



Collegiate Design Series News

Volume 3, Issue 9 September 2006

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2007 Collegiate Design Series

Registration for all Competitions opens on **October 2, 2006** at **10 AM (EST)**.

Registration closes **December 29, 2006** at **11:59 PM (EST)**. Except CSC.

THERE IS NO LATE REGISTRATION!

2007 Preliminary Schedule		
March 19-24	Clean Snowmobile Challenge	Houghton, MI
March 23-25	Aero Design West	Palmdale, CA
April 12-15	Baja SAE – UCF	Ocala, FL
May 4-6	Aero Design East	Fort Worth, TX
May 16-20	Formula SAE	MI
May 24-27	Baja SAE – SDSM	Rapid City, SD
June 7-10	Baja SAE – RIT	Rochester, NY
June 8-9	Supermileage	Marshall, MI
June 13-16	Formula SAE West	Fontana, CA

Formula SAE Registration for 2007!

As announced at every event, slots will be reserved for the top finishing teams of the official competitions of the 2006 Formula SAE Series as follows:

- Formula SAE (Michigan) – Top 10 teams
- Formula SAE West – Top 5 teams
- Formula SAE Australasia – Top 2 teams
- Formula SAE Brazil – Top team
- Formula SAE Italy – Top 2 teams
- Formula Student – Top 5 teams

Teams that earned a reserved slot will have the option of registering early for either the 2007 Formula SAE (Michigan) or 2007 Formula SAE West (California) events at the team’s choice. Any reserved slots that are not taken by the winning teams will be offered as part of the open registration. Kaley Shellhammer, Formula SAE Program Coordinator will be contacting teams one week before registration opens. If you need to contact her, you can reach her anytime at shellham@sae.org

Registration for all teams will follow the 2006 model in that teams will only be allowed to register for one event for the first month, after the conclusion of the first month if any slots are still open they will be free game to everyone.

REGISTRATION OPENS
OCTOBER 2, 2006 at 10:00 am EDT
 **MARK YOUR CALENDARS!!!!**

Percy, Part II

Last month, we reminded teams that we will be enforcing the "Percy" rule on roll bar heights for 2007. It has been suggested that we publish a picture of Percy, and give you some tips on what materials could be used for teams to make their own template.

The US version of Percy is made to the dimensions given in Rule 3.3.4.1.A from:

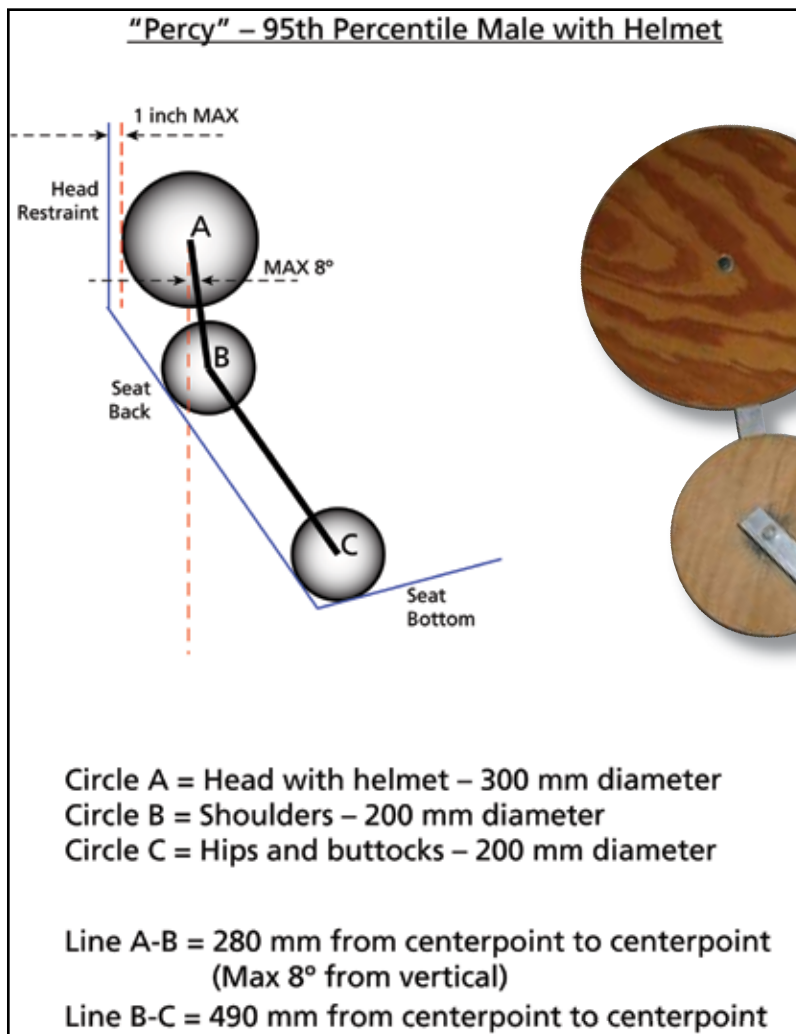
- Three circles cut out of 3/8 inch plywood
- Two pieces of 1 inch x 1 inch x 1/8 inch aluminum angle, (one piece is 33 cms (13 inches) long, the other is 54 cms (21 inches) long).
- 1/4 inch bolts, Nyloc nuts and washers.

A pair of photographs is attached showing both sides of Percy.

Formula Student in the UK has used Lexan instead of plywood to make "Sir Percy". At a pinch, corrugated cardboard and flat pieces of wood could be used instead of the plywood (or Lexan) and aluminum angle.

Last month, we also specified how Percy will be set in the car. For clarification, if one is needed, we are enclosing a sketch of how this will be done at Technical Inspection.

Michael Royce,
Chairman,
FSAE Rules Committee.



Questions To the FSAE Rules Committees

For the 2006 competitions, the FSAE Rules Committee in the USA received over 500 questions from teams.

Many of the questions included photographs or drawings. The size of some of these attachments is presenting a problem because a significant number of the attachments run into several MB each. This is giving some of the Rules Committee members a problem with the amount of file storage space required.

Therefore, we are having to impose some limits on the file size of questions submitted to the Rules Committees.

From this point on, the following limits will apply to all questions submitted per Section 7 of the Rules:

1. No photograph, drawing or other attachment can be larger than 100kB in size.
2. The total size of any question, with its attachments, must not exceed 1MB.

If the Committee needs any of the pictures to be in more detail, they will ask the questioner for them specifically.

In an effort to have a consistent application of the Rules between the competitions in the Formula SAE Series, the organizers at Formula Student, Formula SAE-Australasia, Formula SAE Italy and Formula SAE Brazil are sent copies of the US questions and answers. This is in addition to the questions they receive specifically for their own competitions.

Therefore, these restrictions apply to all rules questions submitted to any of the Formula SAE Series event organizers.

Michael Royce,
Chairman,
FSAE Rules Committee

Supermileage

Supermileage will be held June 8-9, 2007 at the Eaton Proving Grounds in Marshall, MI.

Deadlines for reports are still being decided. Please check the forum for updates:

http://forums.sae.org/access/dispatch.cgi/supermileage_pf

BAJA SAE Series

**BAJA SAE hosted by UCF – Ocala, FL
(April 12-15, 2007)**

Deadlines:

Engines must be ordered by December 29, 2006

Electronic Design Reports due March 4, 2007

Electronic Cost Reports due March 30, 2007

**BAJA SAE hosted by SDSM – Rapid City, SD
(May 24-27, 2007)**

Deadlines:

Engines must be ordered by December 29, 2006

Electronic Design Reports due April 3, 2007

Electronic Cost Reports due March 30, 2007

**BAJA SAE hosted by RIT – Rochester, NY
(June 7-10, 2007)**

Deadlines:

Engines must be ordered by December 29, 2006

Electronic Design Reports due May 4, 2007

Electronic Cost Reports due March 30, 2007

Updates can be found on the forums:

http://forums.sae.org/access/dispatch.cgi/minibaja_pf

Aero Design Series

Registration opens October 2, 2006 at 10AM EST

Registration closes December 29, 2006 11:59 PM EST

Aero Design West – Palmdale, CA

March 23-25, 2007

Deadlines:

Design Reports, Plans and Payload Predictions due

February 27, 2007

Aero Design East – Fort Worth, TX

May 4-6, 2007

Deadlines:

Design Reports, Plans and Payload Predictions due March

24, 2007

Updates can be found on the forums:

http://forums.sae.org/access/dispatch.cgi/aerodesign_pf

News

Student Chapters:

Update your list of student officers today <http://students.sae.org/chapters/collegiate/contact.htm> The deadline to request student branch allocations is December 31.

Refer to the Collegiate Chapter Procedures Manual <http://students.sae.org/chapters/collegiate/manual/>.

Faculty/Instructors - are you an SAE member?

If you're working with an SAE student team, join now and get \$20 off your first year membership <http://www.sae.org/membership/>. There are many benefits to SAE membership, including exclusive access to one of SAE Digital Magazines, and a discount to two distinguished journals International Journal of Engine Research and Journal of Automobile Engineering. Find the complete details at <http://www.sae.org/membership/benefits/>.

If you are already an SAE member, nominate a colleague, friend or young engineer at <http://www.sae.org/membership/nominate/>

Are you a new SAE Faculty Advisor?

Please go to <http://www.sae.org/about/board/committees/facadv.htm> and complete the "Change of Faculty Advisor form.

Deadlines for Awards, Scholarships & Loans

October 16 - Ralph R. Teetor Educational Award

Recognize your professor as an outstanding instructor! The Ralph R. Teetor Educational Award is a prestigious award that recognizes exceptional teaching. <http://www.sae.org/news/awards/list/teetor/>.

October 29 - SAE Leadership Development Program

The SAE Leadership Development Program identifies SAE student members who have exhibited outstanding leadership skills through SAE student activities. It helps them develop these skills for future leadership roles in SAE and their professional engineering career. <http://students.sae.org/awdscholar/awards/leadershipdev/>

October 31 - SAE Faculty Advisor Award

Nominate your advisor for the SAE Faculty Advisor Award. If selected, they will be recognized at one of the major SAE conferences next year. <http://www.sae.org/news/awards/list/faculty/>

November 1 - Women Team Leaders Award

The WEC Baja Challenge for Women Team Leaders Award offers a \$1,000 award for Women's Baja teams or any teams with women leaders. <http://students.sae.org/awdscholar/awards/wecminibaja/>

December 16 - Washington Internships for Students of Engineering

This prestigious internship will give you the opportunity to learn how government officials make decisions on complex technological issues and how engineers can contribute to legislative and regulatory public policy decisions. <http://www.wise-intern.org/>

Student News

Upcoming Event – Students from area Universities Welcome

The SAE Philadelphia & Lehigh Valley Sections are hosting an At-Track Drag Racing Event on Friday, September 15, 2006 at Maple Grove Raceway, Mohnton (near Reading, Pennsylvania). Students are welcome to attend.

Lunch plus some “behind the scene” activities planned. For further details and to register check either the Lehigh Valley or Philadelphia web sites <http://www.sae.org/globalsections/sections/list>.

Questions about the program, contact Janiece Lang @ SAE Int'l, 724-772-7137 or janiec@sae.org, or Scott Smullin, Lehigh Valley, scottsmullin@volvo.com

Formula Hybrid News

An update for participants and sponsors

The Event: Formula Hybrid International Competition, May 2007

Registration: Opens October 9. -- Register via <http://www.formula-hybrid.org>

Entrants: So far 22 colleges and universities have expressed interest in entering a car.

Technical Inspectors:

Michael Royce will be Chief Technical inspector for the Formula Hybrid competition. He is currently the chief technical inspector at the FSAE competitions in the US, UK, Australia and Italy and is chairman of the FSAE Rules Committee.

Dr. Rob Wills, P.E. will be Chief Electrical Inspector. Dr. Wills founded and is technical director of the highly successful American Tour de Sol.

Rules Update:

Final rules will be posted September 15.

Current Formula Hybrid rules are available at <http://www.formula-hybrid.org>. The technical portions of the rules are close enough to final that they can be used to make early decisions about vehicle design. We expect only detail changes and clarifications.

The event descriptions are subject to more substantial change, though they will be patterned as closely as possible to the Formula SAE equivalents. We are in discussions with the New Hampshire International Speedway and the New England Region of the SCCA about possible configurations of the endurance event. We'll keep you posted.

Energy Storage Costs:

We are drafting an energy equivalency chart for defining the official cost (in dollars per kilojoule) of energy storage. There is a \$6000 (standardized cost) limit on accumulators.

We'll post the preliminary list on the website shortly. We'll welcome team comments on that, so we can make the list fair and complete.

(continued on page 6)

Formula Hybrid News *(continued)*

New Sponsors:

The following companies will supply parts to the competing teams for free, at cost, or discounted from retail.

*** Omron Industrial Automation**

Will donate three A22E-LP-01 Emergency Stop Switches to each team at no cost. These switches conform to the Formula Hybrid rules relating to safety shutdown.

Web site: <http://oeiweb.omron.com/IndustrialComponents.asp>

Contact: Robert.Lee@Omron.com

*** Aurora Bearing Company**

Will give discounts to F-H teams. The Aurora catalog is available on line at www.aurorabearing.com, along with 2 and 3D CAD drawings. They will be happy to mail catalogs as well. One half of a team's requirements for Aurora rod ends and spherical bearings will be billed at the OEM cost, Aurora's lowest selling price, and the other half will be free of charge. Domestic orders made with school purchase orders can ship open account, otherwise orders ship C.O.D. They do not accept credit cards.

Contacts: Carole Sanders (Export Sales) at csanders@aurorabearing.com

John McCrory (Race Care Product Manager) at jmccrory@aurorabearing.com

or anyone at Customer Service customerservice@aurorabearing.com

Sponsorship Opportunities:

Companies and individuals are welcome to become involved in the Formula Hybrid International Competition as sponsors. Sponsorship can consist of a general contribution toward the event, monetary or in-kind donations made available to all Formula Hybrid teams, or a combination of both.

For Help or Further Info:

See <http://www.formula-hybrid.org>.

Or contact:

Doug Fraser, Director

doug@formula-hybrid.org (603) 646-3522

Wynne Washburn, Asst. Director

wynne@formula-hybrid.org

(603) 646-6580

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void where prohibited by law. All SAE student members are eligible for contest.

Join today at students.sae.org

Recognize Achievement • Reward Leadership

SAE Leadership Development Program

The 3rd Annual SAE Leadership Development Program is designed to recognize and engage engineering student leaders who have exhibited outstanding leadership skills through SAE student activities. Those selected to participate in the program will attend an all-expenses-paid, two-and-a-half day event in Orlando, Florida -- January 2007. The event will be held in conjunction with the Section Officers Leadership Seminar -- giving the future leaders of SAE a chance to network with SAE members who influence both SAE and vehicle engineering industries.

Program Agenda

- team building exercise
- networking with Section leaders
- professional development sessions on leadership skills
- A World In Motion exercise (encourage involvement through volunteering in a classroom)
- career development session (resume assistance, how to land a job, interviewing tips)
- speaker to discuss future of mobility industry
- self-assessment activity (evaluation of career interests, strengths and weaknesses)
- fun evening activities and/or entertainment

Eligibility

All nominees must be SAE student members and either a team captain for one of the SAE Collegiate Design teams or an officer of their SAE Collegiate Chapter. Nominees must be in their junior or senior year of their undergraduate degree or currently enrolled in a graduate degree program. Nominees must plan to pursue a career in the mobility industries that SAE serves.

Nomination Process

Nominations must be submitted by either the faculty advisor of the SAE Collegiate Chapter or an officer of the local Section. A detailed explanation of the student's leadership activities and skills must be provided as well as an explanation of the student's involvement with SAE.

Nominations are due by October 27, 2006

www.sae.org/leadershipdevelopment

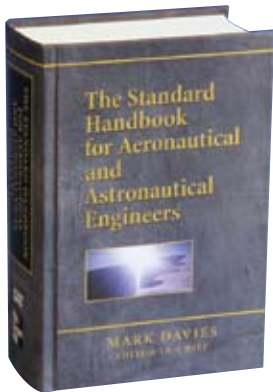
The SAE Leadership Development Program is part of



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About the Editor

Mark Davies, Editor-In-Chief, is Professor of Engineering Science, Head of the Mechanical and Aeronautical Engineering Department, and Director of the Stokes Research Institute at the University of Limerick in Ireland. He was a Rolls-Royce research scholar at Cambridge University, earning his Ph.D. with a thesis on aircraft engine blade flutter. From there he went to Oxford University to research gas turbine heat transfer. His present research interests range from entropy generation in turbomachinery to electronicsystem reliability.

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