



A WORLD IN MOTION® Newsletter

January 2009

Spotlight on SAE Section Activities

SAE India

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SAE India conducted A World In Motion® JetToy Olympics at Sri Sankara Senior Secondary School, in Adyar, Chennai. Fifteen schools with students from class 6 and class 5 qualified for this final round from selection rounds held earlier in various cities. After the concept of the AWIM® Olympics was introduced, the guest of honor, Mr. Joseph Memmel, Chief Operating Officer from TATA Johnson Controls, Pune, stressed the need for such programs.



3rd from left Thomas W. Ryan III, President, SAE International
4th from left, David L. Schutt, Executive Vice President and Chief Operating Officer, SAE International

Materials for the construction of the JetToy were provided to the teams comprising of three students each playing the roles of Project Engineer, Facilities Engineer and Test Engineer. The program witnessed some of the most innovative vehicles that displayed interesting colors and shapes. The various parameters tests included distance, time, speed, accuracy and pay-load carrying capacity. The teams left no stones unturned to excel in their performances. The blend of science, technology and management skills proved to be the best way of teaching and learning science, math, engineering and technology. When a judge asked a team about the unconventional streamlined shape of their vehicle, they came up with a quick response - aerodynamics. "We want the vehicle to pierce through the air and move fast," explained Roshan Jaisimha Dattastri. It would not be an exaggeration to say that the judges were a little taken back by the knowledge of the young team members. Ashoka Universal School from Nashik emerged as the nation champion of the event taking home the trophy.

SAE India has been implementing this program to schools with the help of sponsoring companies such as Ashok Leyland, Honeywell, Mahindra & Mahindra, Maruti and Bank of Baroda.

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Honeywell/SAE International Student Automotive Design Challenge Winners Selected

Students Show Their Passion for Engineering through Global Competition

TORRANCE, Calif., January 8, 2009 – Students at Colegio Americano de Mexicali, College Elsa TRIOLET and College Champittet proved they have what it takes to build innovative cars – even if their engineering degrees are still a few years away! The students’ schools, chosen by Honeywell employees for best meeting building criteria from among nine international participating institutions, built winning electric gear-driven toy cars based on a multi-disciplinary curriculum that integrates science, math, technology, social studies and language arts. Colegio Americano de Mexicali of Mexicali, Mexico won First Place; College Elsa TRIOLET of Thon-les-Vosgues, France won Second Place; and College Champittet, of Pully-Lausanne, Switzerland won Third Place.

Honeywell (NYSE: HON) partnered with SAE International’s *A World In Motion*® (AWIM) program to launch the Honeywell/SAE Student Automotive Design Challenge, which directly addresses the decline of students interested in science, technology, engineering and math. This decline is one of the most pressing issues facing technical-based industries today and is threatening the ability of companies and countries to effectively meet future workforce demands, resulting in repercussions that may affect generations to come.

The SADC is a unique pilot program designed to engage students, ages 11-14, from six countries in hands-on math and science training. Throughout the eight-week program, students actively discovered how these subjects relate to their everyday lives, while uncovering potential career paths for the future.

The SADC uses the AWIM curriculum, which recently won the National Science Foundation’s prestigious 2008 Public Service Award. AWIM is a multi-disciplinary curriculum that integrates science, math, technology, social studies and language arts, providing students with an assignment from a mock corporation to research, design, test and build electric gear-driven toy cars. Students worked in design teams of four to build a vehicle and were involved in writing proposals, drawing sketches and working with models to develop a plan that met a specific set of design requirements based on market research. Students also shared results with international peers via an online forum, designed to directly connect students at a global level.

“We have been thrilled by the passion these students have exhibited during every phase of this challenge and we congratulate each of the schools on a job well-done,” said Adriane Brown, TS President and CEO. “We hope that the program instilled a life-long interest in engineering and that students will continue to be excited about science and math.”

A 2006 report from the National Science Foundation, *Science and Engineering Indicators*, found that the inability to engage students, even as young as elementary school, in these core subjects has resulted in an emerging crisis for the technical, scientific and engineering disciplines.

Honeywell Engineers in the local participating areas selected the first-place vehicle from each school to be entered in the global competition. The first-place vehicles from the nine schools moved forward as finalists and, of that group, three winners were chosen by Honeywell employees. For more information about the global competition and the innovative projects, visit www.honeywell-sae.com/competition-entries.html.

All three winning schools will receive an "SADC Winner" banner for the class and trophies for the winning team, with the First Place class receiving a field trip to a local museum and the Second Place team winning a small gift.

"SAE International congratulates the winners of the Honeywell/SAE Student Automotive Design Challenge," Matt Miller, Education Programs Manager, SAE International, said. "The students and the schools should be proud of the work that they have produced. The AWIM curriculum teaches math, science and engineering principles in a creative way, and these students exemplify that inspired style of learning. SAE is proud to have partnered with Honeywell on this important program."

Honeywell International is a \$38 billion diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; automotive products; turbochargers; and specialty materials. Based in Morris Township, N.J., Honeywell's shares are traded on the New York, London and Chicago Stock Exchanges. For additional information, please visit www.honeywell.com.

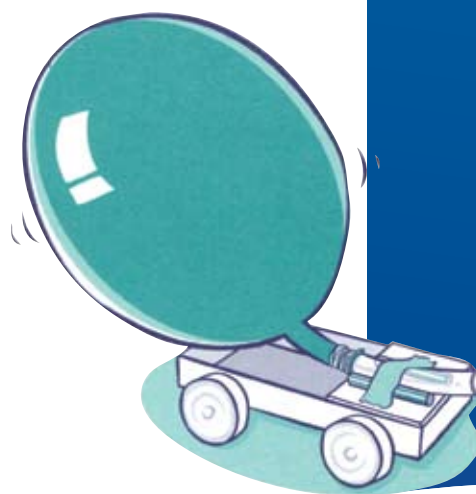
Based in Torrance, California, Honeywell's Transportation Systems business is a worldwide leader in the development of turbocharger technology for passenger cars and commercial vehicles. It also manufactures and markets leading consumer automotive brands including FRAM® oil, air, transmission and fuel filters; Prestone® antifreeze/coolant and car care products; Autolite® spark plugs; Holts® car care products and Bendix® automotive braking technology.

SAE International is a global association of more than 121,000 engineers and related technical experts in the automotive, aerospace and commercial-vehicle industries. SAE International's core competencies are life-long learning and standards development. SAE International's charitable arm is the SAE Foundation, which supports many programs, including A World in Motion and the Collegiate Design Series.

GM Volunteers Give Back to the Community

During 2008 Liz Landsman and Vince Bandurski spearheaded participation in the Greater Pontiac NNOC (National Night Out against Crime). Approximately 250 children built a balloon-powered JetToy car in an assembly line staffed by volunteers. "The kids really enjoyed the project and had fun testing their car. We had some do 'wheelies' and some went straight; and as in golf, some did a 'slice' and some a 'hook'," said Vince Bandurski.

Thanks to the GM employees serving as role models for young people, a hopeful outcome is that children may consider a career in science, math and engineering.



Fourth and 5th graders in Jan Turcic's class at Reynolds Elementary School, in Greenville, PA were asked to respond to the following question: **What is an engineer and what does an engineer do?**

“ An engineer designs buildings. They work with gears. They plan how to build things. They make things like cars and buildings. They fix electrical lines. They also make machines.”

Zak – 4th grade

“ Some engineers start trains. They work with mechanical machines. They work with motors when they start machines.”

Desiree – 4th grade

“ An engineer is a person who creates things like cars, buildings and other stuff. They help us out a lot. If we did not have them we would not have most everything we needed like houses. Engineers also make electric stuff.”

Casidee – 4th grade

“ An engineer is commonly believed to build stuff. This is partially true. Engineers experiment with gears and other simple machines to find ways to make better, complex machines.”

– a 5th grader

“ Engineers are people who do a lot of mechanical work like building, welding and grading. Some drive trains, some drive nothing, but they all do something to help out.”

Sean – 4th grade

“ Someone who is an engineer creates ideas and makes them come to life. Engineers create plans and build structures. They are important because of their inventions. NNOC Engineers create items that help us reach long term goals, and just do everyday things.”

Kassianne – 4th grade

For consideration in a future issue please tell us what you are doing with AWIM in your classroom. Articles/photos should be sent to:

SAE International Phone: 724-772-8513
Attn: Darlene Geweth E-Mail: dgeweth@sae.org
400 Commonwealth Drive
Warrendale, PA 15096

The following are A World In Motion workshops/conferences/events for January and February:

For any of the training workshops listed below contact Gena Ghiardi at gena.ghiardi@gm.com

January 8, 2009 GM Tech Center Warren, MI RM 2AF-25 Refresher Training Skimmer/JetToy Challenge 1:00 p.m. – 3:00 p.m.	January 22, 2009 Flint, MI Skimmer/JetToy Challenge a.m. Timeframe TBD	Skimmer/JetToy Challenge 2:00 p.m. – 4:00 p.m.
Sashabaw Middle School 5565 Pine Knob Lane Motorized Toy Car Challenge 6:00 p.m. – 8:00 p.m.	Auburn Hills Skimmer/JetToy Challenge p.m. Timeframe TBD	February 10, 2009 Parma, OH Skimmer/JetToy Challenge Timeframe TBD
January 13, 2009 Web Ex Training JetToy Challenge 11:00 a.m. – 12:00 p.m. St. Catherines, Ontario	Detroit, MI Ren Center Skimmer/JetToy Challenge 1:00 p.m. – 4:00 p.m.	Motorized Toy Car Challenge p.m. Timeframe TBD
Web Ex Training Skimmer/JetToy Challenge 3:00 p.m. – 5:00 p.m.	January 23, 2009 Lansing, MI Lansing Grand River Assembly Skimmer/JetToy Challenge a.m. Timeframe TBD	February 12, 2009 GM Tech Center Warren, MI Rm2AF-25 Skimmer/JetToy Challenge 8:00 a.m. – 11:00 a.m.
January 20, 2009 Orion, MI Glider Challenge a.m. Timeframe TBD	January 27, 2009 Focus Hope Detroit, MI JetToy Challenge 4:30 p.m. – 7:30 p.m. Detroit Public School Teachers	Motorized ToyCar Challenge 12:00 p.m. – 3:00 p.m.
GM Tech Center Warren, MI Rm 2AF-25 Motorized Toy Car Challenge 7:00 a.m. – 10:00 a.m.	January 29, 2009 Focus Hope Detroit, MI Skimmer Challenge 4:30 p.m. – 7:30 p.m. Detroit Public School Teachers	Glider Challenge 3:30 p.m. – 5:30 p.m.
Glider Challenge 10:30 a.m. – 12:30 p.m.	February 3, 2009 Pontiac, MI Powertrain Bldg B Kettering Conf. Rm C&D Skimmer/JetToy Challenge 8:00 a.m. – 10:00 a.m.	Tonawanda, NY Web Ex Training Skimmer/Motorized Toy Car Challenge a.m.-p.m. Timeframe TBD
Skimmer/JetToy Challenge 1:00 p.m. – 4:00 p.m.	February 5, 2009 Bowling Green, KY Simmer/JetToy Challenge Glider Challenge Timeframe TBD	February 17, 2009 Lordstown, OH Web Ex Training Skimmer/JetToy Challenge Timeframe TBD Girard School Dist. Training
January 21, 2009 Glider Challenge 12:00 p.m. – 2:00 p.m.	February 19, 2009 Spring Hill, TN Web EX Training Skimmer/JetToy Challenge Motorized Toy Car Challenge 8:30 a.m.	Grand Rapids, MI Skimmer/JetToy Challenge Timeframe TBD
Motorized Toy Car Challenge 2:30 p.m. – 5:30 p.m.	GM Tech Center Warren, MI Rm 2AF-25 Refresher Training Skimmer/JetToy Challenge 8:00 a.m. – 10:00 a.m.	February 26, 2009 Wilmington, DE Web Ex Training JetToy Challenge Timeframe TBD
Skimmer/JetToy Challenge 12:30 p.m. -3:30 p.m. Rm 4AA-31	Skimmer/JetToy Challenge 11:00 a.m. – 1:00 p.m.	
AWIM training 3:30 p.m. – 5:30 p.m. Rm 4AA-31		
Skimmer/JetToy Challenge 8:00 a.m. – 12:00 p.m. Pontiac Powertrain Gasoline Alley Conf. Rm.A,B&C Rm 1AN-63 8:00 a.m. – 12:00 p.m.		

To make a contribution to the SAE Foundation, visit their website at <http://www.sae.org>