SAE's newest member service offers expertise in more than 20 areas

Just three months after being launched at the SAE World Congress, SAE's newest member service, the Automotive Resources Institute (ARI), has already registered more than 50 consultants. Neil Schilke (far left), Managing Director, ARI, and Herb Evans (far right), Director, Business Development, ARI, welcomed the group at a “graduation” party in May.

To ensure ARI’s consultants are highly skilled in the automotive arena, all registered consultants were put through an 8-step screening process before being approved as an ARI consultant. During the screening process, in addition to submitting a detailed resume, potential consultants go through an eight-step process including personal interviews and providing qualified references.

“We are looking for professionals that possess a wide breadth of experience and talent, and the registration process provides us the opportunity to ensure the consultants have the requisite expertise and industry stature,” said Neil Schilke, Managing Director, ARI. “Adding 20 consultants to our list brings our total to more than 20 consultants.”

SAE expands China presence

SAE’s newest member service, the Automotive Resources Institute (ARI), has already registered more than 20 consultants. Neil Schilke (far left), Managing Director, ARI, and Herb Evans (far right), Director, Business Development, ARI, welcomed the group at a “graduation” party in May.

A major force in shaping the North American auto industry over the past 100 years, SAE is increasing its impact in other parts of the world as well. That is particularly true in China, where SAE is well established, well respected, and well positioned to play a positive influence as the country’s automotive industry grows at an astounding pace.

One of the society’s principal initiatives is establishment of the DTI-SA Global Knowledge Center at China’s most prestigious educational institution, Tsinghua University in Beijing. SAE is partnering with Delphi, which operates the DTI (Delphi Tsinghua Institute) at the university.

Among the technical information and services offered at the knowledge center are training programs, standards, books, and seminars. The first set of seminars, designed for engineers and engineering managers, is to be held in August. As soon as possible, the seminars will be taught in the Chinese language. “One of the society’s primary goals is to provide capable practitioners to the mobility industries in order to prepare for future advancement,” said SAE President Duane Tiedie.

SAE President Duane Tiedie delivers remarks at a ceremony marking establishment of the DTI-SA Global Knowledge Center at China’s most prestigious educational institution, Tsinghua University in Beijing. Also pictured are (left to right) Li Kejiang, Ph.D., Deputy Director, Department of Automotive Engineering, Tsinghua University; Ying Chen, Chairman, Delphi Automotive Systems (China); and professor Ming Suzong, Director, Shanghai Automotive Industry Training Centre.

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PERSPECTIVES

Industry executive presentations highlight
Brake Colloquium

The most pressing issues facing the brake/friction industry will be discussed by key industry leaders at SAE’s 22nd Annual Brake Colloquium and Exhibition, October 10-13, at the Anaheim Marriott in Anaheim, CA.

A new “Brake/Friction Industry Executive Management Panel,” held on Monday, October 11, will address issues such as capacity, implications of low-cost country sourcing, emerging markets (including China, India, and Eastern Europe) and expectations of global OEMs. Panelists will include top-level representatives from Nissinboi Automotive Corp., TMD Holdings, Akabona, ADVICS, Federal Mogul, and TRW Automotive.

The “Industry Updates” session, also on Monday, October 11, will feature presentations by the executive directors of the Brake Manufacturers’ Council (BMC), Automobile Manufacturers’ Equipment Compliance Agency (AMECA), and Friction Materials Standards Institute (FMSI). There will also be a discussion of “ISO/WG2 Progress and New Test Procedures” featuring executives from Link Engineering, Honeywell Brembo, and Akabona.

The impact of new and proposed government regulations for the heavy truck industry will be the focus of the “Update on Heavy-Duty Brake Regulations and the Effects on the Friction Industry” session on October 11. Presenters will include representatives from the Brake Manufacturers’ Council, Bendix CVS, NHTSA, ArvinMeritor, and Link-Radlinski, Inc.

Attendees who register by September 24 will save $100 on the registration fee. To register, or for more information, visit www.sae.org/brake, e-mail Customer Service@sae.org, or call 877.606.7323 or 724.776.4970 (outside the U.S. and Canada).
President Zhao Hang and Vice President The SAE delegation was met by CATARC number of its engineers in the quality area.

government-funded, and has trained a relationship with CATARC, which is Beijing. SAE has a long-standing located about 80 miles from the center of Center (CATARC) in Tianjin, which is Automotive Technology and Research Cummins may collaborate with SAE in a couple of mutually identified areas.

There are strong indications that SAE Taipei is the industry, and academia. SAE Taipei is the Chinese engineer and management team are members of SAE. SAE officials agreed to cooperate with SAE in a number of standards, professional development programs, and membership development.

Following are some of the other activities of the SAE delegation during its June visit to China:

- Met with the leadership of the society’s China branch (SAE China President, Zhang Xianyu, and Executive Vice President Fu Yu-Wu), to discuss a number of collaborative joint ventures.

- Met with officials of Cummins China, including Vice Chairman Wang Hongjie. There are strong indications that Cummins may collaborate with SAE in a couple of mutually identified areas.

- Met with representatives of the China Automotive Technology and Research Center (CATARC) in Tianjin, which is located about 80 miles from the center of Beijing. SAE has a long-standing relationship with CATARC, which is government-funded, and has trained a number of its engineers in the quality area. The SAE delegation was met by CATARC President Zhao Hang and Vice President Zhang Jianwei, who made a brief introductory presentation about CATARC and Tsinghua University. Members of the SAE collegiate club made a brief report to Tiede on their various activities.

- Attended an SAE Taipei Section for a seminar on systems engineering. The seminar, chaired by the SAE Hong Kong Section, was attended by more than 70 people.

- Visited the Hong Kong Polytechnic University. Members of the SAE collegiate club made a brief report to Tiede on their various activities.

- Attended an SAE Taipei Section for a government-industry panel discussion with a focus on how SAE can help the automotive industry on a worldwide basis. The panel was attended by more than 100 people representing top government officials, industry, and academia. SAE Taipei is the oldest SAE overseas sections.

AWIM—a great opportunity

The SAE A World In Motion (AWIM) educational program is designed to interest primary and secondary students in careers in science and engineering. It supports one of SAE’s two core competencies: lifelong learning. In the AWIM program, an engineer works with the teacher in the classroom to help student teams learn the principles of science and physics by building devices such as a balloon-powered car, a glider, or an electronic circuit.

This program was first introduced in 1990 and is now used in schools in all 50 states and throughout Canada with some limited application in other countries, such as Mexico and the U.K. In some school districts it has become the standard teaching program for this part of the science curriculum.

As I travel this year and talk with students, teachers, and engineers, the enthusiasm of all involved with AWIM is contagious. Students are excited and have fun learning in a “hands-on” program while testing their projects against other teams. Teachers are pleased because it helps their students learn what can be a difficult subject for some. The engineers who volunteer are excited by the opportunity to work with the students and give something back to their profession to assure a continued supply of future engineers.

The SAE Board of Directors recently approved an AWIM Virtual Program Office to provide strategic leadership to the AWIM Program (K-12) and to ensure growth of AWIM’s products and services today and in the future.

Financial support for AWIM is through the SAE Foundation. The first student kits are available to a teacher for free with a nominal fee for subsequent kits. The Foundation is currently launching a major fundraising effort to continue expanding AWIM with other programs and offerings.

The SAE Board of Directors recently approved an AWIM Virtual Program Office to provide strategic leadership to the AWIM Program (K-12) and to ensure growth of AWIM’s products and services today and in the future.

While in China, members of an SAE delegation met with officials of Cummins China. Pictured (left to right) are Gary Schalk, SAE Manager of Strategic Programs; Min Tong, Director, Engineering & Technical, East Asia for Cummins; SAE Executive Vice President Ray Morris; SAE President Duane Tiede; Cummins Chairman Wang Hongjie; Managing Director, SAE/UTI Global Knowledge Center John Chi; and SAE Manager Global Affairs Muriel Liyer.
MEMBER SERVICE continued from p.1

consultants to our resource pool allows ARI to provide leaders and experts for crafting solutions to challenges identified by the automotive industry."

To welcome the new consultants, ARI hosted a "graduation" party on May 26, 2004. During the event, Schilke and Herb Evers, Director, Business Development, welcomed and presented the new consultants with official consultant registration certificates and ARI supplies and information.

"When I heard about ARI, I was very intrigued to learn more about expanding my career in the automotive industry," said Kinstler. "I knew joining ARI was the next logical step in my career path."

ARI's newest consultants are currently available for placement within the industry. These consultants are helping to solve challenges in areas such as engineering, international business, manufacturing, product-life cycle management, and sales and marketing. ARI is continuing to process more potential consultants and expand its capabilities for the automotive industry.

As the organization acquires more consultants, ARI has the capability to become the new resource automotive suppliers use to remain flexible and better meet customer needs and demands. For a complete list of ARI's areas of expertise, visit www.ari.sae.org.

"It's evident that ARI is a great addition to SAE," said Ray Morris, SAE's Executive Vice President and COO. "In such a short amount of time, ARI has proved that it is poised to make an immediate impact on the automotive industry."

ARI is headquartered in the SAE Automotive Headquarters in Troy, MI. For more information about ARI, please contact Neil Schilke or Herb Evers at 248.273.4029 or e-mail netschilke-ari@sae.org or herbeverss-ari@sae.org.

SAE CENTENNIAL

100th Anniversary commemorative products available

As part of the celebration of SAE's 100th anniversary, a line of more than 40 commemorative products featuring the "SAE 100" logo is now available. Shirts featuring the logo are available in a wide variety of styles, including long-sleeve denim shirts, crew and V-neck casual shirts, golf/polo shirts, fleece sweatshirts, and V-neck wind shirts.

Three styles of jackets (leather, poplin, and nylon fleece-lined hooded) and four styles of caps are available. Other commemorative products include mugs, umbrellas, duffle bags, and pen/pencil sets. Additionally, four unique crystal pieces, featuring 3-D images created inside a solid piece of optical crystal, have been developed. (Images are: Formula One car, front-end loader, road racer, and V-8 engine.)

For more information, or to order any of the SAE 100th Anniversary commemorative products, visit www.sae.org/sae100 and click on the "memorabilia" tab at the top of the page.

Special 100th Anniversary programs

From a black tie gala and special Section functions to "mini celebrations" at various SAE conferences and the Centennial Series editions of SAE magazines, you'll have ample opportunity to join SAE in toasting the society's first century.

SAE 2004 Motorsports Engineering Conference and Exhibition
November 30 – December 2, 2004
Hyatt Regency Dearborn
Dearborn, MI

SAE 2005 World Congress
Banquet and many other events that will spotlight the 100th Anniversary.
April 11-15, 2005
Detroit, MI

2005 Foundation Banquet
May 2005

2005 Government & Industry Meeting
Reception at the Air & Space Museum
May 10, 2005
Washington, DC

SAE AeroTech Congress and Exhibition
October 3-6, 2005
Dallas/Fort Worth, TX

2005 SAE Commercial Vehicle Engineering Congress & Exhibition
Banquet and other events that will spotlight the 100th Anniversary.
October 18-20, 2005
Chicago, IL

2005 DoD Maintenance Symposium and Exhibition
October 24-27, 2005
Birmingham, AL

2005 Student Competition
100-Mile Mini-Baja
Southern Arizona

"The premier society dedicated to advancing mobility engineering worldwide*

Powertrain & Fluid Systems Conference & Exhibition
October 25-29, 2004
J.W. Marriott Waterside
Tampa, Florida, USA

New developments are making headlines every day in the powertrain and fluid systems arena.

Stay on top of the latest developments by attending the Powertrain & Fluid Systems Conference & Exhibition:
• Examine industry’s hottest topics — diesel combustion and emissions, fuel economy, advanced power sources and fuels, and more!
• Save $100! Register before October 8 – www.sae.org/pfsys

Keynote Speakers
Thomas A. Cacklette, Chief Deputy Executive Officer, California Air Resources Board
Douglas Lawson, National Renewable Energy Laboratory
Yoshitsugu Kimura, President, Kagawa University
Thomas E. Kenney, Staff Technical Specialist, Ford Motor Company
John Oac, Distinguished Member Technical Staff, Sandia National Laboratories
Magdi K. Khair, Khar Institute Engineer, Southwest Research Institute

Attend • Exhibit • Sponsor • Advertise
Visit www.sae.org/pfsys, e-mail CustomerService@sae.org, or call 1-877-606-7323 (1-724-776-4970 outside the U.S. or Canada) for more information on this must-attend event.

Robert J. Pfeiffer
(Mbr '70), Manager, Accident Avoidance - Advanced Safety & Regulations, Automotive Safety Office, for Ford Motor Co., has been elected to serve a three-year term on the SAE Board of Directors (2004-2006). Most recently in the Automotive Safety Office, Pfeiffer manages the area that serves as a link between Ford and regulatory authorities, standards activities, and industry groups for vehicle accident avoidance systems. Prior to this position, Pfeiffer was Truck Safety Assurance Manager. He serves as Manager of the Core Safety Assurance activity when it expanded its role to cover worldwide safety regulations, initiated an office in Europe, and conducted market requirement comparisons. When initially transferring to the Automotive Safety Office in 1997, he had responsibility for ensuring compliance of all vehicles to the Federal Motor Vehicle Safety Standards for the chassis-related vehicle components and systems. After gaining experience in the regulatory field, he became responsible first for the monitoring and assessing of the crash-related standards, and then for the compliance planning and analysis phases. Next he rotated into the advanced regulatory area where he had the responsibility for tracking, communicating, and responding to proposed rulemaking in the areas of braking, power closures, roof crush, and vehicle stability.

Prior to joining the Automotive Safety Office, Pfeiffer was part of Ford Truck Operations where he was involved in the engine design activity, which had responsibility for mounting, packaging, and accessorizing the large Ford gasoline engines into the medium and heavy trucks. Later, he had the responsibility for liaison and packaging of Caterpillar, Detroit Diesel, and Cummins diesel engines into the Ford medium, heavy, and linehaul tractors and trucks. As pass-by noise regulations became a predominant concern, he became responsible for the design and development of noise-suppression components for the Ford vehicles.

Pfeiffer started at Ford as a co-op student at the Cleveland Stampin Plant, spending seven three-month co-op sessions progressing through the various engineering departments (tool and die, welding, tryout, drawings). Upon graduation, he transferred to Ford's Heavy Truck Operations beginning a two-year college graduate training program. During the program, he worked in the drafting room, advanced engineering, chassis development, and engine design departments.

Pfeiffer has a BSME from Fenn College of Cleveland State University, an MSME from the University of Michigan - Dearborn, and the completed bioengineering classes toward a doctorate at Wayne State University. He spent six years in 323rd General Hospital Unit of the U.S. Army Reserve. After basic and wheeled-vehicle mechanic training, he spent the remainder of service in the Unit motorpool, servicing and driving ambulances and trucks.

As an SAE member for 35 years, Pfeiffer has been part of the Membership Grading Committee for four years (served as Chairperson for one year), the Membership Services Board for four years (served as Chairperson for one year), and the Strategic Planning Committee (served as Planning Subcommittee Chair for two years). He participated as part of the Annual Nominating Committee in 1998, 1999, and 2004.
WASHINGTON REPORT

SAE co-sponsors Capitol Hill briefing on the science and engineering workforce

By Doug Read, Managing Director, SAE Washington, DC, office

A luncheon briefing titled, “A Point-Counterpoint Briefing on the Science and Engineering Workforce” was held on July 13 in the Rayburn House office building on Capitol Hill. Co-sponsored by SAE and ASME, this event was prompted by studies showing a decline in the number of U.S. citizens who are training to become scientists and engineers. The question of whether the federal government should be concerned about the availability of people from other countries who have relevant training was a significant topic of discussion during this briefing.

Opening remarks were made by Congressman Bill Barrett (R-IL), Co-Chair of the House of Representatives Research and Development Caucus. Speaker included Michael P. Crosby, Executive Officer, The National Science Board (NSB), and Director of NSB of the National Science Foundation, who spoke on “An Emerging and Critical Problem of the SAE Labor Force.”

SAE participates in development of new National Standards Strategy

The revision of the existing National Standards Strategy (NSS) has begun and various organizations, including SAE, have been invited to participate in this activity. The first meeting took place on May 18 at the National Association of Manufacturers (NAM). Along with SAE and NAM, organizations represented on the NSS Committee (NSSC) include IBM Corp., National Fire Protection Association, ASTM International, Telecommunications Industry Association, National Institute of Standards and Technology, American National Standards Institute, and the Food & Drug Administration. Subgroups have been formed and will focus on the following topics: national priorities and processes - public/private sector cooperation; international; NAM; education and communication; and funding the standards system - intellectual property rights and patents.

The first meeting on May 18 was held in conjunction with the U.S. Department of Commerce (DOC) release of its recent eight-point standards initiative report. The NSSC was invited to walk across the street to the DOC headquarters and witness the presentation of the final report by DOC Secretary Don Evans.

Former Michigan governor Engler to head NAM

The National Association of Manufacturers (NAM), based in downtown DC, recently selected John M. Engler as its new President. The Republican, who served three terms as Michigan governor, will assume his new post on October 1, 2004, after formal approval by the NAM Board of Directors. Engler replaces Jerry J. Jasinski, who is retiring after more than 13 years at the helm of NAM. NAM, which represents 14,000 companies and 350 associations, is nominally bipartisan, but Engler faces some recent dissension by his association members.

Engler replaces Jerry J. Jasinski, who is retiring after more than 13 years at the helm of NAM. NAM, which represents 14,000 companies and 350 associations, is nominally bipartisan, but has recently worked closely with the Bush Administration on a number of economic initiatives. For the past few years, Engler has served as Vice President of Government Solutions for North America at Electronic Data Systems Corp.

Engler faces some recent dissension by smaller NAM members who feel the association should take a stronger stance on the outsourcing of jobs abroad. As a result, larger organizations like NAM are finding it more difficult to represent its broad constituency on issues where members are divided. This has prompted the creation of a number of narrowly focused groups and coalitions to advocate on legislation and regulation.

NHTSA proposes Event Data Recorder for light vehicles

The National Highway Traffic Safety Administration (NHTSA) recently proposed standard requirements for Event Data Recorders (EDRs) that manufacturers choose to install in light vehicles. The proposed rule would not require the installation of EDRs, electronic devices that detect a crash and record certain information for several seconds of time before, during, and after a crash.

“EDRs are in most new vehicles and are already providing valuable safety information for our crash investigators and researchers,” said NHTSA Administrator E. R. Runge. “We hope that eventually this crash information will be available in real time to emergency medical systems and physicians to improve trauma care after a crash.”

NHTSA has proposed, beginning in September 2008, to require that the EDRs voluntarily installed in light vehicles record a minimum set of specified data elements useful for crash investigations; specify requirements for that data; increase the survivability of the EDRs and their data by requiring that they function during and after front, side, and rear crash tests; require vehicle manufacturers to make publicly available information that would enable crash investigators to retrieve data from the EDR; and require vehicle manufacturers to include a brief, standardized statement in the owner’s manual indicating that the vehicle is equipped with an EDR and describing the purposes of EDRs.

NHTSA first began EDR studies after a 1997 recommendation from the National Transportation Safety Board. The agency’s studies of the EDR records of more than 2000 crashes led to this recent proposal. Out of the approximately 200 million light vehicles in the U.S., NHTSA estimates that 15% of the vehicle fleet (30 million cars, pickups, vans, sport utility vehicles, and multipurpose vehicles) are equipped with EDRs that can be easily read, and that between 65 and 90% of new light vehicle models will be equipped with EDRs.

New book provides overview of in-vehicle networking

One of the most popular areas of vehicle electronics today—multiplexing—is covered in the new book Vehicle Multiplex Communication - Serial Data Networking Applied to Vehicular Engineering by Christopher Albert Lupini.

With multiplex products currently in development at vehicle OEMs, electronic control unit suppliers, and integrated circuit vendors, the book will help engineers and managers acquire a basic understanding of vehicle multiplex systems, primarily from the passenger car and light truck viewpoint.

Topics covered include OBD; encoding schemes; Class A, B, and C protocols; data link usage; the vehicle, component, and I/C levels; industry activities; and future trends.

Vehicle Multiplex Communication - Serial Data Networking Applied to Vehicular Engineering (Order No. R-340) is available for $99.95 (SAE members receive a 20% discount). To order, visit store.sae.org; call 877.606.7323 or 724.776.4970 (outside the U.S. and Canada); or e-mail CustomerService@sae.org.

New book focuses on chassis and suspension design of racing cars

The new book Racing Chassis and Suspension Design Features 27 SAE technical papers written between 1971 and 2003 that provide the most practical information on racing chassis and suspension design.

Chapters cover the pneumatic tire, suspension design, the design of the racing chassis (including the effect of aerodynamics), and materials.

The papers were selected by racing engineering legend Carroll Smith, the noted author and former engineer for the Ford Shelby GT40 race team, who died in 2003. An obituary and tribute to Smith is included in the book.

Racing Chassis and Suspension Design (Order No. PT-90) is available for $199.95 (SAE members receive a 20% discount). To order, visit store.sae.org; call 877.606.7323 or 724.776.4970 (outside the U.S. and Canada); or e-mail CustomerService@sae.org.

Continue to expand your knowledge, your personal and professional network, support your industry, and enhance your career.

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* savings on $90.00 dues only. Does not include those on reduced dues programs such as students and retirees.
CALLS FOR AWARD NOMINATIONS

Environmental Award
The John Connor Environmental Award recognizes the accomplishments of an individual in promoting the environmental vision of SAE within and outside the society. It was established to meet the demands of the ever-changing environmental challenges that face manufacturers, suppliers, and professionals in the global transportation industry.

Nomination deadline: August 31, 2004
Submission: For more information and a nomination form, visit www.sae.org/news/awards/dlf/john/conner/

Standards Development Award
The Henry Souther Standards Award recognizes the accomplishments of an individual for standards development in the disciplines of environment, safety, materials, testing, and emissions. It is designed to recognize the ever-changing challenges that face manufacturers, suppliers, and the professionals in the transportation industry around the world with respect to standards development in the disciplines of environment, safety, materials, testing, and emissions. It is designed to recognize the ever-changing challenges that face manufacturers, suppliers, and the professionals in the transportation industry around the world with respect to standards development in the disciplines of environment, safety, materials, testing, and emissions.

Nomination deadline: August 31, 2004
Submission: For further information and a nomination form, visit www.sae.org/news/awards/dlf/souther/

Advocate of Engineering Education Award
The Excellence in Engineering Education (Triple E) Award recognizes outstanding contributions made by an individual toward activities related to the SAE Engineering Education Board. The award is given for any of the following types of service: promotion of SAE student activities at the international or local levels; contributions that advance engineering education; contributions in support of the SAE Collegiate Design Competitions; or promotion of educational-related activities at any level.

Nomination deadline: September 30, 2004
Submission: For more information and a nomination form, visit www.sae.org/news/awards/dlf/triplee/

Environmental Award
The Environmental Excellence in Transportation (E2T) Award recognizes an individual or groups of individuals who, through their ingenuity and dedication, make significant innovations in reducing the environmental impact caused by the transportation industry. These innovative achievements may occur in motorized vehicles for land, sea, air, or space, or in the areas of fuels, alternative propulsion methods, fuel usage, manufacturing methods, energy usage, and improving public awareness. The key criteria for recognition are originality, demonstrated significant favorable impact on the environment, improvement over any existing technologies or methods, and public acceptance.

Nomination deadline: September 30, 2004
Submission: For more information and a nomination, go to www.sae.org/news/awards/dlf/souther/Advocate of Engineering Education Award

Commercial Vehicle Lecture
The L. Ray Buckendale Lecture deals with automotive ground vehicles for on- or off-road operation in commercial or military service. The intent is to provide procedures and data useful in formulating solutions in commercial vehicle design, manufacture, operation, and maintenance.

Nomination deadline: September 30, 2004
Submission: For more information and a nomination, visit www.sae.org/news/awards/dlf/buckendale/

Nomination deadline: September 30, 2004
Submission: For more information and to nominate, go to www.sae.org/news/awards/dlf/connor/Environmental Award

Member's Update

Members on the move

Dale Brosius (Mbr’86) has been appointed Chief Operating Officer, the Americas and Europe, for Quickstep Technologies Pty Ltd.

Rick Hein (Aff’87) has been named Global Commercial and IT Director for TI Automotive’s Fluid Carry Systems Group. He will be responsible for acquisition of new business, customer strategies, and market research.

Sally McInerny (Mbr’98) has been appointed Head of the Department of Aerospace Engineering and Mechanics in the College of Engineering at the University of Alabama (UA). She is the first female department head in the history of UA’s College of Engineering.

Cyrilla Menon (Asc’95) has been named General Manager for North America for CAN in Automation.

Ron Ortiz (Asc’96) has joined Stride Tool as Chief Executive Officer of the company.

Satoshi Watanabe (Mbr’91) has been appointed Senior Managing Director on the Board of Directors for Denso Corp.

Special acknowledgments

Steven Battenman (Mbr’73), Managing Partner for Battenman Engineering, LLC, has been named a Fellow of the American Society of Mechanical Engineers.

Edmund Chu (Mbr’85), Technical Leader/Consultant for Alcoa, Inc., has been named a Fellow of the American Society of Mechanical Engineers.

Timothy Morgan (Aff’90), Director of Technical Services and Training for Car-O-Liner, has been named Technical Chairman of the Collision Repair Group for the Equipment and Tool Institute.

Rodney O’Neal (Asc’00), President of Dynamics, Propulsion, Thermal & Interior for Delphi Corp., has been elected to a three-year term on the Goodyear Board of Directors.

Peter Woyciesjes (Mbr’98), Technical Manager of Research and Development for Honeywell’s Prestone brand, was awarded the ASTM International Award of Merit for individual contributions to standards activities.

Save time and money renewing your membership by enrolling in SAE’s automatic membership renewal

*Save $10 on your membership every year with automatic renewal.

Here’s how it works. With your authorization, SAE charges your credit card every year at renewal time and your membership is renewed automatically. You may receive any renewal notices in the mail or by e-mail, which means no forms to fill out and no forms to return. Instead, you will receive notice from SAE that your credit card has been charged and that your membership has been renewed for another year.

You may withdraw from the program at any time and return to the traditional membership renewal process. Call 877.908.7323 for details.

Become a Company Representative

Help spread information about the benefits of SAE by becoming a Company Representative at your workplace. Company Reps are SAE ambassadors who serve as information resource for SAE members and nonmembers. Receive important SAE information first and be responsible for signing up new members, routing timely SAE notices, supplying necessary forms, and answering questions that your co-workers may have about SAE programs and activities. Company Reps receive early SAE news appropriate to their industry, as well as up-to-date membership materials to help them spread the word.

If you’d like to serve as a Company Rep at your workplace, call 724.772.7138, fax 724.776.3393, or e-mail bonnief@sae.org.
Meetings and symposia schedule

For more information about meetings and symposia, call SAE Customer Service toll-free at 877.606.7323 (724.776.4970 outside the U.S. and Canada). Additional meeting details can be found on SAE’s website at www.sae.org/calendar/meetings.htm; symposia details at www.sae.org/calendar/optecs.htm.

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<th>SAE Aerospace Design &amp; Manufacturing Events</th>
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<td><strong>Aerospace Power &amp; Electronics Simulation Workshop 2004</strong></td>
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<td>September 21-22 Troy, MI 2004</td>
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<tr>
<td><strong>2004 International Continuously Variable and Hybrid Transmission Congress</strong></td>
<td><strong>Aerospace Manufacturing and Automated Fastening Conference &amp; Exhibition</strong></td>
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<td>September 23-25 San Francisco, CA 2004</td>
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<td><strong>Small Engine Technology Conference (SETC)</strong></td>
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<td>September 27-30 Ottawa Lake, MI 2004</td>
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<td><strong>AWID (All-Wheel-Driven Systems, Security, and Driver Interaction Symposium</strong></td>
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<td>Sept. 27-Oct. 1 Ottawa Lake, MI 2004</td>
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<td><strong>22nd Annual Brake Colloquium &amp; Exhibition</strong></td>
<td><strong>SAE 2004 Brazil Congress</strong></td>
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<td>October 10-13 Anaheim, CA 2004</td>
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<td><strong>Convergence 2004</strong></td>
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<td><strong>DoD Maintenance Symposium &amp; Exhibition</strong></td>
<td><strong>Enhancing Heavy Truck Safety, Security and Efficiency Through Technology: an SAE Symposium</strong></td>
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<td>October 25-28 Houston, TX 2004</td>
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<td><strong>Powertrain &amp; Fluid Systems Conference &amp; Exhibition</strong></td>
<td><strong>Hybrid Vehicles Technologies—Today &amp; Tomorrow</strong></td>
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<td>October 25-28 Orlando, FL 2004</td>
<td>February 9-10 Costa Mesa, CA 2005</td>
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<td><strong>SAE Commercial Vehicle Engineering Congress and Exhibition</strong></td>
<td><strong>SAE 2004 World Congress</strong></td>
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<td>October 26-28 Chicago, IL 2004</td>
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<td><strong>SAE 2004 Brazil Congress</strong></td>
<td><strong>SAE Aerospace Design &amp; Manufacturing Events</strong></td>
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<td>November 16-18 Sao Paulo, Brazil 2004</td>
<td><strong>Aerospace Power &amp; Electronics Simulation Workshop 2004</strong></td>
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<td>Nov. 30- Dec. 2, 2004 Dearborn, MI 2004</td>
<td><strong>Aerospace Manufacturing and Automated Fastening Conference &amp; Exhibition</strong></td>
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<td><strong>Enhancing Heavy Truck Safety, Security and Efficiency Through Technology: an SAE Symposium</strong></td>
<td>September 21-23 St. Louis, MO 2004</td>
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*Events at which SAE seminars will be conducted.*

Symposium focuses on military maintenance issues

Key maintenance issues facing the Department of Defense (DOD) will be the focus of the 2004 Department of Defense Maintenance Symposium and Exhibition, October 25-28 in Houston, TX. The event brings together government and industry representatives who are responsible for executing maintenance programs and improving maintenance practices and procedures.

The symposium will feature panel discussions, breakout sessions, technical sessions, and workshops on DoD maintenance, logistics, and material transformation. Issues covered will include: technology introduction; maintenance process improvement; weapons systems and equipment corrosion; data requirements and information systems; and maintenance management concepts.

Administered by SAE for the DOD, the event provides a unique opportunity for industry personnel to exchange ideas with DOD maintenance logistics leaders, learn about the department’s current and future maintenance requirements, and provide input on issues of concern to the department’s maintainers.

Nine breakout sessions will feature panels of DOD and industry executives discussing a wide range of issues facing the defense maintenance community. Sessions include: Putting Parts in the Hands of Maintainers; Improving Weapons Systems Effectiveness Through Performance-Based Logistics; Information Technology: Evolving Systems That Meet Maintenance Needs; and Partnering: Balancing Military Capabilities and Requirements With the Private Sector.

The exhibit will feature the latest military and industrial maintenance initiatives. More than 180 exhibits and interactive displays—from industry, government, and the military—will showcase front-line weapons systems, maintenance processes, services, technologies, and military equipment.

Other symposium highlights will include the “Great Ideas” competition on Monday, October 25, which features presentations on new technologies or processes that offer solutions to DOD issues, and the Secretary of Defense Maintenance Awards Banquet on Wednesday, October 27 honoring outstanding performance by military maintenance units.

Attendees will also have the opportunity to participate in industrial tours to the maintenance operations centers at the NASA Johnson Space Center, Continental Airlines, The Houston MetroRail, and Six Flags AstroWorld.

The 2004 Department of Defense Maintenance Symposium and Exhibition will be held at the Hilton Americas—Houston and George R. Brown Convention Center. To register, or for more information, visit www.sae.org/dod, or call 877.606.7323 or 724.776.4970 (outside the U.S. and Canada).

New Executive Management Briefing on exterior lighting scheduled

SAE will host an Executive Management Briefing that will focus on New Opportunities in Vehicle Exterior Lighting. The event, which will take place Thursday, Sept. 30, 2004 at the MSU Management Education Center in Troy, MI, allows top industry executives and government officials to explore the implications of revolutionary developments in vehicle exterior lighting. These developments present manufacturers and suppliers with new and exciting possibilities in terms of design options, enhanced safety, increased fuel economy, and improved durability.

The one-day event will bring together industry executives and experts on vehicle exterior lighting to discuss the implications of both technical developments and the regulatory picture regarding vehicle lighting, federal regulations, SAE standards, and potential future trends and developments.

In addition, vehicle designers will share their views on the importance of lighting as a design element, and a business-case format will be used to evaluate the benefit of lighting enhancements relative to cost.

Speakers and presenters at this event will include representatives of companies such as Visteon, Hella Lighting Corp., Ford Motor Co., J.D. Power and Associates, North American Lighting Co., and other key industry players.

In addition, a representative from the National Highway Traffic Safety Administration will be on hand to discuss regulatory issues.

SAE Executive Management Briefings are specifically designed for executives and high-level managers. These interactive events focus on the “hard issues” facing industry—issues that can only be resolved through industry cooperation and synergy—and are presented and discussed in depth by high-caliber speakers.

For details and registration, visit www.sae.org/briefings.

Celebrate the SAE International Centennial

From corporate advertising opportunities in special Centennial issues of AUTOMOTIVE ENGINEERING INTERNATIONAL to memorabilia and more, join SAE in celebrating the Society’s first century in mobility technology. From button-downs to polos, cans, duffels, leather bombers, road racer options, crystal and more, choose from hundreds of exclusive options at value prices. Great gift ideas or just for you! 402199
Brazilian team wins close competition at Midwest Mini Baja

This year's SAE Midwest Mini Baja Competition, held June 3-6 in southern Wisconsin, drew 121 collegiate teams to compete. The top three overall winners, determined by total points, included two Canadian squads and two teams from the United States: one from Argentina and the other from Brazil.

During the four-day competition, points were awarded for vehicle design, cost analysis, static display, dynamic testing, and performance and safety—plus the additional overall performance and safety insurance course. At the conclusion of the event, the SAE Brazil team was declared the overall winner. It was a close victory in that only six points separated the top three teams: SAE Brazil, the University of Akron, and Auburn University, respectively. The top three overall teams received the Briggs & Stratton Overall Performance Award. Additional Awards were presented as follows:

• Honda R&D Americas Engineering Design Award – Top three mechanical design scores: Ecole de Technologie Superieure (1st); Oregon State University (2nd); and Instituto Tecnologico de Buenos Aires (3rd).

• Honda R&D Americas Endurance Award – Top three finishers in the endurance event: Auburn University (1st); University of South Florida (2nd); and University of Akron (3rd).

• Polaris Innovative Suspension Award – Most innovative and unconventional suspension design: Purdue University.

• TARDEC (Tank and Automotive Research and Development Engineering Center) Award – Outstanding display of off-road mobility platforms in small vehicles: Ecole de Technologie Superieure.

The competition was the final of three Mini Baja competitions held this year in North America as part of the SAE Collegiate Design Series. To honor the hard work and dedication of teams that participated in all three events, a special award—The Mike E. Schmidt Memorial Mini Baja Iron Team Award—was presented to the top three teams with the highest combined point totals from these events: University of South Florida (1st); Rochester Institute of Technology (2nd); and Queens University (3rd).

The Ecole de Technologie Superieure (1st) and the University of Akron (3rd) teams, in particular, show the important improvement that can be made from just one year to the next.

The SAE Brazil team #007 was the overall winner at the 2004 SAE Midwest Mini Baja in early June:

• SAE Marv Pifis Sportsmanship Award: Queens University.

The competition is simple yet challenging. Teams build a one-year’s winner, Homestead, finished third. The top three overall teams received the Briggs & Stratton Overall Performance Award. Additional Awards were presented as follows:

• Honda R&D Americas Engineering Design Award – Top three mechanical design scores: Ecole de Technologie Superieure (1st); Oregon State University (2nd); and Instituto Tecnologico de Buenos Aires (3rd).

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In their 2nd place finish at the Midwest Mini Baja, University of Akron Team Captain, J. John Gibbs, credited the team’s performance with having the vehicle completed early. “I love this competition. Everyone did their job and pulled together. We were done earlier this year (than in the past) and had more testing time with the car. We incorporated some design changes and are very happy with the results we’ve achieved.”

For more information regarding these competitions, please visit www.sae.org and click on the Students & Competitions link.

University of British Columbia wins SAE Supermileage competition with eco-friendly vehicle

The University of British Columbia took the top spot in a competition in which the champion team is rewarded not for speed, but for fuel efficiency. Achieving an impressive 1,747 mpg, British Columbia’s eco-friendly vehicle made a notable improvement from its third place finish with 927 mpg last year. This win marked the 25th anniversary for the SAE Supermileage competition, which took place in Marshall, MI, on June 11-12.

British Columbia edged out 22 other universities to take the title, with the California State University of Los Angeles and the Rose-Hulman Institute of Technology of Indiana coming in second and third, respectively. The Ecole de Technologie Superior of Montreal earned a close win over British Columbia in the category of engineering design.

In the high school competition, the Evansville Mater Dei came out on top with 139.1 mpg, up Whanacs, whose team won first place in design. Last year’s winner, Homestead, finished third.

The goal of the Supermileage Competition is simple: a challenging. Teams build a one-person vehicle based around a small, four-cylinder engine to run through a specified course. The vehicles with the highest mpg rate wins. This year, 200 students representing 33 schools participated, gaining real-world engineering experience in a competitive setting of advanced education and teamwork.

The competition has been a part of SAE’s Collegiate Design Series since 1980, when it began as a way to generate public awareness in the area of fuel economy after the energy crisis of the 1970s. Since then, fuel efficiency and fuel consumption have become vital buzzwords in automotive engineering.

For more information on the Supermileage competition and the results, visit www.sae.org/students/supermw.htm.

SAE 2005 Noise & Vibration Conference and Exhibition

Paper abstracts due: September 27, 2004

Event date and location: May 16-19, 2005 in Traverse City, MI

Possible paper topics: noise measurement facilities; subjective response; drive-by noise; powertrain engine; noise assessment development process; instrumentation; SEA design; vibro-acoustic analysis; aerodynamics; materials; active noise & holography; squeak & rattle; tire noise & brake systems; mounts & shock absorbers; body/chassis; body interior noise; modeling structural; vibration and active control; diesel engine noise; standards; off-road recreational vehicles; acoustical advancements in realistic perspective (AAInRP); intense sound pulses due to urban development; sound source location & identification; and truck noise.

Abstract submission: Abstracts should be submitted online via www.sae.org/events/wvlsconf.htm. Upon submission, you will receive an automatic reply informing you of your abstract submission number and the critical deadline dates for the event. For questions or problems during online submission, please contact Niki Foug at 248.273.2465 or n.foug@sae.org.

International Conference on Engines for Automobiles (ICE 2005)

Paper abstracts due: February 25, 2005

Event date and location: September 11-16, 2005 in Capri, Italy

Possible paper topics: diesel & SI combustion; dies & SI technology; fuels; and advanced power sources.

Abstract submission: Abstracts of 300 words should be submitted via email: ice2005@im.cnr.it (preferred method) or fax: +39 081 2396097.
Environmental Excellence in Transportation Award recipients announced

SAE is pleased to announce the recipients of the Environmental Excellence in Transportation Awards, which were presented May 11 at the Government/Industry Meeting in Washington, DC. The awards, established in 2000, recognize individuals who, through their ingenuity and dedication, make significant innovations in reducing the environmental impact caused by the transportation industry. These achievements may occur in motorized vehicles for land, sea, air and space, and cover the areas of education, new methods and tools, energy and emissions, recycling and remanufacturing, process innovations, and materials development. Nominees are judged based on innovation and originality, along with favorable impact on the environment, including improvement over existing technologies, methods, and public acceptance.

The winners were honored in the following categories:

**Education, Training, and Public Awareness**
Winner: GM “Fuel Cells: Driving the Future”
Team Leader/Presenter: Faiz Yono, DaimlerChrysler Corp.
Team: Chris Bates, Dave Barthmuss, Kristi Thoel, Daniel O’Connell, and Jerry King, General Motors Corp.
Community: 20,000 schools

Informed students and their families about hydrogen technology and how it will impact the future of a curriculum created and distributed by General Motors.

Runners-up: Energy Awareness Days
Team Leader/Presenter: Faiz Yono, DaimlerChrysler Corp.
Team: Lawrence Warkens, DaimlerChrysler Corp., Mark Hinebaugh and Dennis Seeger, DTE Energy
Community: Southeastern MI; Windsor & Brantford, Ontario; Kokomo, IN; Belvidere, IL; Newark, DE; and Toledo, OH

Stressed the importance of educating the employees of auto assembly plants about hydrogen technology and how it will impact the future in a curriculum created and distributed by General Motors.

**New Methods and Tools**
Winner: Container Sharing Website
Team Leader/Presenter: Rebecca Kaspryk, Delphi Corp.
Team: Don Korte and Mike Kendall, Delphi Corp.
Community: Delphi manufacturing sites

Provided an innovative, simple-to-use application tool that facilitates reuse of container inventories across the enterprise, benefiting both the industry and the environment.

Runners-up: Mobile Energy and Emissions
Winner: Stationary Energy and Emissions
Team Leader/Presenter: Dave Nielsen, DaimlerChrysler Corp.
Team: Edward Brennan, Hirohisa Tanaka, DaimlerChrysler Corp., and Ibrahim Janajreh, Delphi Corp.
Community: Sterling Heights, MI

Reduction of unusable waste to conserve resources, to avoid air and water pollution by incineration or disposal, and to stop public plans for an incineration plant.

**Mobile Energy and Emissions**
Winner: (tie): Valve Train Cylinder Deactivation System
Presenter: Daniel Smith, Delphi Corp.
Team Leader: Mark Spalth, Delphi Corp.
Team: Ralph Clayton, Dave Draeger, Jeff Edwards, Jason Flanagan, Nick Hendrikse, Daniel Smith, Al Stone, and Carl Kangas, Delphi Corp.
Community: U.S. automobile market

Boasted fuel economy and lowered carbon dioxide emissions by creating a system that selectively “turns off” half of the engines cylinders under certain conditions.

Winner (tie): Michelin X One Wide Single Tire
Presenter: Ibrahim Janajreh, Michelin Americas R&D Corp.
Team Leader: David Stafford, Michelin Americas R&D Corp.
Community: United States

Reduced rolling resistance and weight, lowered carbon dioxide emissions, and enabled increased payloads (resulting in fewer working trucks and the use of less energy and raw materials).

**Stationary Energy and Emissions**
Winner: Plant 47 Up-front Environmental Engineering
Presenter: Norman Brentin, Delphi Corp.
Team Leader: Greg Pachol, Delphi Corp.
Team: Michelle Dillon, J. John Janson, Dave Heffner, Dominic Masfield, Norman Brentin, Bob Bacue, and J. John Patterson, Delphi Corp.
Community: Vienna, OH

Substantially reduced stationary energy and emissions through value engineering for a new world-class plastic injection molding facility.

Runners-up: Recycling, Reuse, and Remanufacturing
Winner: Reduction of Unusable Hazardous Waste
Presenter: Bernd Mattmann, DaimlerChrysler Corp.
Team Leader: Axel Benz, DaimlerChrysler Corp.
Team: Gerhard Nuss, Bernd Mattmann, Herbert Reinhardt, and Joachim Kaut, DaimlerChrysler Corp.
Community: County of Boeblingen, Germany

Reduced unusable waste to conserve resources, to avoid air and water pollution by incineration or disposal, and to stop public plans for an incineration plant.

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Reduced unusable waste to conserve resources, to avoid air and water pollution by incineration or disposal, and to stop public plans for an incineration plant.

Runners-up: Sterling Stamping Plant Black Belt
Team Leader/Presenter: Edward Brennan, DaimlerChrysler Corp.
Community: Sterling Heights, MI

Reduced environmental impacts of the manufacturing process by using quantitative measures to drive continuous improvement at all levels in any enterprise by cutting down on the natural resources, manpower, and time used to produce the end products.

**Materials Development and Usage**
Winner: Development of the Intelligent Catalyst
Community: Cialtcor Corp., Japan

Solved the problem of supply and demand for precious metals through the development of an intelligent catalyst with an innovative self-regenerative function.

Runners-up: Raw Material Reduction
Team Leader/Presenter: Dave Nielsen, DaimlerChrysler Corp.
Team: Anthony Minna, Eugene Conforti, David Hawkes, and Mark Wojdynski, DaimlerChrysler Corp.
Community: Sterling Heights, MI

Reduced environmental impacts and saved money by reducing the raw materials consumed in the manufacture of parts while maintaining or improving quality.

**Process Innovations**
Winner: Process Consistencies and Cost Savings: Opportunities Related to Adhesive Dispense Processes
Presenter: Dan Asfetd, Delphi Corp.
Team Leader: Dale Beal, Delphi Corp.
Team: Dan Asfetd, Jason Ricketts, Phil Wittmer, Tim Byers, Pat Amos, Bill Hillman, and Brenda Baney, Delphi Corp.
Community: Kokomo, IN

Lessened the amount of adhesive material sent to hazardous waste facilities by more than 80%, reducing emissions and generating high cost savings.

Runners-up: Sterling Stamping Plant Black Belt
Team Leader/Presenter: Edward Brennan, DaimlerChrysler Corp.
Community: Sterling Heights, MI

Reduced environmental impacts of the manufacturing process by using quantitative measures to drive continuous improvement at all levels in any enterprise by cutting down on the natural resources, manpower, and time used to produce the end products.

**Dispense Processes**
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Team Leader: Dale Beal, Delphi Corp.
Team: Dan Asfetd, Jason Ricketts, Phil Wittmer, Tim Byers, Pat Amos, Bill Hillman, and Brenda Baney, Delphi Corp.
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Dan Asfetd (left), Delphi Corp. winner of the Process Innovations category, and Duane Tiede, 2004 SAE President.

Runner-up: Sterling Stamping Plant Black Belt
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Dan Asfetd (left), Delphi Corp. winner of the Process Innovations category, and Duane Tiede, 2004 SAE President.
Runners-up: SuperSolids Technology
Presenter: Terrence Cressy, DuPont Automotive
Team Leader: David Wood, DuPont Automotive
Team: Anthony Coletta, Randy Mielnicki, Robert Matheson, Otis York, and Neil Garey, DuPont Automotive; James Wufle, Marion Boone, Kevin Slusarczyk, Kim Scifres, Pat Rauch, Rudy Birney, and Marvin Flier, DaimlerChrysler Corp.
Community: Newark, DE

Met emission permit requirements one year early while improving vehicle finish durability in a successful effort to increase solids content and dramatically reduce emissions.

For more information on the Environmental Excellence in Manufacturing Technology Award, contact the SAE Foundation, 1400 Neil Avenue, Suite 600, Warrendale, PA 15096; phone 724.776.4841.

AWARDS

New racing award includes SAE prizes

It was a Memorial Day to remember for new SAE member Krista Botsford. Her performance at Lime Rock Park’s Formula Ford 35th Anniversary Race earned Botsford the Paul Tariello Hard-Charger Award, which included a one-year SAE membership and a gift certificate redeemable for SAE publications or conferences.

The award was presented by the Mohawk-Hudson Region of the Sports Car Club of America (SCCA) to the driver who most improved his/her finishing position from their original slot on the starting grid. Botsford, the only female competing in the event, started in third and finished fifth.

The award was established to honor Paul Tariello, long-time racing competitor and officer of the Mohawk-Hudson SCCA, who died in December 2003. At a ceremony immediately following the race on May 31, members of Tariello’s family presented Botsford with a trophy, as well as the SAE membership and gift certificate.

“We wanted to make the award more than just a trophy,” said Greg Rides, one of the Mohawk-Hudson SCCA members active in the development of the Tariello Award. “Because of Paul’s interest in automotive technology, we wanted to give the winner something meaningful about what SAE has done for the automotive world. It’s something Paul would have appreciated.”

“Like Paul, Krista is not just a racer,” Rides said. “She’s an active member of the environmental awareness movement.”

Transportation Awards, contact SAE Awards & Scholarships Program Manager Lori Pail at 724.772.8534 or loril@saes.org or visit www.sae.org/news/awards/list/e2t/.

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John H. McMasters to receive 2004 SAE/AIAA William Littlewood Memorial Lecture Award

John H. McMasters, a Program Manager for the Ed Wells Initiative at The Boeing Co. in Seattle, WA., has been selected as the recipient of the 2004 SAE/AIAA William Littlewood Memorial Lecture Award. He will be presented the award on January 11, 2005 at the AIAA Aerospace Sciences Meeting in Reno, NV. This award, established in 1971, recognizes an individual who has made significant contributions to the field of air transport engineering.

The award perpetuates the memory of William Littlewood, the only pilot to serve as President of both SAE (1956) and the AIAA. He was renowned for his contributions to the design and operational requirements for, civil transport aircraft.

McMasters joined Boeing Commercial Airplanes in 1976 as a research aerodynamicist and is now a staff member of the Ed Wells Initiative, a joint program between Boeing and the Society of Professional Engineering Employees in Aerospace (SPEEA) charg with enhancing the excellence of the SPEEA-represented Boeing technical workforce.

In addition to working at Boeing, McMasters also pursues his strong interest in education by applying his engineering expertise as an Affiliate Professor at the Department of Aeronautics and Astronautics at the Massachusetts Institute of Technology.

For more information on SAE Awards, contact SAE Awards and Scholarships Program Manager Lori Pail at 724.772.8534 or loril@saes.org.

Scholarship money available for high school students

Is your son or daughter a current high school senior planning to pursue a career in engineering or a related science? If so, SAE offers scholarships that can be used at any U.S. college, university, or technical school that has an engineering program accredited by the Accreditation Board for Engineering & Technology (ABET). SAE also has more than 60 scholarships that are specific to sponsoring universities in the United States. Scholarship amounts range from $400 to full tuition, and many are renewable if certain criteria are met.

Eligible students must be U.S. citizens, intend to earn a degree in engineering or a related science, be a high school senior at the date of application, and meet minimum GPA, SAT and/or ACT requirements as explained in the individual scholarship descriptions. Information and applications are available on the SAE website at www.sae.org/students/engschrl.htm. The deadline for submitting an application is Dec. 1, 2004.

Christian E. Schaefer receives 2004 SAE Thomas H. Speller Award

Christian E. Schaefer, an Associate Technical Fellow with The Boeing Co. in St. Louis, MO, has been selected to receive the 2004 SAE Thomas H. Speller Award. He will be presented the award during the 2004 Aerospace Manufacturing and Automated Fastening Conference & Exhibition on September 20-23 at the Sheraton Westport Hotel in St. Louis.

The award was established in 1983, recognizes remarkable achievements of an individual who, through dedicated service, tireless efforts, high ideals, and vision, contributes significantly to the implementation of manufacturing processes and methodologies in the dedicated discipline of automated fastening.

Schaefer began his career in automated fastening with the McDonnell Aircraft Co. in 1982 as an Engineer and Process Development Engineer. This experience led to his interest in automated fastening. Schaefer has also presented technical papers on automated fastening.

For more information, contact SAE Awards and Scholarships Program Manager Lori Pail at 724.772.8534 or loril@saes.org.

Noise & Vibration Conference creates new scholarship

The General Committee of the SAE Noise & Vibration Conference has created a scholarship for college junior pursuing an automotive-related engineering degree. The Ralph K. Hillquist Honorary SAE Scholarship was established to honor Ralph Hillquist, a retiree from General Motors Proving Grounds, and founder of the SAE Noise & Vibration Conference. The scholarship is funded by proceeds from the conference and related activities including its annual luncheon.

Eligible applicants must be a U.S. citizen enrolled as a full-time junior in U.S. universities and colleges during the Fall term of 2004. A minimum 3.0 grade point average with significant academic and leadership achievements is required. The student must also have a declared major in mechanical engineering or an automotive-related engineering discipline, with preference given to those individuals with studies/courses in the areas of expertise related to noise and vibration (i.e., statics, dynamics, physics, vibration).

A $1000 scholarship will be awarded to the individual selected to receive the award. The award will be presented to the individual by the SAE Noise & Vibration Conference Chair. Selection of award recipients is based on academic excellence, past achievements, and potential contributions to the field of noise and vibration.

Applications are available from the SAE website at www.sae.org/students/scholarships/!!hillquist.htm. Applications must be submitted no later than the date of application.

The award will be presented to the individual selected to receive the award. The award will be presented to the individual by the SAE Noise & Vibration Conference Chair. Selection of award recipients is based on academic excellence, past achievements, and potential contributions to the field of noise and vibration.
Industry group looks to SAE for unmanned systems architecture standards

The U.S. Army began confronting interoperability problems in its command and control (C2) systems in the late 1980s early 1990s realizing that its family of C2 systems were at varying stages in their life cycles, had been developed as “stovepipes,” and were not interoperable. Though C2 systems had many common requirements, each had implemented solutions differently, and so began the development of a common software solution. Fast forward to today: the Joint Architecture for Unmanned Systems (JAUS) is an upper-level design for interfaces within the domain of unmanned systems. It is a component-based, message-passing architecture that specifies data formats and methods of communication among computing nodes. It defines messages and component behaviors that are independent and/or become part of JAUS in advancing the G-11 project team and accomplish the scope includes the review of the key theoretical aspects, methods, and computational tools for assessing reliability of vehicle mechanical systems and subsystems. Other significant projects include (but are not limited to):

- Probabilistic-based reliability education and training for the U.S. Army – project led by Robert Kuper of the U.S. Army
- Software reliability guidelines and standards – project led by David Peercy of the National Institute of Standards and Technology
- Maintainability guidelines and standards – project led by Will Gregory of GE
- Quantification of uncertainties – project led by Dan Ghioicel of GP Technologies
- Development of standards for probabilistic modeling – project led by Mohammad Khaledi of PredictionProbe

Those interested in and/or expertise in reliability engineering of ground vehicles and aerospace systems are invited to join the G-11 project team and accomplish the challenging G-11 and U.S. Army mission and/or become part of G-11 in advancing the state-of-the-art of RMLS and probabilistic technologies for the engineering community at large including ground vehicles and aerospace systems.

For technical information on all G-11 projects, please contact G-11 Division Chairman Suren Singsih. Also present were Major General N. Ross Thompson III, HQ, Army Tank-Automotive & Armaments Command; Brigadier General William M. Leanners, Commanding General, AOC/Commandant.

A new G-11 committee called Reliability Applications Group was established to conduct the reliability activities focused on ground vehicles. The committee, chaired by Gorsich, is developing engineering information reports applicable to ground and air vehicles that will guide the automotive industry in the future on how to best apply various non-deterministic computational approaches to evaluate the reliability of vehicles.

System Reliability and Integration is one of multiple active projects of the Reliability Applications Committee. The project was started early this year with significant interest and support from the automotive industry and universities. The project membership includes experts from the U.S. Army, General Dynamics, LMS International, NOESI Solutions, GP Technologies, Agouron, University of Iowa, Case Western Reserve University, and Penn State University. The project team is developing guidelines for assessing system reliability of vehicle mechanical systems, and subsystems. The project scope includes the review of the key theoretical aspects, methods, and computational tools for assessing reliability of vehicle mechanical systems and subsystems.

New AADL standard

The new SAE International Aerospace Standard AS5506 (Architecture Analysis and Design Language (AADL)) defines a textual and graphical language used to design and visualize the software and hardware architecture of performance-critical, real-time systems. Performance-critical systems whose operation strongly depends on meeting non-functional system requirements such as reliability, availability, timeliness, responsiveness, throughput, safety, and security. Technical committee AS-2 Embedded Computing Systems has developed SAE AS5506 for avionics, aerospace, automotive, and robotics application developers in DoD (Department of Defense) and industry. Its predictive model-based software system engineering practices are expected to yield significant reductions in system errors that have led to performance and dependability failures. The standard consists of:

- The specification of the core language with textual syntax, semantics, and a graphical representation
- A UML profile of the SAE AADL
- An XML/XMI specification as a SAE AADL model interchange format
- An Ada and C language compliance and application program interface annex
- An Error Model Annex that extends the core language to support reliability modeling

For more information and AS-2 Committee participation opportunities, contact Becky Lemon, SAE, at 724.772.4083.

PROFESSIONAL DEVELOPMENT

SAE offers course on racetrack setup, handling

In the competitive world of racing, a tenth of a second can mean the difference between winning and losing. It is critical, therefore, to make every moment behind the wheel count with an appropriate setup that will turn a standard racecar into a consistent winner.

Recognizing the importance of this thin margin that sets a runner-up apart from a champion, SAE is offering a new course in partnership with the Panar Racing School on hands-on suspension techniques required to move your car ahead of the competition. The course is scheduled for September 20-21 at the Road Atlanta race course in Braselton, GA.

While many drivers and mechanics understand the basic adjustable parameters of racetrack suspension, few have mastered the ability to optimize those variables for specific vehicles and racing conditions. This course is designed to provide participants with a sound understanding of suspension adjustment theory along with supervised hands-on experience in performing proven procedures.

By attending this seminar, participants will be able to explain the purpose and effect of each adjustable parameter, describe the requirements of effective racecar setup, and confidently complete a full geometrical adjustment to a racecar. Drivers, mechanics, crew chiefs, and race engineers with a basic familiarization of adjustable parameters related to racetrack suspension are encouraged to attend.

All necessary tools and equipment will be provided, including demonstration cars for setup. Participants will also receive a copy of Hands-On Racecar Engineer, authored by the course instructor John Glimevres, who has more than 35 years of experience in the motorsports industry.

The book, published by SAE, was released in March.

For more information, visit www.sae.org/racetracksetup or call SAE Customer Service at 877.606.3723 (724.776.4970 outside U.S. and Canada).
**PROFESSIONAL DEVELOPMENT**

Courses from SAE

Detailed course descriptions are available online at www.sae.org/contedu. To register, complete the online registration form, e-mail profdev@sae.org, or call SAE Customer Services toll free at 877.606.7323 (724.776.4970 outside the U.S. or Canada).

**One of SAE’s 40 most popular seminars.**

**September 2004**

Troy, MI, USA - SAE Automotive Headquarters

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<tr>
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<td>Sep 9-10</td>
<td>Finite Element Analysis for Design Engineers - Hands-on FEA Workshop</td>
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<td>Sep 10</td>
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This course is one in a five-course series that leads to a Professional Certificate in Automotive Product Development Management, jointly conferred by SAE and Oakland University’s renowned School of Business. It presents a proven eight-step method for program planning and control, including definition of customers’ requirements, roles of the program team, determination and flowcharting of program tasks, scheduling and costing, quality aspects of critical tasks, and risk management. Easy to grasp, each of the eight steps evolve from common-sense questions that should be answered for any program, regardless of size or complexity.

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**CAREER OPPORTUNITIES**

It's easy to place an advertisement in SAE UPDATE. Simply call with your space reservation and fax—or e-mail and save the typesetting fee—your ad copy to Rebecca Willey:

724.776-2690
advertising@sae.org

You will be contacted promptly to discuss your ad and to receive details about space, pricing, and deadlines.

Individuals seeking employment may also use one of several confidential boards entitled SAE Resume Database.

SAE assumes no responsibility for the truthfulness, accuracy, or reliability of any advertising or classified information. SAE reserves the right to determine the qualifications or placement of those responding to a listing.

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**LATITUDE ADJUSTMENT CALIBRATION ENGINEER**

BRP US Inc., formerly Bombardier Motor Corporation of America, is seeking a qualified Calibration Engineer to join the development team of our Rotax® powered, 11’ selling Sea-Doo® watercraft, 11’ selling Ski-Doo® snowmobiles and fastest growing Bombardier ATV.

This challenging position is responsible for all aspects of the Sea-Doo® engine calibration at our Central Florida R&D Center. The Engineer will be responsible for vehicles meeting performance specifications including speed, acceleration, drivability, durability, emissions and sound levels. They will work closely with our engine and vehicle design teams to deliver the ultimate hardware and calibration package to the market.

The successful candidate will possess a bachelor’s degree in mechanical engineering with a minimum of three years of demonstrated proficiency in engine calibration using electronic calibration tools and engine management systems. Experience with ETAS tools is preferred. Experience in engine dynamometer testing and the correlation to in-vehicle performance is a must. Familiarity with engine instrumentation and data acquisition technologies is also required.

In addition, the successful candidate must be able to manage large technical projects including time lines, budgets, human resources and supplier support. Familiarity with the current personal watercraft regulatory requirements (i.e. emissions, noise, etc.) is a plus. A willingness and ability to ride personal watercraft is required.

Our benefits are attractive. We offer comprehensive medical, dental, vision, life and retirement benefits.

If you are interested and qualified in this great opportunity, please e-mail your resume and salary requirements to hrrecruitment@brp.com or fax to (512) 722-4077.

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**Assistant Production Tooling Manager**

Kendallville, IN - TOWER AUTOMOTIVE

Tower Automotive is a leading supplier of structural components and assemblies for the automotive industry. Our Kendallville, IN Business Unit is currently seeking an Assistant Production Tooling Manager. Responsibilities include Utilize skills and expertise with transfer press operations, heavy gauge stamping and tool and die engineering to review and prioritize tooling projects. Direct tooling changes and directly supervise set-up of first-run tooling orders. Review facility work orders and “die run” histories to determine potential issues with tooling required for production. Direct tool maintenance and anticipate, investigate and lead resolution of tooling issues. Research and implement advanced tooling technology and cost reduction programs. Assist in managing tool room activities and resources to facilitate manufacturing operations and to maximize efficiency and quality. The qualified candidate will hold 4 years experience as a Assistant Production Tooling Manager, Plant Manager or Production Manager. To apply to this opportunity, submit your resume to CGD/KP, 5211 Cascade Road SE Suite 388, Grand Rapids, MI 49546. EOE

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**Check it out!**

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— John Marshall, Shannon County, Arkansas since April 1993

At Toyota Motor Sales, we take pride in what the Toyota name represents – innovation, quality, and reliability. Our devotion to constant improvement guides us in everything we do and benefits everyone connected with our operations from our associates and dealers to our customers and owners. The result is an exceptional line of cars and trucks built with skill, and driven with pride.

Headquartered in Torrance in Southern California, Toyota Motor Sales, U.S.A., Inc. (TMS) was established in 1957 to create and manage the distribution of Toyota motor vehicles and parts in the U.S. In addition to its regional sales distribution centers, TMS maintains operations in 49 states for Toyota distribution and Lexus products. Explore career opportunities at TMS – you’ll find opportunities to achieve great success as part of a team of which you too can be proud.

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