

# executive message

## ASSURING A TECHNOLOGY BASE FOR THE SOCIETY OF THE FUTURE

Even though SAE is nearly 100 years old, it is still a growing organism. Its growth is global and encompasses electronics, manufacturing, website delivery of information and knowledge. Through this growth, SAE reaches out to an ever more diverse mobility engineering community.

With jet travel, computer technology and affordable global communications available to everyone, the expectations of developing countries have been raised. In response to this need, SAE has made great strides toward providing world class mobility technology and networking opportunities to local members in all regions.

The work is beginning to bear fruit. SAE has talked with many sister societies around the globe, in such places as the United Kingdom, Switzerland, Romania, Germany, France, Australia, Spain, Hong Kong, India, China and others. Often, partnering agreements come out of these discussions.

Through these agreements, SAE and the local societies can join forces to provide maximum technological resources for the engineers in a country. This arrangement permits each society to maintain its identity and level of importance, yet at the same time allows the societies to take advantage of the resources each has to offer for the benefit of all parties involved.

Take India, for example. We have seen an explosive blossoming of SAE in that country as new sections are formed, legions of students sign up, and technical meetings are organized and held.

Another example is the United Kingdom where SAE and IMechE have for the past two years jointly conducted a student formula event.

SAE is also growing in diversity. The first woman joined SAE in 1920 and today there are more than 3800 women members. The Women Engineers Committee continues to organize programs and services for the growing population of women engineers in SAE. This committee now sponsors the WEC/BREED Award for Women's Leadership, which is featured in this annual report.

SAE's membership diversity is also represented by more than 12,000 practicing engineers, engineering professors and student members who reside in more than 90 countries outside the U.S. and Canada. Currently, three women and four members with diverse cultural backgrounds sit on the SAE Board of Directors. All of these accomplishments are laudable, but SAE continues to work to elect and appoint qualified leaders with rich, diverse cultural backgrounds.

Environmental concerns is another area where SAE is growing, evolving, and changing. SAE endorses the use of its processes to develop recommended practices and test procedures that will result in a better global environment. SAE believes it is better for the automotive industry if it works proactively with governments to set technically sound standards before governments unilaterally step in and pass laws. Here are only a few of the environmental concerns on which SAE is working:

- SAE has a seat on the United Nations Working Party 29 that is concentrating on facilitating the standards harmonization process. Global coordination of standards will mean that less developed nations will not be forced to compromise their health and well-being to obtain affordable transportation.
- Today's mobility repair technicians must be aware of current environmental emissions standards and be able to determine if the products they repair can meet those standards. SAE's affiliate society, the Service Technicians Society (STS) is working to elevate the training of repair technicians in the industry.
- To encourage research into the environment, SAE annually awards the Environmental Excellence in Transportation Award that recognizes individuals or groups of individuals who, through their ingenuity and dedication, make significant innovations in reducing environmental impact in the transportation industries.

"A World in Motion" has been at SAE for a number of years, but the program keeps improving and adding new elements for elementary students. The latest initiative is Challenge 2 for seventh and eighth grade students. Middle school kids have a very low boredom threshold. There are a lot of physical and social stimuli bombarding them that have nothing to do with

learning. Challenge 2 is designed to push the right buttons and show students the practical side of problem solving that goes into modern day engineering.

Schools throughout the country continue to adopt the original "A World in Motion" for their 4th to 6th grades. This interactive learning inspires the students' interest and enthusiasm for math and science. SAE has reached more than a million children over the years. Also, more than 15,000 technical people and engineers have worked on "A World in Motion" together with teachers in all 50 states and in every province in Canada.

Industry has gotten on board by contributing money to fund "A World in Motion" kits to many schools. The list of contributors includes General Motors, Rockwell International, Toyota, Boeing McDonnell, Caterpillar, Honda North America, Eaton Corporation, Delphi and Bosch and it is growing constantly. The companies are also working side by side with SAE to put engineers into local elementary school classrooms.

SAE's "Information to Knowledge" transition is another initiative on which we have been making considerable progress during 2000. SAE has primarily been an information provider. This includes technical information contained in its papers, magazines, and meeting sessions. By adding understanding and retention to this information, SAE is moving toward the role of a knowledge provider.

Mobility practitioners need real time, interactive tools, and the technology to adapt information and current knowledge to their specific needs. SAE must provide mobility professionals with what they need to know, when they need to know it. Considering the torrent of information available on the Internet, via phone, television and other electronic devices, converting information to knowledge is a tall order.

One of the steps that SAE has taken to address the knowledge-to-information issue is virtual meetings and sections. For the aerospace community, SAE has set up a virtual section on its website that aerospace engineers throughout the world can access to keep up with current technical developments. Along the same lines, SAE is setting up remote access meetings on new automotive technology that can be watched simultaneously across the country.

Another information-to-knowledge initiative is the SAE website. The content of this award-winning site is continually being upgraded, reorganized and synthesized to ensure that the volume of information it holds is easily accessible and available in the format each user prefers. SAE members can now personalize the website to automatically access SAE's available information and display it in a format that will be most useful for them.

Another area in which SAE is changing and evolving is the support of the heavy-duty equipment industry. Without these working vehicles, there would be no roads, no runways, no cities, no agriculture and no goods to purchase. Heavy-duty vehicles are the backbone of our modern world.

The goal of all these initiatives is contained in the theme of this year's annual report, "Assuring A Technology Base for the Society of the Future." In the pages of this year's document, you will find numerous examples of how SAE is growing and evolving to make this objective happen. It is a dynamic process that relies on the abilities and creativity of the 80,000 members involved in the Society and its activities.

SAE has certainly come a long way since its humble beginnings in the early 20th century. But there is still a long road stretching away into the 21st century. To travel on this road, SAE will need to use its best efforts to change and grow, because without growth, there is no movement and without movement there is no chance to excel, to assure that SAE can build a technology base for the future.



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