wheel/tire fitment, pricing, shipping or technical advice, please give Jeff Speer a call at 574-784-3152 or email him at jspeer@hoosiertire.com.

The following sizes are now available for FSAE cars. Always remember when fitting a tire to a rim, match the tread width with the rim within one-inch difference. Hoosier Tire wants to thank all the teams who have chosen to run Tires Designed for Champions at the May competition.

18.0 x 6.0 – 10 R25A	19.5 x 7.5 – 10R25A	20.0 x 7.0 – 13R25A
18.0 x 7.5 – 10 R25A	20.0 x 6.0 – 13R25A	20.0 x 7.5 – 13R25A

(ISMA) International Snowmobile Manufacturers Association

The International Snowmobile Manufacturers Association (ISMA) is an organization representing the four snowmobile manufacturers, Arctic Cat, Bombardier, Polaris, and Yamaha. ISMA coordinates committees within the industry to handle concerns such as snowmobile safety, the promotion of the sport of snowmobiling, keeping accurate statistics, reporting the growth of the industry and the positive economic impact the sport has throughout the world.

ISMA supports the SAE Clean Snowmobile Challenge with a cash contribution and by supplying experts to judge the event. Individual Teams also receive help from snowmobile manufacturers directly. ISMA's president, Ed Klim has been very supportive of the Challenge and is encouraged by the positive impact it has had on youth in snowmobiling and in the future of the industry. You can learn more about ISMA at their website <http://www.snowmobile.org>.

Corporate Sponsors

Henkel/Loctite Technologies – Gold Sponsor, FSAE
Goodyear Tire and Rubber Company – Gold Sponsor, FSAE
Hoosier Tire & Rubber – Gold Sponsor; FSAE
Visteon Climate Control – Gold Sponsor, FSAE
ArvinMeritor, Inc. – Silver Sponsor, FSAE

Supplier Sponsors

Cycle Search International, Inc. - FSAE
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Land & Sea, Inc. – FSAE and Mini Baja
Spa Technique, Inc. – FSAE
Visteon Climate Control – FSAE
Performance Electronics Ltd. - FSAE

ArvinMeritor Inc.

ArvinMeritor is a \$7-billion automotive supplier to the global motor vehicle industry, headquartered in Troy, Mich. The company supplies a broad range of integrated systems, modules and components to the light vehicle and commercial truck market, trailer and specialty original equipment manufacturers and related aftermarket. With 150 manufacturing facilities in 27 countries, the company has the scale and scope to provide effective, integrated automotive solutions to its customers' changing needs – when and where they are needed. The company is traded on the New York Stock Exchange under the ticker symbol ARM.

ArvinMeritor is also a strong supporter of educational initiatives, especially those that emphasize engineering, science and technology, such as Formula SAE. We know that programs such as these not only benefit the students, but also significantly enhance ArvinMeritor's ability to remain competitive in today's global business environment. By supporting the Formula SAE program, ArvinMeritor hopes to increase the number of engineers and scientists available for recruitment into the field of automotive engineering in future years, fostering technological development and innovation in this field.

For more information, visit the company's Web site at www.arvinmeritor.com.

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