



Collegiate Design Series News

Volume 4, Issue 6 July/August 2007

Issue Highlights

- Last But Not Least, Flying High At Aero Design® East 1
- 2007 Aero Design East Awards 2
- Thank You to the 2007 Aero Design East Corporate Sponsorships 3
- Baja In The Black Hills: SDSM&T Hosts First Ever Baja SAE® Event 4
- 2007 Baja SAE SDSM&T Awards 5
- Special Thanks to the 2007 Baja SAE Corporate Sponsorships 5
- Racing In Rochester: Baja SAE® Returns To R.I.T. 6
- 2007 Baja SAE Rochester World Challenge Awards 7
- Thank You to the 2007 Formula SAE Sponsors 8
- FSAE Consortium Members 8
- UW-Madison Takes 1st Place in 23 Years of University's Formula SAE Program 8
- Texas A&M Finishes in 1st Again! 10
- 2007 Formula SAE West Award Winners 11
- Thank You to the 2007 Formula SAE West Sponsors 11
- 2007 Formula photos 12
- FSAE Expands to Three North American Competitions in 2008 13
- 2007 Supermileage Awards 14
- All Roads Lead To Marshall, Michigan For Supermileage Competition 14
- 2008 SAE CDS Schedule 15
- 2008 Collegiate Design Rules Issue Dates 16
- New Registration Fees For The 2008 CDS Season 16
- CDS Website Revision 16

Last But Not Least, Flying High At Aero Design® East

The final Aero Design competition, Aero Design® East, was held May 4 – 6, 2007 at Thunderbird Field which is located on the western shore of Benbrook Lake, about 12 miles southwest of downtown Fort Worth, Texas. Oliver Alvarado of Lockheed Martin® was Chief Organizer of the event along with the help of Lonnie Dong, also of Lockheed Martin, who managed the scoring process. Many individuals from the Fort Worth Thunderbirds Radio Control Association, Inc. volunteered their time throughout the weekend to ensure the event was successful; many acted as flight stewards, distributed radios and ensured that all flight information was collected at the end of a flight round.

The event hosted 62 teams who designed, fabricated and tested radio controlled aircraft that can take off and land while carrying the maximum cargo. Representation from Canada, Brazil, Mexico, Venezuela and Poland were in attendance along with many schools from the United States. With a rainy and windy start to the event Saturday morning, 5 flight rounds were completed throughout the weekend although 4 were anticipated. The competition was an exciting one to say the least, a few teams even broke out into a “percussional” musical rendition to get the crowd going and cheer on the other teams.

The awards ceremony was held immediately after the event on Sunday at Thunderbird Field so fortunately most of the team members were able to attend. Sam Barill of SAE International and Oliver Alvarado presented the majority of the awards however Melissa Thomas of Autodesk® was on site to present the Autodesk Communication Award to the top 3 winners. With 30 available awards to receive, the ceremony was a hit due to a number of different teams achieving these honors.

All final score results from Aero Design East can be found online at <http://students.sae.org/competitions/aerodesign/east/> under “2007 Results”. To watch a clip of this event, visit www.youtube.com and type “SAE Extreme Aero Design East 2007” into the Search field. For photos of this event, visit the Fort Worth Thunderbirds website at http://www.fwthunderbirds.org/2007_sae_east_photos_.htm.

Please note the 2008 SAE Aero Design East event will be taking place April 18-20, 2008 at Cobb County Radio Control Modeler’s Club in Acworth, Georgia. The Aero Design West event will be held at Thunderbird Field in Fort Worth, Texas on April 4-6, 2008.

The SAE Collegiate Design Staff would like to thank all who helped make these past two Aero Design events memorable. We know how much hard work and planning it takes to get these events up and running, and all during everyone’s spare time nonetheless!! Your efforts are very much appreciated and we hope to see you all next year.



2007 Aero Design East Awards

Regular Class Overall / Elliott Green Award:

1st #015 - Michigan Tech University
2nd #041 - Ecole Polytechnique De Montreal
3rd #035 - Federal University of Itajuba

Open Class Overall:

1st #201 - Universidade de Sao Paulo
2nd #211 - Embry-Riddle Aeronautical University
3rd #202 - University of Akron

Micro Class Overall:

1st #301 - Wright State University
2nd #304 - University of Puerto Rico
3rd #312 - Saint Louis University

SAE Design Innovation Award:

#201 - Universidade de Sao Paulo
Innovation - Homemade Braking System

Autodesk Inventor Design Communication Award:

1st #029 - Lawrence Tech University
2nd #005 - Ohio State University
3rd #015 - Michigan Tech University

NASA Systems Engineering Award:

#212 - Ecole De Technologie Superieure

Regular Class - Most Payload Lifted Award:

1st #035 - Federal University of Itajuba (31.69 lbs)
2nd #047 - Warsaw University of Technology (31.15 lbs)
3rd #004 - University of Akron (26.43 lbs)

Open Class - Most Payload Lifted Award:

1st #201 - Universidade de Sao Paulo (42.23 lbs)
2nd #211 - Embry-Riddle Aeronautical University (38.10 lbs)

Micro Class - Most Payload Lifted Award:

1st #315 - Cedarville University (6.35 lbs)
2nd #312 - Saint Louis University (4.53 lbs)

Regular Class Report / Presentation Award:

1st #023 - University of Cincinnati
2nd #015 - Michigan Tech University
3rd #021 - Colorado State University

Open Class Report / Presentation Award:

1st #211 - Embry-Riddle Aeronautical University
2nd #218 - California State University - Long Beach

Micro Class Report / Presentation Award:

1st #313 - University of Dayton
2nd #317 - College of New Jersey

Best Flight Path Award:

#35 - Federal University of Itajuba

Best Crash Award:

#301 - Wright State University



Thank You to the 2007 Aero Design East Corporate Sponsorships

Platinum Sponsors



Lockheed Martin Aeronautics Co

Gold Sponsors



Autodesk Inc

Silver Sponsors



NASA Ames Research Center

Bronze Sponsors



RCAT Systems

Baja In The Black Hills: SDSM&T Hosts First Ever Baja SAE® Event

The second of three Baja SAE® events was held May 23 – 26, 2007 hosted by the South Dakota School of Mines & Technology in Rapid City, South Dakota. A very special thank-you is in order for the key organizers of this event – Dr. Dan Dolan, Kris Lepine, Dr. Jennifer Karlin and Brandon Lingle. As first time organizers, these individuals did an outstanding job to ensure the logistics, safety and overall flow of event activities were seamless.

The event was kicked off on Wednesday, May 23 with early registration and technical inspection held at the Rushmore Plaza Civic Center. This first day was very helpful in getting many of the 90 teams registered as well as helping teams get a jumpstart with tech inspection. Schools from United States, Canada, Mexico, South Korea, France and South Africa traveled near and far to South Dakota.

Static events were held on Thursday which consisted of tech inspection, design judging and sales presentations. Since this is the only Baja event that holds sales presentations, teams showed excellent project management skills by planning around their allotted presentation times to ensure their governor setting check, design judging and all other aspects of technical inspection were complete within the 8-hour window they were given.

Friday morning was the start of the dynamic events at a working farm called Stacy Madsen Ranch. Gates opened bright and early for everyone to get paddocked and ready for the drivers meeting. The different dynamic events held were Hill Climb, Acceleration, Maneuverability and Rock Crawl. Although many of these events presented great challenges to the teams, only one team was able to complete the Rock Crawl. California State University – Sacramento, car #43 (The Hornets) managed to make their way up the steep, sharp-edged hills of the Crawl in their “oversized” Baja vehicle.

As the day went on, a severe storm came through Friday afternoon resulting in having to cancel the events for the rest of the day. Fortunately for the Endurance Race

on Saturday, the skies cleared up and the race went on for four hours straight with no stops along the way. The top three finishers of the race were car #085 – Rochester Institute of Technology who came in 1st place, car #002 – University of South Florida (complete with the ever-famous “wing” which stayed on the car at all times no matter what!) who achieved 2nd place and car #003 – Queen’s University who came in 3rd place.

The awards ceremony was held Saturday evening at the Rushmore Plaza Civic Center. A delicious sit-down dinner sponsored by Caterpillar® was served followed by a presentation and a song entitled “Baja Tradition” from Caterpillar’s own Josh Goddard. The awards were then distributed to the winning teams; each team present at the event however showed great examples of project management and teamwork – everyone did a terrific job. The overall winners of the event were car #057 - Auburn University in 1st place, car #078 - Oregon State University who took 2nd place and car #027 - SUNY - Stony Brook in 3rd place.

Another huge thank you is in order for all volunteers who gave up their free time to help out at the event. These competitions would be impossible to complete without the assistance from these individuals.

Want to see this event and more on the Internet? Visit www.youtube.com and type “SAE Extreme” into the Search field to view the Baja SAE SDSM&T event and other SAE Collegiate Design competitions from this past season.

Final score results from this event can be found online at <http://www.sae.org/students/mbw2007results.xls>. We would love to see you at next year’s event which will be taking place at the Caterpillar Facility located in Peoria, Illinois on **May 29 – June 1, 2008.

***Dates are subject to change*



2007 Baja SAE SDSM&T Awards

Autodesk Inventor Design Communication Award

- 1st - #019, University of Iowa
- 2nd - #093, California State University - Los Angeles
- 3rd - #018, New Mexico Institute of Mining & Technology

Polaris Overall Design Award

- 1st - #010, LeTourneau University
- 2nd - #027, SUNY - Stony Brook
- 3rd - #078, Oregon State University

Honda Cost Award

- 1st - #051, Universidad La Salle
- 2nd - #061, Korea University of Technology & Education
- 3rd - #094, Instituto Tecnologico de Chihuahua

Honda R&D Americas, Inc. Dynamic Events Award

- 1st - #007, South Dakota School of Mines & Technology
- 2nd - #057, Auburn University
- 3rd - #008, California State Poly University - San Luis Obis

Honda R&D Americas, Inc. Endurance Award

- 1st - #085, Rochester Institute of Technology
- 2nd - #002, University of South Florida
- 3rd - #003, Queen's University

Power Washer Recipient

University of Illinois

Generator Recipient

University of California - Los Angeles

Briggs & Stratton Overall Performance Award

- 1st - #057, Auburn University
- 2nd - #078, Oregon State University
- 3rd - #027, SUNY - Stony Brook



Special Thanks to the 2007 Baja SAE Corporate Sponsorships

Platinum Sponsors



Briggs & Stratton Corp

Gold Sponsors



Autodesk Inc.



Where You Turn
The Timken Company



Honda R&D Americas Inc.



Cummins Inc

Silver Sponsors



Caterpillar Inc



Oshkosh Truck Corp

Bronze Sponsors



Kohler Co



Polaris Industries Inc

Racing In Rochester: Baja SAE® Returns To R.I.T.



The Baja SAE® Rochester World Challenge, the last in the series, was recently held June 7-10, 2007 in Rochester, New York. Hosted by the Rochester Institute of Technology, Chief Organizer, Marty Gordon, along with Co-Organizers Jason Rounds and Tom Locke, put in many hours of planning to make this year's event even better since the last RIT event held in 2005.

With 126 teams hailing from many parts of the world such as Brazil, Canada, United States, Venezuela, Mexico, South Korea and India, this event was the largest Baja SAE event for 2007 as far as the number of participants.

Static Events were held at the Gordon Fieldhouse located on the RIT Campus both Thursday and Friday. Teams were paddocked in the parking lot surrounding the Fieldhouse which gave them the opportunity to work on their vehicles overnight if need be.

Saturday the event moved to Hogback Hill Motocross Track in Palmyra, New York for the dynamic events. The events held Saturday morning were Acceleration, Hill Climb, Land Maneuverability, and Suspension & Traction. That afternoon everyone watched as teams ran through the Suspension & Traction event which went on until later in the evening. Gridding for the afternoon run was a determination of the morning run's results; the teams were lined up in order by the fastest times.

It was a beautiful day for the Endurance Race on Sunday. The four hour race started promptly at 10:00 AM with the Impound and Final Inspection of the top 10 vehicles following immediately after. 1st place went to car #002 - Universite de Sherbrooke, car #043 – SUNY – Buffalo came in 2nd place and #054 – Tennessee Tech University took 3rd place in the Endurance Race.

The awards banquet sponsored by Toyota® was held at the Gordon Fieldhouse, complete with the Baja vehicle ice sculpture. A wonderful buffet dinner was served followed by an awards program. Overall winners of the event were car #005 - Centro Universitario Da FEI in 1st place, car #002 - Universite de Sherbrooke who took 2nd place and car #054 - Tennessee Tech University in 3rd place.

To view all final score results from the Baja Rochester World Challenge competition, please visit <http://www.sae.org/students/2007bajarit.xls>. This event is also displayed on YouTube®; please visit www.youtube.com and type "SAE Extreme Baja RIT 2007" into the Search field. Next year's event will be taking place in Montreal, Canada hosted by Ecole de Technologie Superieure on **June 12-15, 2008.

**Dates are subject to change

As the final Baja SAE season comes to an end, the SAE Collegiate Design Staff would like to thank everyone who helped make this season a great success. We couldn't have done these events without you and hope to see you all next year. Graduating students are encouraged to volunteer as technical inspectors for future events. For more information on this, please contact SAE at CollegiateCompetitions@sae.org. Have a safe and enjoyable summer!



2007 Baja SAE Rochester World Challenge Awards

Heaviest Car

#015, Lake Superior State University - 735 pounds

Lightest Car

#012, Universidade Federal de Minas Gerais - 318 pounds

Longest Wheelbase

#049, Youngstown State University - 91 inches

Shortest Wheelbase

#083, IUT_RC "Dr. Federico Rivero Palacio" - 53 inches

Most Interesting Car

#014, Case Western Reserve University

Determination Award

#019, Embry-Riddle Aero University

Rookie Award

#025, Worcester Polytechnic Institute

Food Donation - Highest per team member (per capita)

#074, Université Du Québec à Rimouski

Food Donation - Most

#116, #117 - Rochester Institute of Technology

Teamwork Award

Rochester Institute of Technology

Honda R&D Americas, Inc. Endurance Award

1st - #002, Université de Sherbrooke

2nd - #043, SUNY - Buffalo

3rd - #054, Tennessee Tech University

Suspension & Traction

1st - #002, Université de Sherbrooke

2nd - #011, Escola de Eng de Sao Carlos USP

3rd - #006, LeTourneau University

Land Maneuverability

1st - #001, Oregon State University

2nd - #005, Centro Universitario Da FEI

3rd - #004, University of South Florida

Acceleration

1st - #012, Universidade Federal de Minas Gerais

2nd - #011, Escola de Eng de Sao Carlos USP

3rd - #009, Michigan State University

Hill Climb

1st - #005, Centro Universitario Da FEI

2nd - #013, LeTourneau University

3rd - #070, University of Michigan - Ann Arbor

Honda R&D Americas, Inc. Dynamic Events Award

1st - #005, Centro Universitario Da FEI

2nd - #013, LeTourneau University

3rd - #006, LeTourneau University

Honda Cost Award

1st - #026, University of Michigan - Dearborn

2nd - #128, University of Maryland - Baltimore County

3rd - #005, Centro Universitario Da FEI

Autodesk Inventor Design Communication Award

1st - #050, SUNY - Stony Brook

2nd - #058, Clarkson University

3rd - #075, Cornell University

Polaris Overall Design Award

1st - #001, Oregon State University

2nd - #002, Université de Sherbrooke

3rd - #047, École de Technologie Supérieure

Briggs & Stratton Overall Performance Award

1st - #005, Centro Universitario Da FEI

2nd - #002, Université de Sherbrooke

3rd - #054, Tennessee Tech University

Mike Schmidt Memorial IronTeam Award

1st - University of South Florida

2nd - Queen's University

3rd - University of Michigan - Ann Arbor

Power Washer Recipient

Rochester Institute of Technology

Jet Set Recipient

Northeastern University

Thank You to the 2007 Formula SAE Sponsors

FSAE Consortium Members

DaimlerChrysler
Ford Motor Company
General Motors

Gold Sponsors

ArvinMeritor
AutoDesk
Briel & Kjaer
FEV Engine Technology
Goodyear
Henkel Technologies
Hoosier Racing Tire
Land and Sea
Lincoln Electric
Ricardo
Solidworks
Sunoco
Timken Motorsports

Silver Sponsors

Altair Engineering
Blue Ridge Numerics
The Mathworks
William C Mitchell Software
Yazaki

Bronze Sponsors

Chief Cart, Inc

Award Sponsors (only)

ASBE Body Design Award
Ductile Iron Society
Society of Plastics Engineers
Composites

UW-Madison Takes 1st Place in 23 Years of University's Formula SAE Program

The Formula SAE competition recently held May 16 – 20, 2007 in Romeo, Michigan was the first event to kick off the official series for 2007. Hosted by SAE International and the Formula SAE Consortium, the second event at Ford's Michigan Proving Grounds proved to be more successful than in 2006.

With a total of 110 teams onsite, the participants spanned from across the globe with 10 countries on 5 continents. Besides the United States, representation from the following countries was noted: Australia, Austria, Brazil, Canada, Finland, Japan, Singapore, South Korea, and Venezuela.

All the static and dynamic events took place onsite starting Thursday with Cost, Design and Presentation judging. For those cars that passed Technical Inspection, the fun of driving began Friday with the Acceleration and Skidpad events in the morning and Autocross in the afternoon.

Eighty-nine cars crossed the starting line for the Autocross event which lasted 3.5 hours. The best time recorded was 47.1 seconds (37 mph). This year's course which was designed according to the FSAE Rules was a little more representative of a SCCA solo course due to 2006 feedback; ultimately giving more positive feedback from the participating teams.

On the "Big Race Day" a.k.a. Endurance, the 22 km track was declared "damp" before the event started due to a 7 am shower which had passed through causing some slight delays in lying of the timing lines. However; 94 cars were given the green flag to start the event resulting in only 41 cars finishing both heats successfully; a finishing percentage of 43.6%. The event itself took teams seven hours to complete.

The award ceremony took place on Sunday afternoon at the GM Vec Tower. After a truly disappointing finish in 2006 as a result of not failure in endurance; the University of Wisconsin-Madison came strong in 2007. Taking home the 1st Place Overall Champion title was monumental to the team as they were the first to bring home the title in the university's 23 year history competing in Formula SAE. UW-Madison was also the only team in the top 10 finishers using E-85. The team made the decision to switch fuel types to demonstrate their commitment to not only build a high performance car but also environment friendly with reduced emissions. The knowledge learned was worth it!

Respectively finishing in second and third place were the international wonders University of Western Australia and Graz University of Technology.

To view all final score results from Formula SAE, please visit <http://students.sae.org/competitions/formulaseries/fsae/>. The event is also displayed on YouTube®; please visit www.youtube.com and type "SAE Extreme Formula SAE 2007" into the Search Field.

As the 2007 competition season comes to an end, the SAE Collegiate Design Series Staff would like to thank everyone who helped this season a great success. To all the volunteers and sponsors, thank you for all your contributions! To all the students, thank you for your undying interest in this student competition! And remember, graduating students are encouraged to come back next year and volunteer!! For more information on this please contact SAE International as CollegiateCompetitions@sae.org. Have a safe and enjoyable summer!



2007 Formula SAE Award Winners

Hard Luck Award

Car #9, Michigan State University (Only 100 yards to go in endurance before breaking)

Most Outstanding Achievement in Push Bar

Car #125, University of Oklahoma

Has scored in every event in the last 8 years

Car #4, University of Kansas

Altair Engineering's William R. Adam Engineering Award

1st Place – University of Western Australia, Car #11 — \$1,000.00
2nd Place – University of Waterloo, Car #95 — Honorable Mention
3rd Place – University of Toronto, Car #13 — Honorable Mention

ArvinMeritor Suspension System Award

1st Place – University of Western Australia, Car #11 — \$1,000.00
2nd Place – Graz University of Technology, Car #17 — \$500.00
3rd Place – University of Kansas, Car #4 — \$250.00

ASBE Body Design Award

1st Place – University of Missouri-Rolla, Car #44 — \$500.00
2nd Place – University of Western Australia, car #11 — Honorable Mention
3rd Place – University of Oklahoma, Car #125 — Honorable Mention

Autodesk Inventor Design Communication Award

1st Place – University of Oklahoma, Car #125 — \$750.00
2nd Place – Northern Illinois University, Car #123 — \$500.00
3rd Place – University of New Mexico, Car #71 — \$250.00

Bruel & Kjaer Quiet Car Cup

Universidad of Central de Venezuela, Car #89 \$250.00

Cfdesign Computational Fluid Dynamics

University of Western Australia, Car #11 — \$1,000.00

Ductile Iron Society – Ductile Iron Design Contest

University of Kansas, Car #4 — \$2,000.00

FEV Powertrain Development Award

1st Place – University of Toronto, Car #13 — \$1,250.00
2nd Place – University of Western Australia, Car #11 — \$500.00
3rd Place – Carleton University, Car #6 — \$250.00

Goodyear Best Performance Award

1st Place – University of Western Australia, Car #11 — 3 sets of tires
2nd Place – University of Wisconsin-Madison, Car #103 — 2 sets of tires
3rd Place – University of Toronto, Car #13 — 1 set of tires

Hoosier Tire Autocross Award

1st Place – University of Texas-Arlington, Car #75 — 8 free tires
2nd Place – University of Oklahoma, Car #125 — 6 free tires
3rd Place – Oxford Brookes University, Car #16 — 4 free tires

Lincoln Electric Welding Award

McGill University, Car #85 Welding Unit & Training

Ricardo Powertrain Award

1st Place – University of Wisconsin-Madison, Car #103 — \$750.00
2nd Place – University of Oklahoma, Car #125 — \$500.00
3rd Place – University of Toronto, Car #13 — \$250.00

SAE Perserverance Award

1st Place – Miami University, Car #76 — Set of Carroll Smith Books
2nd Place – Cooper Union, Car #41 — Set of Carroll Smith Books
3rd Place – York College of Pennsylvania, Car #82 — Set of Carroll Smith Books
4th Place – Universidad Nacional Experimental Polite, Car #121 — Set of Carroll Smith Books

Society of Plastics Engineers' Composites Award

1st Place – Lehigh University, Car #36 — \$1,000.00
2nd Place – Ecole de Technologie Superieure, Car #48 — \$800.00
3rd Place – University of Western Australia, Car #11 — \$600.00
4th Place – University of Kansas, Car #4 — \$400.00
5th Place – Graz University of Technology, Car #17 — \$200.00
6th Place – University of Oklahoma, Car #125 — Award

Timken Friction Management Engineering Award

1st Place – University of Western Australia, Car #11 — \$750.00
2nd Place – University of Wisconsin-Madison, Car #103 — \$500.00
3rd Place – University of Toronto, Car #13 — \$250.00

William C. Mitchell Rookie Award

Miami University, Car #76 — Software

Yazaki North America – Cost Award

University of Arizona, Car #52 — \$500.00

Yazaki North America – Presentation Award

Vanderbilt University, Car #32 — \$500.00

SAE Spirit of Excellence Award

1st Place – University of Wisconsin-Madison, Car #103 — \$3,000.00 + Trophy
2nd Place – University of Western Australia, Car #11 — \$2,000.00 + Trophy
3rd Place – Graz University of Technology, Car #17 — \$1,000.00 + Trophy
4th Place – University of Cincinnati, Car #79 — \$600.00 + Trophy
5th Place – University of Toronto, Car #13 — \$500.00 + Trophy
6th Place – University of Florida, Car #8 — \$400.00 + Trophy
7th Place – Rochester Institute of Technology, Car #12 — \$300.00 + Trophy
8th Place – University of Toledo, Car #101 — \$250.00 + Trophy
9th Place – Rensselaer Polytechnic Institute, Car #57 — \$250.00 + Trophy
10th Place – University of Kansas, Car #4 — \$250.00 + Trophy

Niel Schilke SAE Foundation Cup

University of Wisconsin-Madison, Car #103

Formula SAE Certificate of Accomplishment

Auburn University - Car #88
Bradley University - Car #128
Brown University - Car #70
Carleton University - Car #56
Clemson University - Car #98
Duke University - Car #25
Iowa State University - Car #7
Kokushikan University - Car #104
Kookman University - Car #66
McGill University - Car #85
Michigan Tech - Car #124
North Carolina State University - Raleigh - Car #6
Northern Illinois University - Car #123
Old Dominion University - Car #86
Oregon State University - Car #23
Penn State University - Car #2
Southern Polytechnic State University - Car #100
University of Akron - Car #10
University of Laval - Car #61
University of New Hampshire - Car #42
University of Pittsburgh - Car #26
Vanderbilt University - Car #32



Texas A&M Finishes in 1st Again!



The California Speedway once again hosted the Formula SAE West event. The second competition in the official series took place on June 13 – 16, 2007. Organized by SAE International Staff and Volunteers, the competition attracted 80 universities from around the world. In addition to those in United States, one third of the entries were from Brazil, Canada, China, India, Italy, Japan, Mexico, Puerto Rico, South Korea, Sweden, United Kingdom and Venezuela.

The site, though massive, provided a true motorsport atmosphere. With state of the art facilities, teams used the VIP motorcoach area for their paddocks, the NASCAR garages were used for some static judging along with several of the suites above the hot pits, and SAE used the NASCAR drivers briefing room for the various Formula SAE drivers meetings.

The weather was hot, dry and sunny; almost perfect conditions for the event. The event kicked off on Wednesday with registration and technical inspection. Thursday was a full day of static judging where teams presented in three areas of Cost, Design and Presentation. Friday started the first day of racing for those teams who passed technical inspection. In the morning was the acceleration and skidpad events followed by the autocross in the afternoon.

On the “big day” of the competition, the Endurance race was to start at 9am however due to some delays the event started at 9:40am. The 1.1 km course allows for each driver to complete 10 laps. Fifty-five cars started the endurance event however only 25 finished both heats successfully. Many failures were a result of over heating during driver change. The event this year was definitely a challenge for the volunteers as they were tested with a car fire on track resulting in a red flag shutting down the course; however they did a great job clearing the course, reacting to the fire and restarting the event.

The awards ceremony started a few hours after the Endurance event ended and took place onsite. Cooper Tire donated their stage for the presentations as well as the bands that played prior to the start of the awards ceremony. Taking home 1st Place Overall was 2006 1st Place Winner, Texas A&M University. The 2007 Texas A&M Formula SAE design featured a new lightweight Aprilia SXV550 V-twin engine and weighed less than 400 pounds.

Filling out the top 10 in the California competition were: University of Kansas by a second close finish, Auburn University, Purdue University, University of Toledo, South Dakota School of Mines and Technology, California State University at Northridge, University of Illinois at Urbana-Champaign, Shibaura Institute of Technology and Michigan State.

To view all final score results from Formula SAE West, please visit <http://students.sae.org/competitions/formulaseries/west/>. The event is also displayed on YouTube®; please visit www.youtube.com and type “SAE Extreme 2007 Formula SAE West” into the Search Field.

As the 2007 competition season comes to an end, the SAE Collegiate Design Series Staff would like to thank everyone who helped this season a great success. To all the volunteers and sponsors, thank you for all your contributions! To all the students, thank you for your undying interest in this student competition! And remember, graduating students are encouraged to come back next year and volunteer!! For more information on this please contact SAE International as CollegiateCompetitions@sae.org. Have a safe and enjoyable summer!

2007 Formula SAE West Award Winners

Altair Engineering's William R. Adam Engineering Award

- 1st Place – University of Kansas — Awarded \$1,000
- 2nd Place – Lehigh University — Honorable Mention
- 3rd Place – Brigham Young University — Honorable Mention

Autodesk Inventor Design Communication Award

- 1st Place – University of Oklahoma — Awarded \$750
- 2nd Place – Dartmouth College — Awarded \$500
- 3rd Place – South Dakota School of Mines & Technology — Awarded \$250

Bruel and Kjaer Quiet Car Cup

- University of California – Irvine @ 97 dBa — Awarded \$250

Formula SAE Certificate of Accomplishment

- California State Poly University – Pomona
- California State University – Sacramento
- Clemson University
- Instituto Tecnológico de Chihuahua
- Montana State University
- Tennessee Technological University
- Tokyo Denki University
- University of Maryland

Goodyear Best Performance Award – Top 3 teams scored in Endurance

- 1st Place – University of Toledo — Awarded 3 sets of tires —
- 2nd Place – University of Kansas — Awarded 2 sets of tires
- 3rd Place – Texas A&M University — Awarded 1 set of tires

Honda Dynamic Event Award – Top3 teams scored in Overall Dynamic events

- 1st Place – Texas A&M University — Awarded \$1200
- 2nd Place – University of Kansas — Awarded \$800 —
- 3rd Place – University of Toledo — Awarded \$500

Honda Engineering Design Award – Top 3 teams scored in Design

- 1st Place – University of Oklahoma — Awarded \$1200
- 2nd Place – Auburn University — Awarded \$800
- 3rd Place – Michigan State University — Awarded \$500

Hoosier Tire Autocross Award – Top 3 teams scored in Autocross

- 1st Place – Texas A&M University — Awarded 8 free tires
- 2nd Place – University of Oklahoma — Awarded 6 free tires
- 3rd Place – Michigan State University — Awarded 4 free tires

Lincoln Electric Welding Award

- Montana State University

SAE Perseverance Award – Top 5 Rookies will receive a set of Carroll Smith Books

- 1st Place – University of Ontario Institute of Technology
- 2nd Place – Pittsburg State University
- 3rd Place – Wichita State University
- 4th Place – Hunan University
- 5th Place – Dalhousie University

William C. Mitchell Rookie Award – Best Finish for 1st year team will receive software

- University of Ontario Institute of Technology

Timken Friction Management Engineering Award – Top 3 teams combined scores in Cost and Endurance

- 1st Place – University of Toledo — Awarded \$750
- 2nd Place – University of Kansas — Awarded \$500
- 3rd Place – Auburn University — Awarded \$250

SAE Spirit of Excellence – Top 10 Overall Finishers

- 1st Place – Texas A&M University — Awarded \$3000
- 2nd Place – University of Kansas — Awarded \$2000
- 3rd Place – Auburn University — Awarded \$1000
- 4th Place – Purdue University — Awarded \$600
- 5th Place – University of Toledo — Awarded \$500
- 6th Place – South Dakota School of Mines & Technology — Awarded \$400
- 7th Place – California State University – Northridge — Awarded \$300
- 8th Place – University of Illinois – Urbana-Champaign — Awarded \$250
- 9th Place – Shibaura Institute of Technology — Awarded \$250
- 10th Place – Michigan State University — Awarded \$250

Thank You to the 2007 Formula SAE Sponsors

Platinum

Honda R&D Americas

Gold Sponsors

AutoDesk
 Bruel & Kjaer
 Goodyear
 Honeywell
 Hoosier Racing Tire
 Land and Sea
 Lincoln Electric
 Solidworks
 Sunoco
 Timken Motorsports

Silver Sponsors

Altair Engineering
 William C Mitchell Software

East

2nd Place University of Western Australia



1st Place University of Wisconsin Madison

FSAE 3rd Place Graz University of Technology



West

2nd Place University of Kansas



1st Place Texas A&M University

3rd Place Auburn University



FSAE Expands to Three North American Competitions in 2008

2008 Formula SAE at VIR
Wednesday April 23 – Saturday April 26, 2008
Virginia International Raceway
Alton, Virginia

Next year, for the first time, we will organize three Formula SAE competitions in North America. The third event will take place in late April at Virginia International Raceway in conjunction with the VIR 400 which is part of the Grand American Rolex Sports Car Series. VIR 400's main event will be held on Sunday, April 27 and participating FSAE teams will have the opportunity to stay and watch the race.

This will be the first time an FSAE competition has been co-located with a major motor sports race and we've made some minor changes to our registration and operating procedures that are specific to this event. Please keep in mind that there will be two competitions running at the same track and at the same time and that some of the areas of VIR set aside for FSAE interlock with those assigned to the VIR 400. You should expect a lot of interest in your team and your car.

Registration – Registration for 2008 FSAE at VIR will open Monday October 1, 2008 at 10:00 am EDT.

Dual Registration – For 2008 you will be permitted to register for both FSAE at VIR and for one other competition at the same time. Specifically, registering your team for FSAE at VIR and either FSAE or FSAE West will be permitted during the first month of registration.

Registration Limit – Registration for 2008 FSAE at VIR will be capped at 50 teams.

Team Member Registration – Your registration will cover admission of ten (10) team members or faculty advisors to VIR for both Formula SAE and the VIR 400 events. Any additional team members or faculty advisors after the first 10 will pay the standard VIR event entry fee of approximately \$45 each.

Paddocks – The paddocks will be on grass.

Electrical Power – Power will not be provided to the individual paddocks, so if you intend to run lights or power tools you will need to bring your own generator.

Course – Autocross and Endurance/Fuel Economy will be run on the Patriot Course.

VIR Website – You can find details on VIR and the Patriot Course at <http://www.virclub.com/vir/>

2007 Supermileage Awards

Collegiate Division Highest Points:

- 1.... Rose-Hulman Institute of Technology
- 2.... Cedarville University
- 3.... University of Massachusetts - Amherst

High School Division Highest Points:

Mater Dei High School

Collegiate Division Best Design Report:

Delhi College of Engineering (India)

High School Division Best Design Report:

Mishawaka High School (Indiana)

Most Visually Appealing Vehicle:

Ivy Tech State College of Indiana

Closest Predicted to Actual Fuel Economy:

University of Dayton

Best Demonstrated Overall Team Attitude:

Ivy Tech State College of Indiana

All Roads Lead To Marshall, Michigan For Supermileage Competition

(Several excerpts below taken from The Marshall Chronicle, written by John Hendler, June 9, 2007)

SAE International held its 28th annual Supermileage Competition Thursday, June 7 and Friday, June 8 at the Eaton Proving Grounds. Over 30 teams from the United States, Canada, India and Bahrain participated in the competition that provides engineering and technology students with a design project that involves the development and construction of a single-person, fuel efficient vehicle. All vehicles must be powered by a small four-cycle engine, have a minimum of three wheels, and the driver must be fully enclosed to prevent contact with the ground.

Thursday, participants arrived to the Proving Grounds and had to go through several different inspections or checkpoints before their vehicle would be permitted on the track. "The technical inspection focuses on compliance to the rules," said Jim Gluys, a principal design manager from Eaton Corporation who took over as the organizer of the event five years ago. "It also emphasizes safety."

Jennifer Hulbert, a mechanical engineer was one of the tech inspectors and said just about every vehicle inspected has something that needs to be corrected. "A lot of the teams were missing chain guards, located in the rear of the vehicle," she said. "We didn't want the chain hitting the fuel line." Hulbert said sometimes teams don't like to hear that they've got to spend more time getting the vehicle ready. "It's hard for them not to take it personally because they dedicate so much of their time to the project," she said.

Dale Muyskens, one of the judges in the verbal presentation said it's important to make sure the team has put in a team effort. "We ask questions to make sure they are solid on their technical knowledge," he said. "We don't like it when it looks like only one guy did all the work."

Also on Thursday was the braking test, which measured stopping distance. The first team to get through all their inspections would go first on Friday, followed in order by the teams that got through inspections after them. "The winner is based on a combination of best fuel economy and points from the Thursday inspections," said Gluys.

Interestingly enough, aside from the various technical inspectors, there were several Eaton representatives from Human Resources. "When we see the students, we say, 'hey do you want a job?'" said Anna Ruzzkiewicz, senior human resources generalist. "This is a recruiting event, and we use a lot of recruitment tactics," said Dolly Limones. "We had out some cards for job opportunities, internships."

Eaton has once again planned and executed another successful Supermileage event. The 2008 Supermileage competition will return to the Eaton Proving Grounds on June 5-6, 2008. Another great turnout is anticipated!

2008 SAE Collegiate Design Competition Schedule

Below is a tentative schedule of Collegiate Design Series events for 2008. Please note the dates and locations may be subject to change. Further information will be posted in future CDS Newsletters or web pages.

March 10 – 14, 2008

Clean Snowmobile Challenge

Location: Keweenaw Research Center - Houghton, Michigan

April 4-6, 2008

SAE Aero Design West

Location: Fort Worth, Texas

April 18 – 20, 2008

SAE Aero Design East

Location: Marietta, Georgia

April 23 – 26, 2008

Formula – VIR

Location: Virginia International Raceway – Danville, Virginia

May 1 – 4, 2008

Baja SAE– Tennessee Tech University

Location: Cookeville, Tennessee

May 5 – 7, 2008

Formula Hybrid

Location: New Hampshire International Speedway - Loudon, New Hampshire

May 13 – 18, 2008

Formula SAE

Location: Michigan International Speedway - Brooklyn, Michigan

May 29 – June 1, 2008

Baja SAE – Central Illinois

Location: Caterpillar Facility - Peoria, Illinois

June 5 – 6, 2008

SAE Supermileage

Location: Eaton Proving Grounds - Marshall, MI

June 12 – 15, 2008

Baja SAE – Ecole De Technologie Superieure

Location: Montreal, Canada

June 17 – 21, 2008

Formula West

Location: California Speedway - Fontana, California

2008 Collegiate Design Rules Issue Dates

After a long and grueling Collegiate Design Series event season, the 2008 Rules Committees have been working diligently to develop the rules for next year. We know that many teams are anxious to start working on their models and vehicles for next year; below is a summary of when the 2008 revisions can be expected:

Aero Design Series – early August
Baja SAE Series – early August
Clean Snowmobile Challenge – early August
Formula SAE Series – early August
Supermileage – early August

New Registration Fees For The 2008 CDS Season

Registration for the 2008 SAE Collegiate Design events will open on Monday, October 1, 2007 at 10:00 AM Eastern Standard Time. Please note that the following changes will be made to the registration fees for the following Collegiate Design events:

	2007 Fee	2008 Fee
Aero Design Series	\$350.00 USD	\$450.00 USD
Baja SAE Series	\$500.00 USD	\$600.00 USD
Clean Snowmobile Challenge	\$500.00 USD	\$500.00 USD
Formula SAE Series	\$600.00 USD	\$1,000.00 USD
Supermileage	\$250.00 USD	\$350.00 USD

Collegiate Design Series Website Revision

Currently under construction is a revision for the existing Collegiate Design Series website. Over several years it has been noted that our website is not user-friendly and too often items get buried within the website. Along with the IT staff, the CDS staff has been working on revamping the website with better navigation, information and design. The roll out of this website is scheduled this fall before the 2008 registration opens if all testing has been completed.

Editors:

Kaley Shellhammer
Samantha Jeswald

Please if you have submissions or ideas for news, contact us at:
collegiatecompetitions@sae.org