

# SAE International™

preparing mobility leadership  
for the next 100 years



2004 Annual Report

# leadership



SAE continues to

provide vital services

to its members and to corporations  
within the mobility industry.

## Executive Message



Chronologically, 2004 was the year that SAE closed out its first 100 years of service. But, it was really more of a beginning; a beginning that is full of promise and limitless potential.

2004 was a year of great accomplishments for SAE International. We are particularly proud of reaching our financial and membership goals and changing the governance process to better meet members' needs.

SAE continued to focus on the core competencies that make it a world-class, global organization: voluntary standards consensus and lifelong engineering education. Each major initiative in 2004 was undertaken to better prepare SAE for the future. 2005 is the 100th anniversary of SAE, and we believe that the organization is well-positioned to succeed in the next 100 years.

Financially, for the first time in recent years, SAE surpassed its revenue goal. Because of this outstanding showing, the SAE Board of Directors agreed to make a one-time contribution of \$1 million to the SAE Foundation to support its mission of nurturing students' enthusiasm for math and science.

SAE also surpassed its membership goal by more than 3,000, finishing the year with 89,106 members. This represents the highest membership figure ever for SAE and puts the Society on schedule to meet its goal of 100,000 members by 2010.

A key component to reaching our membership goals is recruiting and retaining younger members. In 2004, SAE began the Younger Members Initiative to better engage and prepare engineers under the age of 35. An important part of the initiative is Power Track, an innovative new program that offers tools and information to help members carve out the best career track possible. As a result of these efforts, younger member retention for 2004 exceeded target by more than 10 percent.

The implementation of new vice presidents in each of SAE's key mobility sectors was finalized when Mark Pflederer of Caterpillar was elected Vice President Commercial Vehicle. This appointment was in addition

to the already-existing positions of Richard Schaum, Vice President Automotive and Robert Spitzer, Vice President Aerospace. With three-year terms, these positions provide leadership and continuity of focus for each major sector.

And finally, in 2004 SAE continued planning for its 100th anniversary. Several activities and memorabilia designed to enhance the SAE brand visibility and increase revenues were developed. They include special banquets, sessions and celebrations at the 2005 SAE World Congress; a coffee table book, *The SAE Story: One Hundred Years of Mobility*; and a 100th Anniversary Reception at the Smithsonian Air and Space Museum in Washington, D.C. These are among the many products and events that will highlight our anniversary year.

As president and executive vice president, we have had the privilege to travel the world and represent SAE in many different nations. While the cultures and people we met were diverse, one constant was the favorable image that SAE enjoys. This is a testament to the skill and hard work of the people who make up SAE: its members, volunteers and employees.

Chronologically, 2004 was the year that SAE closed out its first 100 years of service. But it was really more of a beginning – a beginning that is full of promise and limitless potential. SAE is determined to continue its mission of advancing mobility engineering worldwide and to offer the most value possible to its members.

Sincerely,

A handwritten signature in cursive script that reads "Duane Tiede".

Duane Tiede  
2004 President

A handwritten signature in cursive script that reads "Raymond A. Morris".

Raymond A. Morris  
Executive Vice President and Chief Operating Officer



# mobility



## SAE Automotive Headquarters

offers executive-level meetings and  
a growing professional development seminar program.

The automotive industry, with almost 60 million vehicles produced around the world each year, is under continuous pressure from consumers and government regulators to advance developments in passive and active safety systems, lower emissions standards, produce leading-edge product design, and explore new propulsion systems.



### SAE's Key Mobility Sectors

The implementation of new vice presidents in each of SAE's key mobility sectors was finalized when Mark Pflederer of Caterpillar was elected Vice President Commercial Vehicle. This appointment was in addition to the already-existing positions of Richard Schaum, Vice President Automotive and Robert Spitzer, Vice President Aerospace. With three-year terms, these positions provide leadership and continuity of focus for each major sector.

#### **Automotive**

The SAE Automotive Business Initiative focused on gaining increased support for the SAE World Congress from global OEM and top-tier supplier executives. An Industry Leadership Coalition created to support this goal met throughout 2004 to develop methods of supporting and participating in the World Congress. Commitments to provide executive leadership for the 2005-2007 World Congresses were gained from General Motors, BMW Group and Toyota Motor Corp.

Other key areas of focus and progress included increased engagement of BMW, Toyota, Nissan, Honda and Hyundai in the target areas of corporate leadership, membership and participation on SAE committees.

Increased visibility and recognition for the SAE Automotive Headquarters in Troy, Mich., also was an area of emphasis. Successful efforts in this area led to more executive-level meetings and an expanded professional development seminar program.

The launch of the SAE Automotive Resources Institute (ARI) into the automotive industry has initially been accepted with a high degree of interest and enthusiasm. This matchmaking service of consultants and companies addresses short-term industry needs for experts from across multiple technical and business disciplines.

# *flight*



If a profession is defined by its body of knowledge,  
then **SAE** defines  
the mobility profession.

To date, the U.S. Department of Defense has adopted more SAE standards than it has adopted from any other standards-developing organization.



### **Aerospace**

Aerospace Standards continued to be the leading product for SAE's growing presence in the aerospace sector, publishing 538 new and revised standards, material specifications, recommended practices and information reports in 2004. The Aerospace Council, led by Chair Greg Saunders, implemented the first year of its strategic plan in 2004. The plan addresses three major areas: globalization, improved products and processes, and management and oversight.

SAE continues to be the secretariat for the International Aerospace Quality Group (IAQG), an organization that leads the world in the development of aerospace quality standards, including the highly successful 9100 series. The 9100 series calls for an online database of qualified, certification bodies and suppliers who produce products to the 9100 prescribed levels of quality. To accomplish this requirement, SAE created the OASIS database, which now has more than 2,500 companies listed as acceptable suppliers in aerospace.

Robert Spitzer, Aerospace Vice President, established a goal in 2004 to expand the reach of SAE Aerospace and touch more of the stakeholders and customers in this sector. Early in the year, Spitzer traveled to the Dallas/Fort Worth area to meet with industry leaders from companies such as Lockheed Martin, Bell Helicopter and Voght. In the fall, Spitzer met with the Airbus staff at the firm's Washington, D.C., office and later joined the Aerospace Council in Toulouse, France where the Council met at the Airbus facility.



power



## SAE connects professionals

from the truck and bus, diesel engine, construction, and agricultural engineering sectors of the mobility industry.



More than 3,200 engineers and practitioners from around the globe went to the Commercial Vehicle Congress and Exhibition to learn about emissions, safety, electronics and branding.



### **Commercial Vehicle**

Two significant events this year signaled the rebirth of SAE's engagement in the Commercial Vehicle sector, which encompasses trucks, buses, construction equipment and agricultural machinery.

In early fall, the third of the three SAE Vice Presidents was elected. Mark Pfleiderer, a Vice President at Caterpillar, was elected to serve as the inaugural Commercial Vehicle Vice President for a three-year term starting November 2004. He immediately started assessing the needs of SAE members and customers in this sector and developing plans to address those needs.

A new congress and exhibition was created for this sector in 2004 – the Commercial Vehicle Engineering Congress & Exhibition, which was held near Chicago's O'Hare International Airport. The event, with its large exhibit, comprehensive technical program and unique banquet, proved to be an exciting and valuable event for this industry. More than 3,200 engineers and practitioners from around the globe attended the congress to learn about emissions, safety, electronics and branding.

# benchmark



SAE developed a number of **new standards**  
in 2004 that **directly supported**  
new aircraft programs.

“I cannot emphasize enough how important it is for manufacturers, airlines and suppliers to have internationally-recognized standards, not only to cut the cost of stocks, but also for common practices with their consequential effects on aviation safety enhancement.”

*Alain Garcia, Executive Vice President of Engineering for Airbus*



### SAE Aerospace Standards

**Benchmarking:** As part of the Aerospace Council Strategic Plan, a benchmarking study was conducted of the major standards developing organizations that support the aerospace industry. The benchmarking study looked at four areas: Web sites, intellectual property policies, the document revision processes and project management and tracing. The results were analyzed and best-in-class characteristics were identified.

**Rapid Amendment Process:** The Aerospace Council extended a trial process on the development of amendment documents in 2004. Amendments allow for a rapid change to a document based upon an immediate procurement need that doesn't affect form, fit, function or interchangeability. SAE is the only industry-standards developer offering this process.

**Standards Supporting New Aircraft Programs:** SAE developed a number of new standards in 2004 that directly supported new aircraft programs such as the Boeing 787 and Airbus A380.

**Council Meeting in Toulouse** – For the first time the Aerospace Council met outside of North America, hosted by Airbus in Toulouse, France and addressed by Alain Garcia, Executive Vice President of Engineering, Airbus. In conjunction, an International Aerospace Standards Workshop was also conducted. Both events were important elements in support of the Council's strategic initiative on Globalization.

**AS-4 Unmanned Systems:** In 2004, the Aerospace Council approved the establishment of a new committee, AS-4 Unmanned Systems, under the Avionic Systems Division. AS-4 will develop standards related to communication and navigation for unmanned vehicle systems.

**Works in Progress:** In order to provide better metrics and process management for standards development, SAE implemented several tools for tracking and management of Works in Progress (WIP). This information allows committees to better manage their workload during the pre-draft document stage.

global



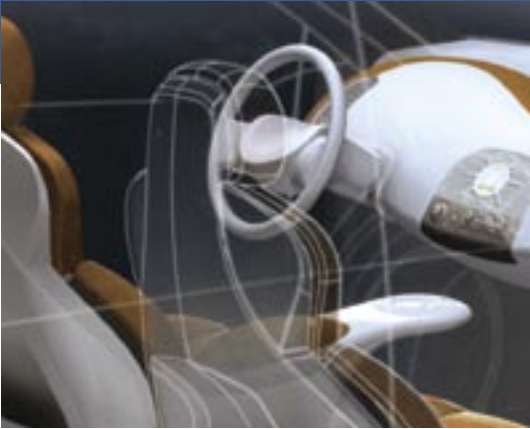
SAE's ground vehicle standards provide distinct,

measurable value

to the mobility industry.



*The true international development of a single set of global ground vehicle standards is central in today's standards development program at SAE.*



### SAE Ground Vehicle Standards

**Fuel Cell Vehicle Standards:** SAE International was appointed by the U.S. Department of Energy (DOE) as the leading standards development organization (SDO) for automotive hydrogen fuel cell vehicle standards.

**EMI and EMR Standards:** The EMI and EMR Standards Committees released the 2004 edition of the Surface Vehicle Electromagnetic Compatibility (EMC) Standards Manual (HS3600).

**LIN Devices:** The Vehicle Architecture for Data Communications Standards Committee released J2602, LIN Network for Vehicle Applications. The standard improves the interoperability and interchangeability of LIN devices within a network by resolving those LIN 2.0 requirements that are ambiguous, conflicting or optional.

**Wire Harnesses:** The Wire Harness Covering Task Force published J2192, Performance Specification for Physical Protection of Wiring Harnesses to fill a much-needed request from the OE and supplier communities.

The **Cooperative Research and Standards Development** programs at SAE International developed and tested the appropriateness of standards prior to industry adoption. New projects include: emergency-vehicle lighting studies, vehicle exterior sound-level testing, high strain rate plastics testing, gage Reliability & Repeatability studies, otologic trauma studies, and IRCRP (Improved Refrigerant 134a Cooperative Research Project) systems performance and emissions as supported by the U.S. EPA.

**Engine Power Test Code:** The Engine Power Test Code Committee completed revisions to J1349, Engine Power Test Code-Spark Ignition and Compression Ignition-Net Power Rating, to accommodate the development of electronic controls that recognize the transient nature of automotive engine operation.

**Tire Pressure Monitoring:** The Tire Pressure Monitoring Systems Committee issued J2657, a recommended practice (RP) for tire pressure monitoring systems for light-duty highway vehicles.

# opportunity



SAE serves as a **building block**  
of our customers' technical knowledge base  
and fulfills unexpressed needs.

Marketing, Sales and Customer Service are charged with maintaining a laser-like focus on the customer, paying attention to both the needs of members as well as those of the industry-at-large.



### Marketing, Sales and Customer Service Centralized

In 2004, SAE's reinvigorated focus on understanding and engaging customers while anticipating their needs continued. SAE marketing, sales and customer service resources function in a customer relationship management (CRM) model. SAE's working definition for CRM is "a business philosophy that aligns its people, processes and technology around customer needs and builds a long-term relationship based on mutually received value."

Marketing, Sales and Customer Service are charged with maintaining a laser-like focus on the customer, paying attention to both the needs of members as well as those of the industry at large. CRM champions will lead a shift in the SAE corporate mindset to one that exemplifies the concept of delivering value consistently – and with one voice – in every customer interaction.

### Marketing

**Promotion:** Direct mail continues to be the predominant way SAE reaches target markets. Refinement of this tool continued in 2004. Increased list management proficiency and data mining sophistication made possible more targeted and effective individual promotion campaigns. A complete redesign of SAE's Web site also provided increased reach for the organization's products and services.

**Corporate Communications:** The strategy was adjusted in 2004 with a staff reorganization that enabled SAE to more aggressively engage media and to provide them access to resources. The goal is to increase media coverage of SAE, our members and their contributions.

**Awards and Scholarships:** The visibility of these two important programs increased through creative promotions and public relations focus.

**Brand:** An initial branding study begun in 2004 will lead to a comprehensive strategic review and initiative in 2005.



# focus



SAE's Customer Service

## becomes the voice

of the engineering consumer.



The philosophy of SAE's Customer Service is to create opportunities for lifelong learning to our customers by providing technical knowledge resources and value-added information.



### Corporate Sales

Corporate Sales began a reorganization that will transition the focus of the SAE Sales Team from product lines to key account management. An example of this new focus is the development of relationship managers for key customers among the New American Domestic.

In addition, Corporate Sales is working with Marketing and Customer Service on the development of sales tools, analysis of resource allocation and cross-functional engagement of customers and markets.

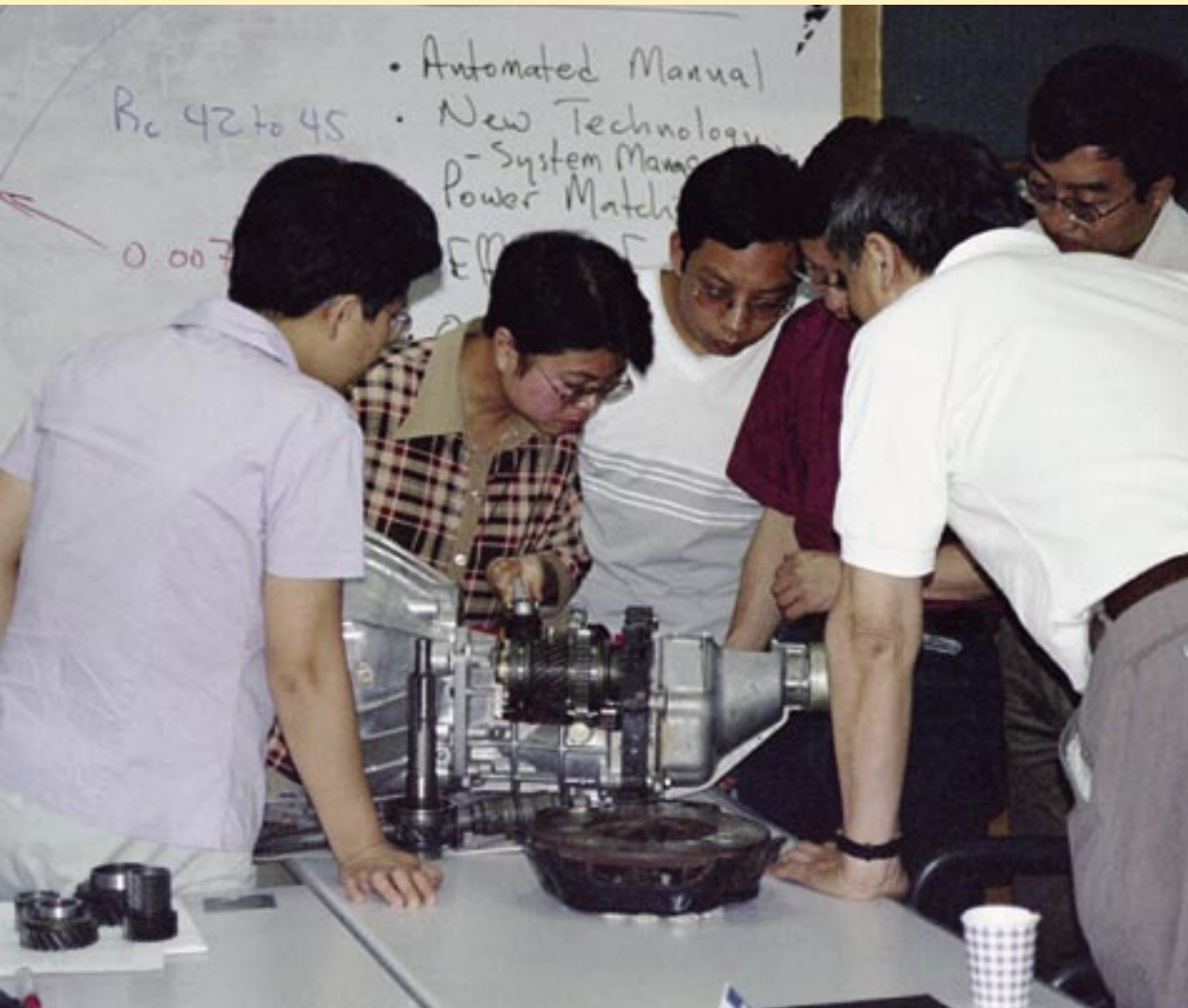
### Customer Service

The philosophy of SAE Customer Service is to create opportunities for lifelong learning for customers by providing technical knowledge resources and value-added information.

Of the 178,826 customer contacts in 2004, Customer Service staff resolved approximately 97 percent of customer requests by using telephone, e-mail, postal options, fax and face-to-face contact. SAE builds customer loyalty by focusing on one customer at a time; it creates special opportunities for that customer by providing knowledgeable, professional and personal service.

By using customer feedback to capture unexpressed needs of individuals in a variety of mobility industries, Customer Service becomes the voice of the engineering consumer. The department also scrutinizes each process from the customer's viewpoint and shares pertinent information with company sectors that can work to satisfy customers' needs.

# education



SAE is an **international resource**

for meeting the educational and training needs  
of technical professionals around the world.

SAE is helping to develop a worldwide network of technically-informed, capable mobility practitioners in land, sea, air, space, government, industry, and education.



## Professional Development

2004 was a record-breaking year for SAE's Professional Development. Eighty-eight percent of the scheduled seminars were completed, with all-time-high figures for average enrollment per seminar (13.45) and total enrollment (2,838). Overall revenue for seminars, telewebcasts, in-house seminars and e-learning products reached an all-time high of \$3,866,252.

In 2004, Professional Development introduced 16 new seminars, including a new race car setup course in partnership with the Panoz Racing School and the new Applied Vehicle Dynamics Seminar in partnership with BeaveRun Motorsports Complex. Both courses achieved full enrollment, and additional dates have been scheduled in 2005.

SAE held four seminars in China in 2004 with very positive response. Additional dates have been scheduled in Shanghai for 2005.

A record number of corporate in-house learning programs were offered in 2004; four new e-seminars were developed and launched; and three telewebcasts were developed and delivered. In addition, the department developed the Certified Automotive CAD Professional program.

# community



A common bond for SAE members is

**mobility technology,**

the common home for these individuals is SAE.



At its core, SAE remains an individual-membership organization that serves engineers and others in the mobility industry.



### Membership and Sections Activities

SAE closed the year with 89,106 members from more than 100 countries – a record. This figure includes professional and student members, and members of SAE’s affiliate societies in Great Britain, India and Brazil. The member retention rate for the year was 80 percent.

#### **Members-Only Career Center**

The SAE Career Center connects qualified SAE members with employers and recruiters in the mobility industry. Launched on September 30, 2004, the Career Center is an exclusive member benefit for professional and student members. SAE members can search and apply for jobs, post their resume, receive e-mail notification of new jobs, and access career tips and resources. It is part of the SAE Power Track program to help members accelerate their careers in mobility engineering.

At the end of December, more than 2,300 members had used the service with 360 members posting resumes. The site averages more than 20,000 total page views per month and about 40 different job postings.

#### **Affiliates**

SAE-UK, an affiliate society in the United Kingdom incorporating the Institute of Vehicle Engineers (IVehE), was established in 2004 to serve the professional and informational needs of UK-based mobility practitioners.

At the time of its creation, SAE-UK had more than 1,500 members. SAE International also has affiliate societies in Brazil and India.

# *solutions*



SAE offers neutral forums for the

**exchange of ideas,**

showcasing the latest in technical innovations,  
and addressing difficult problems.

“SAE has helped to broaden my knowledge of local and global industry issues and increased my creativity as an engineer. SAE provides for all of my professional needs.”

- Jason Wilkening

Sales Application Engineer, Freightliner



### SAE Engineering Meetings and Symposia

SAE's Engineering Meetings and Symposia business unit conducted 30 events in 2004, attracting nearly 46,000 attendees and contributing 2,608 printed papers to the society's collection of lifelong learning resources. Under the umbrella focus areas of automotive, aerospace and commercial/heavy-duty, the events covered topics as diverse as hybrid vehicles, alternative refrigerants, emissions, air brakes, safety, aircraft batteries and thermal control for the International Space Station.

**SAE 2004 World Congress:** Under the leadership of the Ford Motor Co., representatives of a coalition of OEMs including General Motors, DaimlerChrysler, BMW AG and Toyota organized the SAE World Congress. The Congress kicked off the conference year in March, bringing more than 35,000 delegates from 70 countries to Detroit. The AVL Technology Theater was home to an Executive Management Conference that drew 75 senior-level automotive executives, and the Dana Technical Innovation Forum featured business panels on China, Poland and Austria, along with technical sessions on the Ford GT, Six Sigma and intelligent vehicles. The Congress generated more than 1,400 technical papers.

**SAE Commercial Vehicle Engineering Congress:** In 2004, the SAE Commercial Vehicle Engineering Congress and Exhibition in Chicago, brought together the truck, bus, construction and agricultural mobility communities for the first time at a single conference. The event leadership comprised representatives from each of the industries to ensure a balanced technical program and exhibit focusing on emissions, electronics, maintenance, body and chassis, safety and braking. The event drew more than 3,000 attendees and 150 exhibitors.

# performance



SAE's engineering conferences

## meet and exceed

the extremely high-value expectations  
of the global mobility marketplace.



The engineering conferences and exhibitions of SAE International feature speaker rosters of the most knowledgeable and most influential technology professionals.



### SAE Engineering Meetings and Symposia (cont.)

#### **34th International Conference on Environmental Systems:**

In July, SAE administered the 34th International Conference on Environmental Systems (ICES) in Colorado Springs, Colo. SAE partners with AIAA, AIChE, ASME and the ICES International Committee to organize this event, which focuses on the design, production and operation of environmental systems for vehicles intended for use in remote and hostile environments. In 2004, ICES contributed 297 written papers to the SAE literature and had its highest-ever attendance.

**DoD Maintenance Symposium:** The third SAE-administered DoD Maintenance Symposium took place in October in Houston. Highlights included a keynote address by James Roche, Secretary of the Air Force, and the Secretary of Defense Awards Banquet, which included presentation of the Phoenix Trophy, the DoD's highest award for maintenance. The event featured a 22,450-square-foot exhibit and nearly 1,100 attendees.

#### **2004 SAE Motorsports Engineering Conference & Exhibition:**

In December, SAE presented the motorsports industry's only high-performance technology event, the 2004 SAE Motorsports Engineering Conference & Exhibition, in Dearborn, Mich. Max Mosley, President of the FIA, the governing body for Formula 1 Racing, presented the keynote, and the presidents of motorsports' top five sanctioning bodies – FIA, IRL, NASCAR, SCCA and NHRA – comprised a business panel that addressed the conference theme, "Change for Relevance." More than 80 presentations and 39 exhibitors added to the value of the event.

During the year, Engineering Meetings staff teams addressed several issues identified in the 2003 J.D. Power customer satisfaction survey as opportunities for improvement. Teams investigated the current state of and recommended changes to the processes for technical paper acquisition; paper quality measurement and improvement; and event customer satisfaction data collection, automation and interpretation. Many enhancements have already been or soon will be implemented, and the teams will monitor their progress throughout 2005.

# excellence



SAE magazines feature

## futuristic perspectives

on critical-mobility technologies.

*SAE magazines reach more than 140,000 subscribers  
in more than 100 countries.*



### SAE Magazines

*Automotive Engineering International* continued its string of recent successes with another boost in share to nearly 60 percent of the advertising market in 2004. This compares with last-year's record 56 percent share and 53 percent the year before. *Aerospace Engineering* and *SAE Off-Highway Engineering* also increased market share in their respective segments.

After undergoing a redesign in 2003, *SAE Off-Highway Engineering* took home an award for publication excellence from APEX in 2004. It was one of nearly 5,500 entries and was cited in the most improved magazine or journal category.

*Automotive Engineering International* and other SAE magazines began publishing a series of articles in the fall in celebration of SAE's 100th anniversary in 2005. The articles have received very positive response from the marketplace. Top executives from the world's leading automotive, aerospace and off-highway companies are contributing the SAE 100 Future Look articles, which focus on the future of mobility industries and technologies. The articles that appear in SAE magazines throughout the year, along with others, will be published in a special SAE Centennial Issue of the SAE magazines in fall 2005.



# *milestones*



SAE creates a foundation for the  
**future of technology.**



SAE's first series of training programs were held at the SAE Global Knowledge Center in Beijing. More seminars are scheduled for 2005 based on the success of the inaugural sessions.



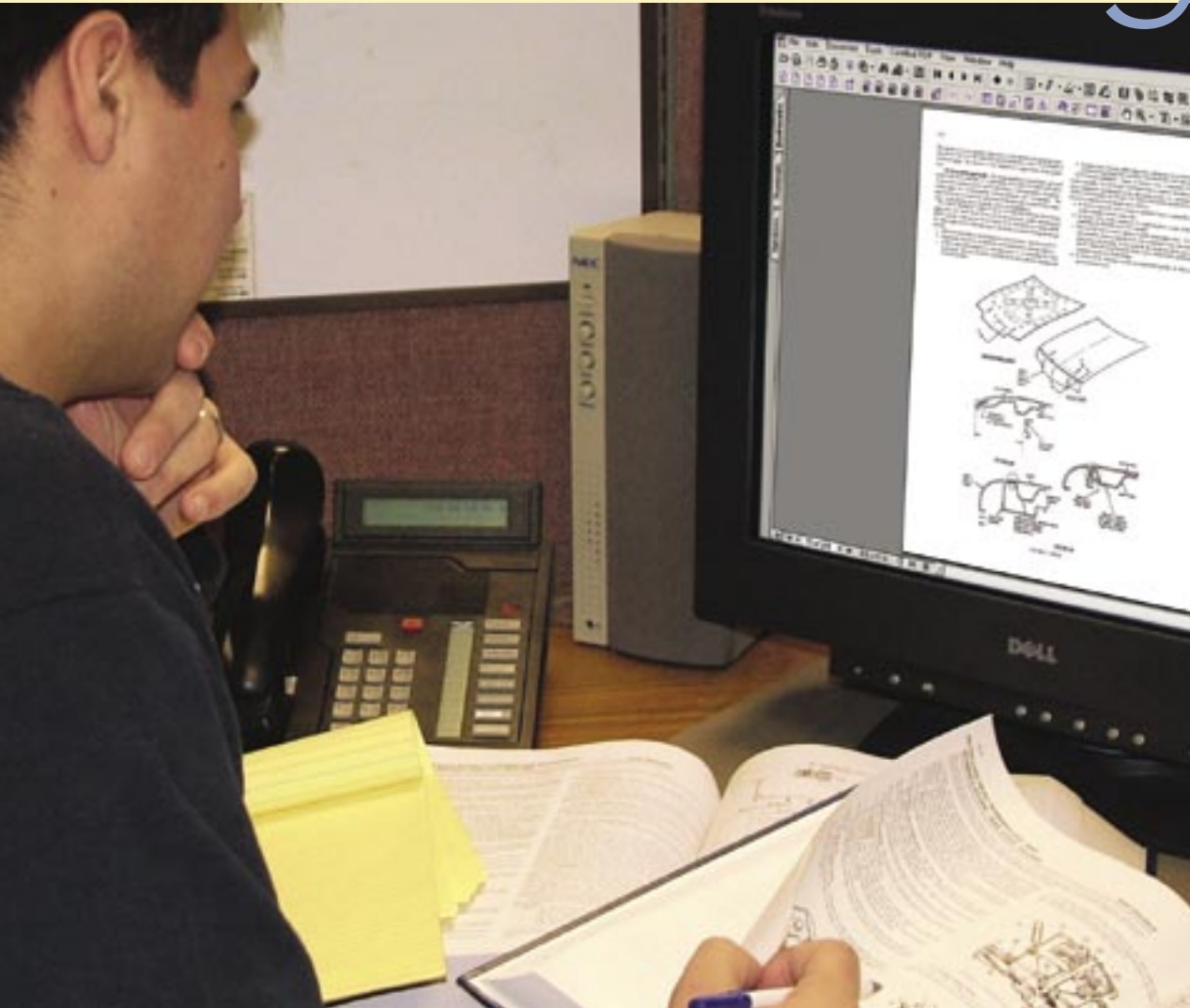
### Global Business Development-China

2004 proved a busy year for SAE's business development in China. Several new events and milestones were achieved and more are scheduled for 2005.

Here are some of the highlights from 2004:

- SAE and Delphi signed an agreement to expand the SAE-DTI Library in the SAE Global Knowledge Center (GKC) on the Tsinghua University campus.
- Two staff positions – DTI managing director and technical specialist – were created for the GKC.
- An exhibit was shown at the Beijing International Automotive Industry Exhibition.
- SAE President Duane Tiede attended the GKC Inauguration and Signing Ceremony.
- The first series of training programs were held at the GKC in Beijing. Four seminars were presented to 44 attendees representing 18 different Chinese corporations and 17 different cities in China. More seminars are scheduled for 2005 based on the success of the inaugural sessions.
- Plans are under way for 2005 SAE President Ted Robertson to visit the GKC and Auto Shanghai in 2005.

# knowledge



SAE provides the most

**timely and relevant**

engineering technology information.

During 2004, SAE Technical Publishing responded to the ever-growing market trend for more electronic delivery of products and customized products.



## Publications

During 2004, SAE Technical Publishing responded to the ever-growing market trend for more electronic delivery of products and customized products. The Technical Publications staff met the challenge by providing improved content management and delivery systems, and improved product development and manufacturing processes.

In addition to the numerous papers and session books, *Transactions* and other yearly compendiums typically produced each year, SAE's publishing program introduced nine authored books to the automotive engineering market. Several of these books are new editions of popular titles, and two are motorsports books that have been very well-received. In addition, SAE published an English translation of the well-known German text *Internal Combustion Engine Handbook-Basics, Components, Systems, and Perspectives*. The nine new titles include:

- *Aircraft Maintenance: The Art and Science of Keeping Aircraft Safe*
- *Automobile Electrical and Electronics Systems, 3rd Edition*
- *Automotive Engineering Fundamentals*
- *Automotive Lubricants Reference Book, 2nd Edition*
- *Car Suspension and Handling, 4th Edition*
- *Ferrari Formula 1: Under the Skin of the Championship-Winning F1-2000*
- *Hands-On Race Car Engineer*
- *Internal Combustion Engine Handbook-Basics, Components, Systems, and Perspectives*
- *Vehicle Multiplex Communication-Serial Data Networking Applied to Vehicular Engineering*

SAE also published a record number of Special Publications – session books of paper collections from conferences. The number of Progress in Technology titles was also expanded to provide critical bodies of research on such popular topics as safety, diesel engines, electronics, fuel cells and motorsports.

# challenge



SAE's lifelong-learning opportunities assist  
the young professional  
with the transition into the work force,  
then provides personal-growth opportunities.



Participants in SAE's Collegiate Design Series competitions benefit by gaining hands-on engineering design experience; developing their engineering project management skills in a "real-world" environment; gaining exposure to mobility engineering industry; and by enjoying excellent networking and employment opportunities.



### Educational Relations

The events of the Collegiate Design Series are SAE's most important contribution to university-level engineering education. SAE benefits by attracting new members and involving existing ones; and connecting student members to future employers in mobility industries. SAE strengthens its presence in the academic community by serving as a training ground for future member leaders. Students benefit by gaining global visibility in SAE competitions which include Formula SAE, Aero Design East and West, Clean Snowmobile Challenge, and Mini Baja West, East and Midwest.

#### **Here are some notable achievements from 2004:**

- Overall student participation increased from 4,300 in 2003 to 4,557 in 2004.
- Registration for the 2004 Formula SAE was limited to 140 teams and all available spaces were filled within eight days.
- The Aero Design East competition was hosted by the SAE/ University of Central Florida Section in DeLand, Fla., with teams from the United States, Canada, Puerto Rico and Brazil. The Aero Design West competition was hosted by Lockheed Martin of Ft. Worth, Texas, and the Ft. Worth Thunderbirds R/C Club for the first time.
- The Mini Baja Midwest competition included teams from 120 colleges and universities from across the United States, Canada, Argentina, South Africa, Brazil and South Korea.

In 2005, Mini Baja West will be transformed into Mini Baja 100 to commemorate SAE's 100th Anniversary. The key event will be a 100-mile endurance race through the desert at Caterpillar's Tinaja Hills Training Center in Green Valley, Ariz.

At the international level, the Collegiate Design Series presents important opportunities for forging relationships with professional organizations, university administrators and students, and a wide range of sponsoring companies. SAE's active support of international events increases its impact on engineering education worldwide. It helps build a base of appreciation and respect for all of our activities.

# progressive



## SAE's Power Track

provides opportunities to help members advance their careers.

Power Track is an exciting new program that is a formalized career path that starts as early as grade school and progresses through a career as an engineer.



### Younger Members – Focusing on SAE’s Future

Through customer service feedback and research, SAE is responding to the needs and requests of younger members. The response is Power Track, an exciting career development program launched in 2004. Power Track features milestones an individual can follow from grade school through high school and college – all the way to a professional career as an engineer. Power Track incorporates new and existing programs, products and services that can help accelerate the career of an engineer.

Other new programs, products and services also are being introduced to keep up with customers’ changing needs. SAE’s online career center was added in the fall as a new, member-only benefit. Members can upload a resume, search job postings, set up job alert services and read career-related articles and find job tips. The online career center offers a unique resume-search feature that identifies SAE members who participate on boards and/or committees, Collegiate Design Series alumni, authors, instructors, and others.

# *motivate*



Students will learn the **engineering design experience**  
by participating in design challenges.



SAE is committed to working to inspire new generations of students and increase their interest in math and science.



### A World in Motion (AWIM)

SAE and General Motors Corp. have been collaborating on numerous teacher/volunteer workshops at sites such as Flint, Warren and Wentzville in Michigan and Fairfax, Kan.

In addition, AWIM is in the San Diego County School District for a second year and involves more than 200 teachers.

**2004 Teacher Awards:** Pamela Grifka of Wilkerson Elementary in Warren, Mich., received the 2004 Lloyd Reuss Award for Teaching Excellence. The annual award recognizes teachers who have effectively implemented the AWIM program to further develop students' understanding of the principles of motion and the science that underlies them. Grifka has taught fourth grade at Wilkerson Elementary for 10 years. She received her bachelor's degree in mathematics from Central Michigan University and also holds a master's degree in education.

In addition, Richard J. Comeau, a teacher at William Diamond Middle School, and Robyn P. Vioria, former Middle School Outreach Technology Specialist for Minuteman Regional High School, (both schools in Lexington, Mass.) received the 2004 SAE Gary Dickinson Award for Teaching Excellence. This annual award recognizes an outstanding middle school for the best use of the AWIM Challenges 2 & 3 curriculum to further develop students' interest in math and science.

*inspire*



Programs funded through the SAE Foundation  
enable students to recognize the **connection**  
**between ideas and actions**  
and between imagination and innovation.

The SAE Foundation provides opportunities for professionals and educators to work together to produce a qualified and creative work force for the future. Their passion inspires future generations to stretch to new heights.



### SAE Foundation

Don Ableson, 1999 SAE President, President of the SAE Foundation Canada and member of the SAE Foundation Board, was selected to serve on a math and science steering committee that will advise the U. S. Congress on important issues concerning future legislation related to math and science education. The steering committee reports to the Congressional Science and Math (STEM) Education Caucus, which is comprised of members of Congress.

#### **SAE Foundation Banquet Dedicated to the Year of the Supplier:**

On May 12, 2004, Ford Field in Detroit was transformed into a venue of elegance and sophistication for the SAE Foundation Banquet, the kick-off event for SAE's 100th Anniversary. Seven hundred people gathered to honor and recognize 28 supplier companies with innovation awards and four individuals with achievement awards.

Bill Agnew, Head of Research and Development at General Motors (retired), and Raymond A. Morris, Executive Vice President and COO of SAE International, were recipients of the first Ableson Award for Visionary Leadership. The award recognizes their efforts in the creation and development of "A World In Motion," SAE's math and science educational outreach program for students in grades four through 10.

Joseph B. Anderson Jr., Chairman and CEO of TAG Holdings LLC, was presented the Lifetime Achievement Award for his many accomplishments in the military and community and as a corporate leader. J.T. Battenberg III, Chairman, Chief Executive Officer and President of Delphi Corp., was awarded the Manufacturing Leadership Award.

**Unique Contribution:** The SAE Foundation was the recipient of a 1933 Marmon 16-cylinder automobile valued at \$200,000. The Marmon Sixteen, a four-door, seven-passenger sedan, was the largest American passenger car of its era. Chris MacAllister, President and COO of MacAllister Machine Inc., purchased the Marmon from the SAE Foundation.

*quality*



PRI advances the  
mobility industries through  
development of performance standards  
and administration of quality assurance,  
accreditation, and certification programs



PRI develops performance standards and administers quality assurance, accreditation, and certification programs for the benefit of industry, government, and the general public.



### Performance Review Institute

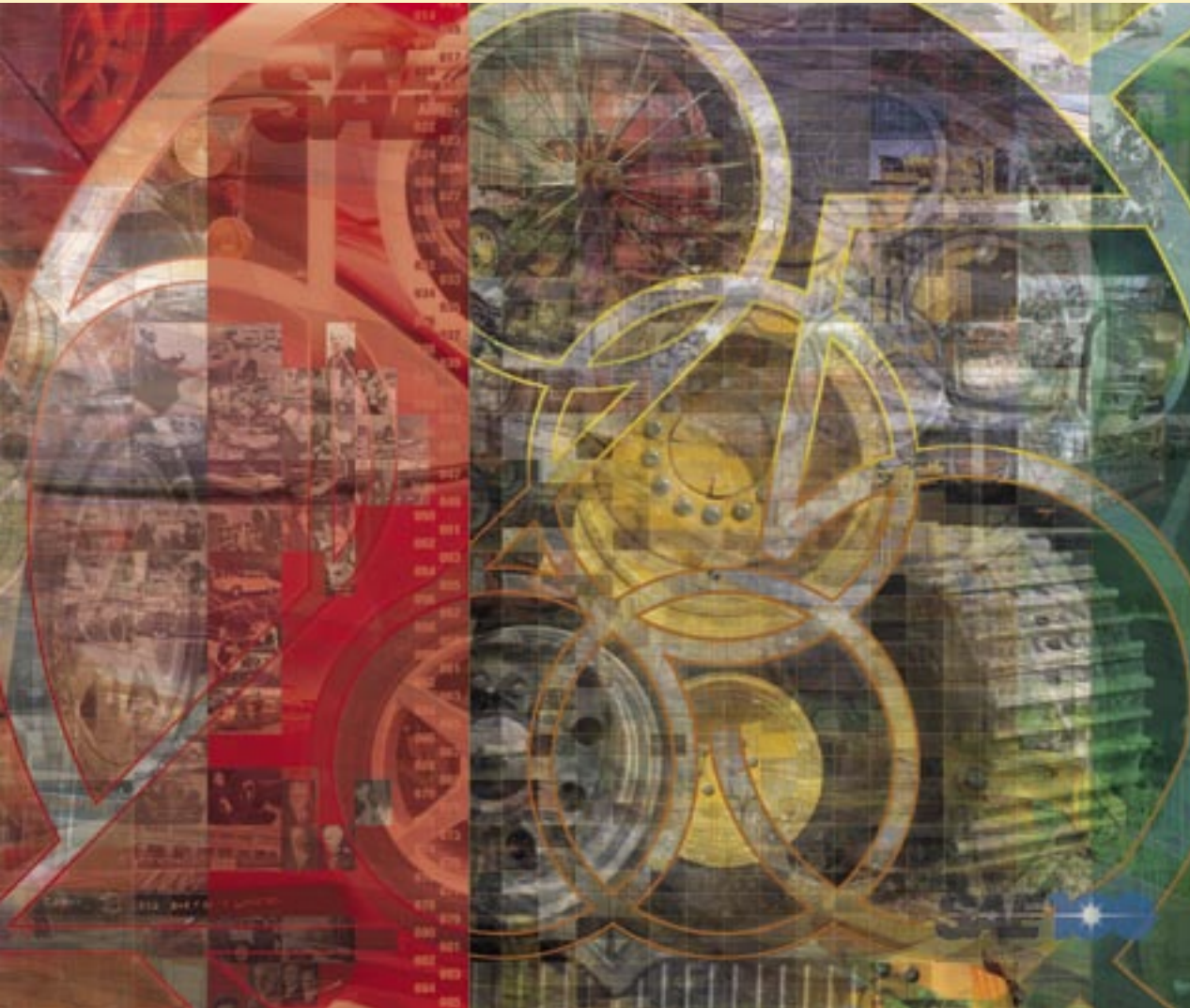
SAE's affiliate organization, the Performance Review Institute (PRI), completed another highly successful year in 2004. It is projected that PRI's revenue for the year will exceed \$18 million, with a positive margin of \$1.3 million. The international organization has offices in London, Beijing and Nagoya and additional staff in Derby, Los Angeles, Boston, Cincinnati and Columbus, Ohio. PRI conducted more than 3,000 audits for the mobility industry in 2004. Of these, approximately 675 were in Europe and 65 were in Asia. Driving PRI's global outreach is a Board of Directors comprised of members from Japan, France, the United Kingdom and United States. Additional members from Canada and China are likely to join the PRI Board in 2005.

### Online Aerospace Supplier Information

The Online Aerospace Supplier Information System (OASIS) saw significant growth in 2004, generating approximately \$500,000. This database provides subscribers with direct access to a complete listing of suppliers certified to the industry's quality system. OASIS provides users the tool to convert audit data and QML information into easily-managed strategic intelligence.

By the end of the year, the database contained more than 2,500 individual site listings of aerospace suppliers certified to AS9100. PRI is the world's second largest contributor to the database.

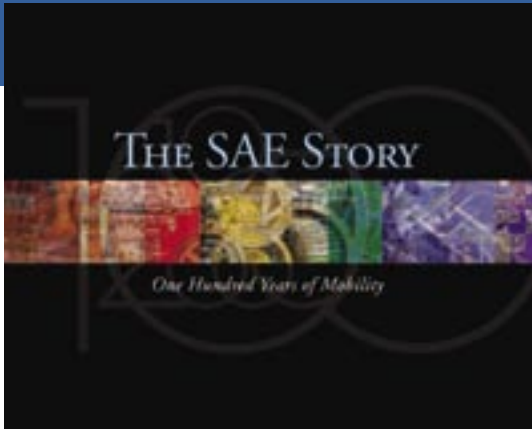
# *future*



SAE maintains its role as the center for the free exchange of  
**ideas and achievement,**  
the sharing of science and technology.

Chronologically, 2004 was the year that SAE closed out its first 100 years of service.

But, it was really more of a beginning;  
a beginning that is full of promise and limitless potential.



### SAE's 100th Anniversary

SAE's 100th Anniversary celebration got under way in 2004 with a variety of products and events. These activities and memorabilia are designed to enhance key market and public awareness of SAE and its core products and services. In addition, SAE is attaining significant brand visibility and revenues from such activities.

The SAE 2005 World Congress will feature a 100th Anniversary banquet, sessions and celebrations with sister societies and industry partners. A coffee table book, *The SAE Story: One Hundred Years of Mobility*, has been published; a special Mini Baja 100 competition is scheduled for June 2005 in Tucson, Ariz.; and a 100th Anniversary Reception at the Smithsonian Air and Space Museum in Washington, D.C., is planned. These are just a few of the many products and events being created to celebrate the anniversary year.

SAE is proud of its past 100 years and the milestones reached. SAE – which began in the days of the horseless carriage – owes its successes to the thousands of talented people who comprise the organization. They are the reason SAE enters the next 100 years with great confidence and optimism.

*vision*



# SAE International

the advancement of the mobility community  
to serve humanity.



# Corporate Directory

## The 2004 SAE Board of Directors



2004 President

### Duane Tiede

Vice President of Functional Engineering  
CNH Global  
(Retired)



2005 President & 2004 Assistant Treasurer

### J. E. "Ted" Robertson, P.E.

Vice Chairman, Product Development  
ASC Inc.  
Chief Engineer Emeritus  
General Motors Corp.



2003 President

### Jack E. Thompson

Director, CAE & Concept Development  
Advance Vehicle Engineering  
DaimlerChrysler Corporation  
(Retired)



2004 Vice President Aerospace

### Robert E. Spitzer

Vice President, External Technical Affiliations  
and University Relationships  
The Boeing Company  
(Retired)



2004 Vice President Automotive

### Richard O. Schaum

Vice President & General Manager, Vehicle  
Systems  
WaveCrest Laboratories LLC



2004 Vice President Commercial Vehicle

### Mark R. Pflederer

Vice President & Chief Technology Officer  
Caterpillar, Inc



2004 Treasurer

### Greg W. Henderson, P.E.

Director, Weight Management & Control  
Lockheed Martin Aeronautics Company



2004 Secretary

### Raymond A. Morris, CAE

Executive Vice President & COO  
SAE International

## Directors One-Year Term (2004)

### Eden H. C. Chen

Principal Consultant  
Chen Technology, Inc.

### D. Brad Keleher

Staff Engineer  
Deere & Company

### Teresa A. Hundley

Manufacturing Area Manager  
Delphi Corporation

### Landon J. Sproull

Assistant Chief Engineer  
Peterbilt Motors Company

### Robert L. Ireland

Director, Training Devices &  
Facilities  
United Airlines, Inc.

### Keith B. Termaat

Consultant and CEO  
Suntree Associates Ltd.

## Directors Two-Year Term (2004-2005)

### Andrew Brown Jr.

Executive Director, Engineering  
Competency  
Delphi Corporation

### Andrew C. Palmer

Program Director, LCV & President,  
Light Truck  
Nissan Motor Company, Ltd.

### Nicholas P. Cernansky

Professor  
Drexel University

### V. Sumantran

Executive Director  
Tata Motors, Ltd.

### Derek J. Logan

Senior Project Engineer  
Nissan Technical Center North  
America, Inc.

### Steven W. Woodard

Division Engineering Manager  
Eaton Automotive

### Michael D. Madley

Vice President, OEM Sales  
Cloyes Gear & Products, Inc.

## Directors Three-Year Term (2004-2005-2006)

### Daniel R. Kapellen

Product Line Manager, Gas Engine  
Products  
Woodward

### Robert J. Pheiffer

Manager, Advanced Safety &  
Regulations, Global Compliance  
Ford Motor Company

### Alan H. Nye

Professor  
Rochester Institute of Technology

### Ronald G. Rath

Managing Director  
Marx Consulting Group, LLC

### Eduardo Paredes

Director Commercial  
Gleason SA de CV

### Arnold W. Siegel P.E., FSAE

Retired  
UCLA

## THE FINANCIAL MESSAGE

To all SAE International Members

We are pleased to present the SAE 2004 audited financial statements for your information and review. The accompanying reports are: the Independent Auditor's Report, Statements of Financial Position, Statement of Activities and Changes in Net Assets, Statement of Cash Flows, and Notes to Financial Statements. The SAE Foundation is an unincorporated affiliate of SAE and, accordingly, is included in the accompanying financials. The actual accounts of SAE and the SAE Foundation are maintained separately and the respective funds are not co-mingled.

The Statements of Financial Position reflect total assets of \$68.2 million at the end of 2004. The increase in total assets was \$7.4 million, or an increase of 12.2% over 2003. We believe you will find the Statements of Financial Position show SAE to be in excellent financial condition and well positioned to continue to provide strong member service activities in the future. We appreciate the efforts of the SAE staff and all who were involved in producing these favorable results.

In 2004 SAE adopted a new financial reporting period based on the calendar year beginning January 1, 2004 and ending December 31, 2004. For this period the Statement of Activities and Changes in Net Assets reflect SAE operating revenues of \$59.4 million. This was an increase of \$6.6 million or 12.5% from fiscal year 2003 (October 1, 2002 through September, 30, 2003). The net gain from operations was \$6.0 million in calendar year 2004, up from a \$1.3 million gain in fiscal year 2003.

In non-operating activities, SAE invested \$365,000 in development activities to fund new programs; these program costs were supported by returns from the General Investment Fund. In 2004, investment activities finished with a net gain of \$3.8 million, due primarily to increases in the market value of our long-term investments. The investment in development activities, when combined with long-term investment gains and an adjustment for pension expense, resulted in a total non-operating gain of \$4.3 million.

Net assets increased \$10.3 million during 2004 as a result of the operating and non-operating gains noted above. The increase in net assets for the year of \$10.3 million, when combined with net assets at the beginning of the year of \$44.4 million, resulted in \$54.7 million net assets at year-end.

Once again we received a favorable management letter from our independent auditors. Cited positively were SAE internal control activities including budgeting and reporting to the Finance Committee, and the SAE control environment including integrity and ethical values, commitment to competence, Board of Directors and Audit Committee participation, management's philosophy and operating style, etc. There were no auditor recommendations for strengthening SAE's internal controls.

As a reminder, please recall that SAE is tax exempt under Section 501(c)(3) of the Internal Revenue Code. Ultimate responsibility for the financial statements and other information in the annual report rests with the

SAE Board of Directors. The Board, through its Finance Committee and Financial Audit Committee, monitors the system of accounting and internal controls, investment management, and the professional competency and integrity of persons performing these functions. The independent auditors have direct access to the Financial Audit Committee to discuss the scope and results of their audit, their comments on the adequacy of internal accounting controls, and the quality of financial reporting.

If you would like more details about the accompanying financial statements or any aspect of financial operations at SAE, please feel free to contact either of us or Dana Pless, Chief Financial Officer at SAE World Headquarters ([dpless@sae.org](mailto:dpless@sae.org)).

Respectfully submitted,



Gregory W. Henderson  
Treasurer  
[greg.henderson@email.sae.org](mailto:greg.henderson@email.sae.org)



J. E. "Ted" Robertson  
Assistant Treasurer  
[trobertson@sae.org](mailto:trobertson@sae.org)

## INDEPENDENT AUDITOR'S REPORT

### Society of Automotive Engineers, Inc.

We have audited the accompanying statements of financial position of the Society of Automotive Engineers, Inc. as of December 31, 2004, and the related statements of activities and cash flows for the year then ended. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year summarized comparative information has been derived from the Society's 2003 financial statements and, in our report dated February 2, 2004, we expressed an unqualified opinion on those financial statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Society of Automotive Engineers, Inc. as of December 31, 2004, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

*Stelmack Dobransky & Eannace, LLC*

**STELMACK DOBRANSKY & EANNACE, LLC**  
Pittsburgh, Pennsylvania

*Joseph S. Stelmack, CPA, Member*

**Joseph S. Stelmack, CPA, Member**

February 4, 2005

## Society of Automotive Engineers, Inc.

### Statements of Financial Position

December 31, 2004 AND 2003

(000's omitted)

	2004	2003
<b><u>ASSETS</u></b>		
<b>CURRENT ASSETS</b>		
Cash and short-term investments .....	\$ 2,661	\$ 8,376
Current portion of long-term investments .....	1,432	1,400
Accounts receivable - less allowance for doubtful accounts of \$181 and \$147.....	2,804	3,051
Pledges receivable .....	929	396
Inventories and supplies .....	772	915
Prepaid expenses .....	2,175	2,464
Accrued interest and other receivables .....	2,246	2,099
Total current assets .....	<u>13,019</u>	<u>18,701</u>
<b>LONG-TERM INVESTMENTS</b> - market value .....	<u>42,635</u>	<u>34,005</u>
<b>OTHER ASSETS</b>		
Pledges receivable - amounts due after one year .....	4,454	138
<b>FIXED ASSETS</b>		
Land and buildings .....	10,704	10,539
Furniture and equipment .....	<u>17,668</u>	<u>18,943</u>
Total cost .....	28,372	29,482
Less accumulated depreciation .....	<u>20,330</u>	<u>21,578</u>
Net fixed assets .....	<u>8,042</u>	<u>7,904</u>
<b>TOTAL ASSETS</b> .....	<u>\$ 68,150</u>	<u>\$ 60,748</u>
<b><u>LIABILITIES AND NET ASSETS</u></b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable .....	\$ 3,090	\$ 3,189
Accrued expenses .....	1,477	1,289
Deferred revenue:		
Conferences and publications .....	4,888	5,246
Dues and fees .....	<u>2,518</u>	<u>2,547</u>
Total current liabilities .....	<u>11,973</u>	<u>12,271</u>
<b>LONG-TERM LIABILITIES</b>		
Accrued pension costs .....	1,238	3,775
Charitable gift annuity .....	<u>277</u>	<u>318</u>
Total long-term liabilities .....	<u>1,515</u>	<u>4,093</u>
<b>TOTAL LIABILITIES</b> .....	<u>13,488</u>	<u>16,364</u>
<b>NET ASSETS</b>		
Unrestricted .....	43,485	38,629
Temporarily restricted .....	9,669	4,247
Permanently restricted .....	<u>1,508</u>	<u>1,508</u>
Total net assets .....	<u>54,662</u>	<u>44,384</u>
<b>TOTAL LIABILITIES AND NET ASSETS</b> .....	<u>\$ 68,150</u>	<u>\$ 60,748</u>

See Independent Auditor's Report and Notes to the Financial Statements



## Society of Automotive Engineers, Inc.

### Statement of Activities And Changes in Net Assets

For the Year Ended December 31, 2004

(000's Omitted)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
<b>OPERATING ACTIVITIES</b>				
Revenue				
Meetings and conferences .....	\$14,193	\$ -	\$ -	\$14,193
Magazines and publications .....	24,791	-	-	24,791
Membership .....	4,549	-	-	4,549
Technical standards .....	3,277	-	-	3,277
Other products and services .....	910	123	-	1,033
Contributions .....	579	6,262	-	6,841
Contributed services .....	4,744	-	-	4,744
Net assets released from restrictions .....	1,397	(1,397)	-	-
Total revenue .....	54,440	4,988	-	59,428
Expenses				
Meetings and conferences .....	10,980	-	-	10,980
Magazines and publications .....	10,124	-	-	10,124
Membership .....	2,345	-	-	2,345
Technical standards .....	3,501	-	-	3,501
Other products and services .....	6,467	-	-	6,467
Administrative services .....	12,492	-	-	12,492
SAE Foundation .....	2,799	-	-	2,799
Contributed services .....	4,744	-	-	4,744
Total expenses .....	53,452	-	-	53,452
Net change from operations .....	988	4,988	-	5,976
<b>NONOPERATING ACTIVITIES</b>				
Development activities .....	(365)	-	-	(365)
Investment activities – net of expenses of \$132 .....	3,333	434	-	3,767
Pension adjustment .....	1,000	-	-	1,000
Contribution – SAE Foundation – Canada .....	(100)	-	-	(100)
Net change from nonoperations.....	3,868	434	-	4,302
<b>CHANGE IN NET ASSETS</b> .....	4,856	5,422	-	10,278
<b>NET ASSETS - BEGINNING OF YEAR</b> .....	38,629	4,247	1,508	44,384
<b>NET ASSETS - END OF YEAR</b> .....	\$43,485	\$9,669	\$1,508	\$54,662

# Society of Automotive Engineers, Inc.

## Statement Of Cash Flows

For the Year Ended December 31, 2004

(000's omitted)

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### CASH FLOWS FROM (USED IN) OPERATING ACTIVITIES

Change in net assets .....	\$ 10,278
Adjustments to reconcile change in net assets	
To net cash used by operating activities:	
Depreciation and amortization .....	2,141
Net (gain)/loss on investments .....	(2,739)
Net (gain)/loss on sale of fixed assets .....	29
Changes in assets (increase)/decrease	
Accounts receivable .....	247
Accrued interest and other receivables .....	(147)
Prepaid expenses .....	289
Inventories and supplies .....	143
Pledges receivable .....	(4,848)
Changes in liabilities (decrease)/increase	
Accounts payable .....	(99)
Accrued expenses .....	188
Deferred revenue .....	(387)
Accrued pension costs .....	(2,537)
Charitable gift annuity .....	(41)
Net cash from (used in) operating activities .....	<u>2,517</u>

### CASH FLOWS FROM (USED IN) INVESTING ACTIVITIES

Purchase of fixed assets .....	(2,468)
Proceeds from sale of fixed assets .....	160
Purchase of investments .....	(24,662)
Proceeds from sale of investments .....	<u>18,738</u>
Net cash from (used in) investing activities .....	<u>(8,232)</u>

**NET INCREASE/(DECREASE) IN CASH BALANCES** ..... (5,715)

**CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR** ..... 8,376

**CASH AND CASH EQUIVALENTS - END OF YEAR** ..... \$ 2,661

### SUPPLEMENTAL INFORMATION

Interest paid .....	\$ -
Income taxes paid .....	\$ -

# Society of Automotive Engineers, Inc.

## Notes to Financial Statements

For the Year Ended December 31, 2004

### 1. GENERAL

The Society of Automotive Engineers, Inc. (SAE) is a not-for-profit corporation originally organized and incorporated in 1905 under the laws of New York and reincorporated in 1986 under the laws of Pennsylvania. SAE is a technical society aimed at developing, collecting and disseminating on a worldwide basis the knowledge of mobility technologies in order to advance these fields and their practitioners in a manner which serves humanity. The SAE Foundation is an unincorporated division of SAE and, accordingly, is included in the accompanying financial statements.

SAE Foundation-Canada is organized as a separate entity under the laws of Canada. It was formed to manage the activities, missions and goals in support of SAE in Canada, which requires SAE Foundation-Canada's solicitation and receipt of specific funding from individuals, public or private corporations, foundations, or government agencies. The SAE Foundation-Canada operates under the direction of a Board of Trustees with administrative support provided by the SAE Executive Vice President and reports directly to the SAE Board of Directors.

SAE is affiliated with Performance Review Institute, Inc. (PRI), a Pennsylvania corporation organized by SAE in April 1990 to compile and review performance standards, to promote and administer quality assurance, accreditation and certification programs for the benefit of the general public, industry and government. PRI also contributes funds, property and services to nonprofit organizations that develop and publish standards for maintaining and improving quality and performance within the automotive industry. The Internal Revenue Service has granted PRI tax-exempt status under Section 501(c)(6) of the Internal Revenue Code.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Basis of Accounting** - The accompanying financial statements are prepared on the accrual basis of accounting and include only the assets, liabilities, net assets and financial activities of the international organization of the Society of Automotive Engineers, Inc. The funds and accounts of Society Sections are not included in the accompanying financial statements. However, Sections are permitted to invest in a money market investment pool and a long-term investment pool managed by the Society. Funds of Sections participating in the pool are included in the Short Term Investment Fund and are reflected as an accounts payable liability in the accompanying financial statements.

**Comparative Financial Statements** - The financial statements include certain prior-year comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the organization's financial statements for the three months ended December 31, 2003 from which the summarized information was derived.

**Change in Year End** - Effective October 1, 2003, SAE changed its fiscal year end from September 30 to December 31.

**Financial Statement Presentation** - SAE has adopted Statement of Financial Accounting Standards (SFAS) No. 117, "Financial Statements of Not-for-Profit Organizations". Under SFAS No. 117, SAE is required to report information regarding its financial position and activities according to three classes of net assets:

**Unrestricted net assets** - Net assets that are not subject to donor-imposed stipulations.

**Temporarily restricted net assets** - Net assets subject to donor-imposed stipulations that may or will be met either by actions of SAE and/or the passage of time.

**Permanently restricted net assets** - Net assets subject to donor-imposed stipulations that they be maintained permanently by SAE. Generally, the donors of these assets permit SAE to use all or part of the income earned on related investments for general or specific purposes.

**Contributions** - SAE has also adopted SFAS No. 116, "Accounting for Contributions Received and Contributions Made." In accordance with SFAS No. 116, contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support depending on the existence or nature of any donor restrictions.

**Cash and Cash Equivalents** - For purposes of the Statement of Cash Flows, SAE considers all highly liquid investments with an initial maturity of year or less to be cash equivalents. For the year ended December 31, 2004, SAE had no noncash investing or financing activities for cash flow purposes.

**Estimates** - Management uses estimates and assumptions in preparing financial statements. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Actual results could differ from those estimates.

**Investments** - SAE has adopted SFAS No. 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations." In accordance with SFAS No. 124, investments are presented at their current market value, which is established using published market prices.

**Inventories** - Inventories and supplies are stated at the lower of cost (determined on the first-in, first-out or average cost method) or market.

**Fixed Assets** - Fixed assets are recorded at cost and depreciated using the straight-line method over estimated useful lives of three to forty years. Depreciation expense, totaling \$2,141,000 for the year ended December 31, 2004, is allocated to the various activities based on usage.

**Revenue and Expense Recognition** - Income from membership dues, subscription fees, magazines and publications are deferred and recognized over the periods to which the specific types of income relate. Revenues related to continuing education programs, engineering meetings and displays are deferred and recognized in the period when the programs are held. Expenses related to such activities are also deferred as prepaid expenses and recognized in the period when the programs are held.

2. **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

Income Tax Status - SAE is exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code. However, income from certain activities not directly related to the SAE's tax-exempt purpose such as advertising revenue is subject to taxation as unrelated business income. At December 31, 2004, there were no federal income taxes provided as business activities unrelated to exempt purposes resulted in no taxable income in those years. In addition, SAE qualifies for the charitable contribution deduction under Section 170(b)(1)(A) and has been classified as an organization that is not a private foundation under Section 509(a)(1).

Concentration of Credit Risk - Financial instruments which potentially subject the organization to concentrations of credit risk consist principally of marketable debt and equity securities and trade receivables. The organization's temporary cash investments are greater than the \$100,000 insured by the FDIC but are maintained by creditworthy, high quality financial institutions. The organization holds bonds and notes issued by the United States government and financially strong corporations. By policy, these investments are kept within limits designed to prevent risks caused by concentration. Credit risk with respect to trade receivables is limited because SAE deals with a large number of customers in a wide geographic area. As of December 31, 2004, SAE had no significant concentrations of credit risk.

3. **INVESTMENTS**

At December 31, 2004, investments were as listed below:

	Cost \$(000)	Market \$(000)
U.S. Gov't and U.S. Gov't		
Agency bonds .....	\$ 1,582	\$ 1,554
Corporate bonds .....	10,189	10,966
Corporate stocks .....	25,495	28,828
Mutual funds .....	2,034	2,022
Money market funds .....	668	668
Certificates of deposit .....	29	29
 Total investments .....	 \$ 39,997	 \$ 44,067

The following schedule summarizes the investment return and its classification in the Statements of Activities for the year ended December 31, 2004:

	Unrestricted \$(000)	Temporarily Restricted \$(000)	Total \$(000)
<b>OPERATING ACTIVITIES:</b>			
Interest and dividend income .....	\$ 151	\$ 0	\$ 151
<b>NON OPERATING ACTIVITIES:</b>			
Interest and dividend income .....	\$ 977	\$ 183	\$ 1,160
Realized gains .....	1,214	86	1,300
Unrealized gains .....	1,439	0	1,439
Subtotal investment return .....	3,630	269	3,899
Less investment expenses .....	(132)	0	(132)
Over-allocation .....	(165)	165	0
Total investment return from non operating activities .....	\$ 3,333	\$ 434	\$ 3,767

Investment returns from operating activities are comprised of returns included in SAE's liquidity investment fund, which are included in the accompanying Statements of Activities as part of other products and services.

4. **PLEDGES RECEIVABLE (PROMISES TO GIVE)**

Pledges of contributions (or promises to give) have been classified as unconditional. Unconditional promises to give at December 31, 2004 are as follows \$(000):

Receivable in less than one year .....	\$ 929
Receivable in one to five years .....	3,967
Greater than five years .....	715
Total unconditional promises to give .....	5,611
Less discounts to net present value .....	228
Net unconditional promises to give .....	\$ 5,383

5. **EMPLOYEE BENEFIT PLANS**

Defined Benefit Pension Plan

SAE has a noncontributory defined benefit pension plan covering substantially all employees of SAE and PRI. Pension expense amounted to \$1,964,000 for the year ended December 31, 2004. The benefits are based on years of service and the employee's final average compensation, as defined, during the last ten years of employment. SAE's funding policy is to fund amounts on an actuarial basis, which complies with ERISA.



# Society of Automotive Engineers, Inc.

## Notes to Financial Statements

For the Year Ended December 31, 2004

### 5. EMPLOYEE BENEFIT PLANS (Continued)

Net periodic pension costs charged to expense for year ended December 31, 2004 included the following components \$(000):

Service cost - benefits earned during the period .....	\$ 1,370
Interest cost on projected benefit obligation .....	1,860
Expected return on plan assets .....	(1,451)
Net amortization and deferral .....	185
Net periodic pension expense .....	<u>\$ 1,964</u>

In 2004, due to the change in the minimum liability requirements, SAE's pension expense was reduced by \$1,000,000, which is shown under Nonoperating Activities of the accompanying Statement of Activities.

The following table sets forth the funded status of the pension plan as of September 30, 2004 \$(000):

Accumulated benefit obligation: .....	<u>\$ 24,089</u>
Projected benefit obligation .....	<u>\$(30,039)</u>
Plan assets at fair value .....	<u>23,239</u>
Plan assets (deficit) in excess of projected benefit obligation (funded status) .....	(6,800)
Unrecognized actuarial net (gain) loss .....	5,763
Unrecognized net asset at July 1, 2004 being amortized over remaining three (3) years .....	(201)
Prepaid (accrued) pension costs .....	<u>\$ (1,238)</u>

The weighted average assumptions used in determining the net periodic pension costs and reconciliation of funded status as of December 31, 2004 is as follows:

Discount rate .....	6.75%
Long-term rate of return .....	8.00%
Average compensation increase .....	4.75%

SAE made a \$3,500,000 contribution to the pension plan for the year ended December 31, 2004. Benefits paid from the plan for the year ended December 31, 2004 amounted to \$917,000.

#### Group Tax Deferred Annuity Plan

SAE also has a group tax deferred annuity plan qualified under Section 403(b) of the Internal Revenue Code. The plan covers all employees. Employees may make voluntary matched and unmatched contributions. Employees not entitled to full benefits are not eligible to receive matching contributions. Employees may make voluntary matched contributions in a range from 1% to 6% (subject to maximums allowed by the Internal Revenue Code) and SAE will match up to 100% of the contributions based on the employee's years of service. Employee contributions in excess of 6%, also subject to maximums, are not matched by SAE. SAE's contributions were \$577,000 for the year ended December 31, 2004. Employees are immediately vested in all contributions but withdrawals are subject to plan withdrawal and distribution rules.

#### Beneficiary Association

SAE has established the SAE Employees and Retired Employees Beneficiary Association, which is exempt from federal income tax under Section 501(c)(9) of the Internal Revenue Code. The Beneficiary Association provides a means of accumulation and distribution of certain welfare plan benefits including benefits after retirement. The contributions to the Beneficiary Association are determined by reference to insurance premiums and estimated costs determined by SAE's independent outside actuary. SAE's contributions were \$24,000 for the year ending December 31, 2004.

### 6. SPLIT-INTEREST AGREEMENTS

During 1998, the SAE Foundation received a \$300,000 charitable gift annuity, which calls for annual annuity payments totaling \$24,000 for the term of the donor's natural life. The present value of estimated future payments to the donor, which totals \$146,000 using a discount rate of 1.5% and applicable mortality tables is included in the accompanying Statements of Financial Position.

During 2003, the SAE Foundation received a \$200,000 charitable gift annuity which calls for annual annuity payments totaling \$16,000 for the term of the donor's natural life. The value of estimated future payments to the donor, which totals \$169,000 using a discount rate of 1.5% and applicable mortality tables is included in the accompanying Statements of Financial Position.

### 7. TEMPORARILY RESTRICTED AND PERMANENTLY RESTRICTED NET ASSETS

Net assets restricted by donors as of December 31, 2004 provide support for the following purposes:

	Temporarily Restricted \$(000)	Permanently Restricted \$(000)
A World in Motion .....	\$ 8,857	\$ 386
Awards and recognition fund .....	807	1,018
Engineering activity support .....	5	104
Totals .....	<u>\$ 9,669</u>	<u>\$ 1,508</u>

**8. OPERATING LEASES**

SAE has noncancelable operating leases, primarily for off-site office space and copiers, that expire at various dates through September 30, 2008. Those leases generally contain renewal options and require SAE to pay all executory costs such as taxes, maintenance, and insurance. Rental expense for those leases amounted to \$923,000 for the year ended December 31, 2004.

Future minimum lease payments under operating leases, which have remaining terms in excess of one year as of December 31, 2004, are:

Period Ended December 31,	Amount \$(000)
2005 .....	\$ 864
2006 .....	864
2007 .....	380
2008 .....	190
	<u>\$2,298</u>

**9. SAE FOUNDATION**

The SAE Foundation is organized as part of the Society of Automotive Engineers, Inc. The SAE Foundation was created to facilitate financial contributions from members and others to provide an additional source of income, beyond those sources normally available to SAE, for activities in support of SAE's Purpose, Missions, and Goals. The Foundation has also adopted a Financial Management Policy so that the Foundation can maintain fiscal stability and viability, be self-sustaining and have the financial competency to meet its obligation to provide the required funding for programs as well as to pay for its fund raising and administrative costs.

The Foundation operates under the direction of a Board of Trustees, with administrative support provided by the SAE Executive Vice President, and reports directly to the SAE Board of Directors. The Foundation conducted fund raising activities that cost \$607,000 for the year ended December 31, 2004. In addition, SAE contributed \$900,000 to the Foundation during 2004.

**10. CONTRIBUTED SERVICES**

SFAS No. 116 requires contributed services to be recognized if the services received create or enhance nonfinancial assets or require specialized skills, are provided by individuals possessing those skills, and would typically need to be purchased if not provided by volunteers. SAE receives such services from numerous members who volunteer to serve on technical committees that are responsible for developing, reviewing, revising and updating technical standards for the ground vehicle and aerospace industries. The value of these services was calculated as \$4,744,000 for the year ended December 31, 2004 and is included in the accompanying Statements of Activities as revenue and expense.

**11. RELATED PARTY TRANSACTIONS**

PRI

SAE is related to PRI but their affiliation does not meet the criteria requiring consolidation in the accompanying financial statements.

PRI leases office space from SAE under an operating lease that expires December 31, 2005 unless thirty days notice of cancellation or modification is provided by either party to the other.

As of December 31, 2004, SAE's financial statements reflect the following balances and transactions with PRI:

	Amount \$(000)
Accounts receivable .....	\$ 73
Service fees revenue .....	141
Rental income .....	164

SAE Foundation - Canada

SAE is related to SAE Foundation - Canada, but their affiliation does not meet the criteria requiring consolidation in the accompanying financial statements.

As of December 31, 2004, there was a \$151,000 liability to SAE Foundation - Canada in the accompanying financial statements. Also, during 2004, SAE contributed \$100,000 to SAE Foundation - Canada, which is shown under nonoperating activities of the accompanying statement of activities.

**12. CONTINGENT LIABILITIES**

SAE Sections

While the funds and accounts of Society Sections are not included in the accompanying financial statements, the Sections Board minutes do not disclose any major potential liability to SAE from Section's activities.

## Affiliates

**SAE BRASIL** SAE Brasil  
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CEP 01311 940  
Sao Paulo, Brazil  
Phone: 011 55 11 287 2033  
Fax: 011 55 11 288 6599

**SAE INDIA** SAE India  
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ISTE Professional Centre  
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**SAE Foundation**  
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Phone: (724) 776-4841  
Fax: (724) 776-0038

## SAE Sections/Groups

### Outside North America

Minsk, Belarus  
Mogilev, Belarus  
SAE Beijing, China  
Cairo, Egypt  
Hong Kong  
Naples, Italy  
Kuala Lumpur, Malaysia  
Mexico  
Bryansk, Russia  
Moscow, Russia  
Nizhni Novgorod, Russia

St. Petersburg, Russia  
Volga, Russia  
Aviation and Astronautics  
Development, Russia  
Central Proving Ground, Russia  
Orenburg, Russia  
Zhukovsky (Moscow), Russia  
VTK, Russia  
Taipei, Taiwan  
Kiev, Ukraine  
United Kingdom

### Joint Sections

Bucharest, Romania  
Brasov, Romania  
Constantza, Romania

# SAE International™

## Staff Leadership Team

**Raymond A. Morris, CAE**  
Executive Vice President & Chief Operating Officer

**Antenor R. Willems**  
Executive Director

**Dana M. Pless**  
Chief Financial Officer

**V. Herbert Kaufman**  
Director – Commercial Vehicle Business & Chief  
Technology Officer

**Scott R. Klavon**  
Director – Aerospace Business

**David L. Amati**  
Director – Automotive Business & Automotive  
Headquarters

**Robert H. Chalker**  
Director – Sales & Marketing

**Maryann Ihrig**  
Director – Human Resources

**William G. Wagner**  
Managing Director – PRI

### Corporate Headquarters

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## **Society of Automotive Engineers**

### **Raymond A. Morris, CAE**

*Executive Vice President, COO & Secretary  
SAE International*

### **Reed Smith**

*Legal Counsel*

### **Cohen & Grigsby, P.C.**

*Legal Counsel*

### **Smith Barney Inc.**

*Investment Counsel*

### **INVESCO National Asset Management**

*Investment Counsel*

### **Roxbury Capital Management**

*Investment Counsel*

### **Bowling Portfolio Management**

*Investment Counsel*

### **Delaware Capital**

*Investment Counsel*

### **Lord Abbett & Co.**

*Investment Counsel*

### **Stelmack Dobransky & Eannace**

*Auditors*

### **Mercer Human Resource Consulting**

*Actuaries – SAE Pension and Beneficiary Association  
Programs and Compensation Consultants*

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