## **ASEE Vision**

# **ASEE Mission**

The American Society for Engineering Education is committed to furthering education in engineering and engineering technology. This mission is accomplished by promoting excellence in instruction, research, public service, and practice; exercising worldwide leadership; fostering the technological education of society; and providing quality products and services to members.

The Society seeks to encourage local, national, and international communication and collaboration; influence corporate and government policies and involvement; promote professional interaction and lifelong learning; utilize effectively the Society's human and other resources; recognize outstanding contributions of individuals and organizations; encourage youth to pursue studies and careers in engineering and engineering technology; and influence the recruitment and retention of young faculty and underrepresented groups.

ASEE will serve as the premier multidisciplinary society for individuals and organizations committed to advancing excellence in all aspects of engineering and engineering technology education. To realize its vision, ASEE will:

- Enhance services to its members.
- Work with educational institutions to improve engineering education and promote faculty development.
- Facilitate productive collaborations among industry, academe, and government
- Increase the participation and success of underrepresented groups in the engineering profession.
- Promote the value of the engineering profession to society
- Increase membership in ASEE in order to more completely serve the engineering and engineering technology enterprise.
- Facilitate international cooperation in matters pertaining to engineering education.



## PRESIDENT'S ANNUAL MESSAGE

**BUILDING A BRIGHTER FUTURE** 

**ASEE** President Gerald S. Jakubowski



In this 2001 fiscal year ASEE annual report, I am happy to convey that ASEE is in excellent shape. The Society's fiscal status is sound, membership is stable, and services provided to members continue to expand and improve. ASEE's progress during the past year is right on course with a long-range plan charted by previous presidents and boards of directors. However, implementation of that plan requires a dedicated and committed ASEE staff, including the excellent leadership of our ASEE Executive Director, Frank Huband. On behalf of the Society membership, I thank the staff members for their commitment to ASEE and congratulate all of them on a job well done. Progress also requires the active involvement of individual members through their participation in ASEE's divisions, councils, and sections. I thank all of the officers and members of these various groups.

ASEE has particularly progressed in three main areas during the past year, and the Society's long-range plan must continue to incorporate these priorities. The three areas are industry involvement, K-12 education, and international cooperation. I will address each of these briefly, explaining actions that we've taken during the past year, progress that has been made, and our plans for the future.

#### **Industry Involvement**

We need to increase the involvement of industry in the engineering and technology education enterprise. We need to make sure that those of us in education are listening to the needs of industry and that the education we are providing students is relevant to the needs of industry. This, of course, requires a venue where educators and industrial practitioners can come face-to-face to have an open dialogue.

I am very happy to report that at our last annual conference in Albuquerque, ASEE held its

first-ever industry day. We were very fortunate to have several executives from various business sectors come to the conference, which provided the opportunity for educators to hear the needs and concerns of industry and for educators and practitioners to discuss important matters related to engineering and technology education. Several sessions were held throughout the day, including a special luncheon and dinner for our industry guests. All of the sessions drew standing room only attendance, and the day was considered a huge success. Another industry day is planned for the 2002 ASEE annual conference in Montréal.

#### K-12 Education

ASEE recognizes that it is important to take a proactive role in helping to improve the quality of K-12 education, especially as it relates to science and mathematics education. This is important for several reasons. Early engineering education helps to assure a continuous flow of students entering programs for careers in engineering and technology, and it helps to assure that students who are entering college engineering and technology programs are better prepared to undertake the rigors associated with these programs. Early education gives future engineers an edge that is important for the nation in maintaining economic competitiveness, technological innovation, and national security.

Businesses, professional organizations—including engineering professional societies—and even individual citizens have initiated programs to help improve K-12 education. However, little true assessment, if any, has been used in measuring the effectiveness of these many programs.

I am happy to report that ASEE is in the process of establishing a Center for Best Practices in K-12 Education. ASEE's center will identify and publicize programs among higher education, pre-college, government, and private-sector stakeholders that most effectively improve U.S. achievement in K-12 science and mathematics education. Through the center, ASEE will identify programs that are directed at improving K-12 science and mathematics education and will conduct research to assess measures of effectiveness of these outreach programs. This will require a tremendous effort on the part of ASEE, and it will take some time to get the center fully off the ground. However, ASEE intends on easing into this gradually by focusing initially on K-12 programs currently being offered by universities. As a matter of fact, ASEE has already started a Web site that contains over 100 programs currently being offered to improve K-12 science and math education.

#### **International Cooperation**

ASEE will continue its expansion into the global arena and make its presence known internationally by getting actively involved in international engineering education conferences. I am happy to report that ASEE, along with our European counterpart, the European Society for Engineering Education, and the Technical University Berlin, planned on hosting the first-ever International Colloquium on Global Changes in Engineering Education in Berlin, Germany, in September. Unfortunately, the events of September 11th caused the colloquium to be cancelled. Nevertheless, this was a major step forward for the Society. The international colloquium has been rescheduled for this fall, and ASEE will continue to be involved in the global

enterprise of engineering education.

Failure of any organization to recognize and adapt to change will lead to its demise. I believe that the ASEE board of directors is very insightful and is able to recognize important changes and challenges on the horizon. I also am confident that ASEE will continue to be a vibrant organization. It is well-positioned to address any challenges with its highly qualified and motivated staff.

The strength of any organization also is dependent upon the involvement of its members. ASEE is a very complex organization made up of several microcosms including councils, divisions and PICs, sections and zones, and the board of directors. It is an organization that is run by many, many members who volunteer their valuable time to serve as officers of these various microcosms. I am always truly amazed at all of the members who are willing to volunteer their time, to take leadership roles, to serve as officers, and to make the organization a little better than it was before. I thank all of our volunteer members for the valuable service that you provide to this great Society. I am confident that ASEE is well positioned to address any challenge with the combined strength of its dedicated members.

Gerald S. Jakubowski
President

## EXECUTIVE DIRECTOR'S MESSAGE

### LOOKING BACK, MOVING AHEAD

**ASEE Executive Director Frank L. Huband** 



I am always pleased with the opportunity to summarize the accomplishments of the past year. An annual report, of course, can only present a snapshot of what has happened—what has come to fruition over the past 12 months reflects the planning and work that has spanned several years. Last year's accomplishments were numerous, and all were made possible with the fine support of ASEE's members.

#### **Improved Services to Members**

ASEE has a strong membership base and a fine core of committed volunteers who give generously of their time and interest. Serving the membership remains our top priority, and we continue to seek ways to improve and augment services for our members.

#### Prism magazine

*Prism* magazine is the number one preferred membership benefit. Last year, the magazine continued to improve both visually and in content. Changes included cover stories of greater depth, more profiles of engineers, both in education and industry, and more stories about women and other minorities in engineering. *Prism*'s new art director added more photography and gave the magazine a streamlined and sophisticated look. These changes were key to a banner year for *Prism*, which garnered 12 awards in 2001.

#### **Membership Database**

Last year, the membership department refined and augmented the contents and structure of the new ASEE membership database, which contains over 45,000 names of members, lapsed members, and potential members. The department worked to complete the database so that customized direct mail campaigns could be initiated. Work on the database required identifying departments and department heads at all U.S. engineering colleges, implementing a program to maintain the accuracy of lapsed member and non-member records, and identifying needed modifications and enhancements. This database is central to development of future ASEE strategic marketing plans.

The Spread the Word campaign, Deans Program, and Industrial Advisory Board Program were all successful, and two new student chapters were established at Northwestern University and Ohio Northern University.

#### **Annual Conference**

The ASEE annual conference in June was a success. It was well attended, and the plenary speaker, Dean Kamen, was highly regarded. There were also some big challenges in Albuquerque. The bus company hired to transport meeting participants went bankrupt, and at registration, there was a total meltdown of the registration company's software. I am happy to say that everyone performed with grace—attendees for the most part were very understanding, and the staff worked round the clock to cope. As it turned out, Albuquerque was one of ASEE's best meetings. There were increases in exhibitors, sponsorship, and picnic participation. With electronic submission, more abstracts and papers were submitted than ever before, and the multi-media session gave close to 200 authors a poster session in which to deliver their papers.

#### Web site

ASEE's Web site contains a wide array of contents both for our members and the public. The MIS department and our Web manager continued to work to redesign and polish the site during 2001. The goals remained easy navigation, intuitive organization, and visual appeal. Online features were added to aid our members, such as online classified advertisement submission, conference registration, and payment systems. MIS implemented an automated section and division listserv process, which updates members' e-mail addresses weekly. In addition, MIS upgraded the pre-college site, which is the most visited subsection.

#### **Finances**

ASEE's finances are in good order, and ASEE's accounting department achieved two clean annual audits, as well as a clean DCAA billing system audit. Accounting ensured that ASEE remains in compliance with local and federal tax laws and secured tax-exempt status in the District of Columbia for Tau Alpha Pi, the national engineering technology honor society.

#### Government programs and fellowships

The projects department administered education-related programs for federal sponsors in 2001, as it has done for almost 40 years. ASEE benefits financially from the administrative fees and through indirect cost recovery, which in turn help pay for services to ASEE's members.

For the second year, ASEE administered the National Defense Science and Engineering Graduate (NDSEG) Fellowship Program, the largest single contract ASEE manages. NDSEG expanded dramatically as DOD increased its support by \$18 million and added nanotechnology to its list of supported disciplines.

Other programs that the projects department administered include the ONR Summer Faculty Research Program, ONR Postdoctoral Fellowship Program, ARL Postdoctoral Fellowship Program, NASA/Helen T. Carr Fellowship, and the 2001 Future Truck Challenge.

#### **Public Policy**

The public affairs department continued to represent the interests of engineering educators in a broad range of Washington policy arenas and monitored and supported appropriations and other Congressional activities that bear on engineering research and education. The public affairs department sponsored a K-12 engineering college activity at the Coalition for National Science Funding Capitol Hill reception and cosponsored the Coalition for National Security Research briefings on the Hill.

The public affairs department staffed the Engineering Deans Council, and in February the deans held a very successful Engineering Deans Council Public Policy Colloquium. One hundred twenty-six deans from 41 states attended, an indication of the growing interest of the U.S. engineering deans in participating in public policy activities in Washington.

#### **Data Collection**

In the surveys and statistics area, survey participation increased substantially. In the 2000 survey cycle, 346 schools reported data—up from 270 in 1999. The survey staff implemented quality control procedures resulting in a dataset of the highest quality.

#### **Continuing Education**

Learnon.org, ASEE's continuing education site, grew from a small- scale continuing education database to a full engineering/IT career resource with more than 6,000 courses and 100 providers. Learnon currently receives 71,000 hits and 4,400 visitors a month.

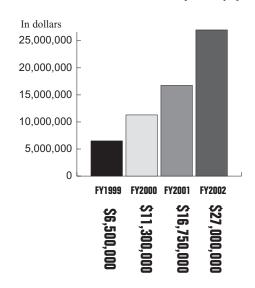
#### **Awards Program**

The 2001 ASEE awards program was successfully managed by the administrative services department, which published information on the 2001 awards recipients—including national, council, section, and division awards—on the ASEE Web site. The administrative services department assisted ASEE units in establishing new awards and worked closely with Agilent Technologies on the Robert G. Quinn Award, which was presented for the first time at the annual banquet in Albuquerque.

#### International Colloquium

Last year, ASEE, in collaboration with the European Society for Engineering Education (SEFI) and the Technical University Berlin, worked to launch ASEE's first international meeting outside the United States, which seemed headed for success. The terrible events of September 11th foreclosed the activity for 2001, but we have now rescheduled this meeting for October 1-4, 2002, in Berlin.

## ASEE Projects Income Federal and Privately funded projects



## Center for Best Practices in K-12 Science and Math Education

The development of ASEE's Center for Best Practices in K-12 Science and Math Education has drawn considerable interest. A K-12 Web site for the center was developed, which offers a database of over 100 programs in K-12 science and math programs.

As I indicated at the beginning, I am pleased to share a few of the highlight accomplishments of last year. The staff worked hard, but we appreciate that all was achieved with the interest and generous support of the ASEE membership. Thank you for your contribution in helping the Society realize ASEE's vision to advance excellence in engineering and engineering technology.

Frank & Hubard

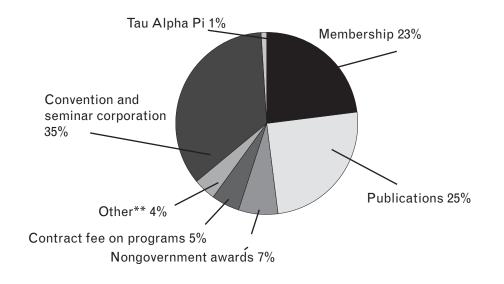
Frank L. Huband Executive Director

#### Revenue

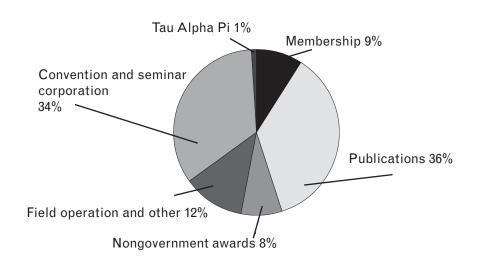


Revenue	FY2001	FY2000
Membership	\$946,146	\$942,836
Publications	1,038,659	884,905
Nongovernment awards	304,479	486,290
Contract fee on programs	216,838	161,106
Other**	183,059	471,803
Convention and seminar corporation	1,475,108	1,217,525
Tau Alpha Pi	26,683	25,860
TOTAL	\$4,190,972	\$4,190,325
Expenses		
Membership	\$377,092	\$422,108
Publications	1,507,452	1,518,453
Nongovernment programs	324,619	511,395
Field operations and other	501,977	331,618
Convention and seminar corporation	1,406,323	1,245,112
Tau Alpha Pi	34,448	23,451
TOTAL	\$4,151,911	\$4,052,137
Change in Net Assets	\$39,061	\$138,188

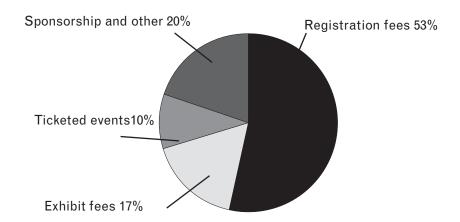
<sup>\*\*</sup>INCLUDES A \$124,241 UNREALIZED CAPITAL LOSS ON INVESTMENTS IN FY 2001 AND \$91,688 UNREALIZED CAPITAL GAIN IN FY 2000.



#### **Expenses**



#### Revenue

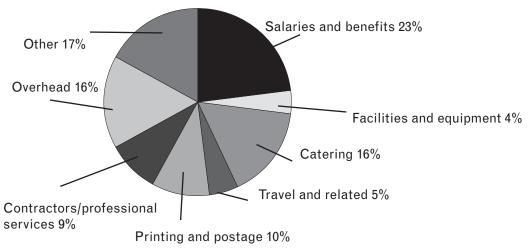


## **ASEE Convention and Seminar Corporation**

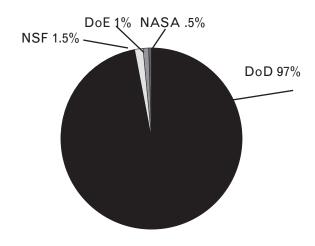
For the Fiscal Years Ended September 30

Revenue	FY2001	FY2000
Registration fees	\$790,154	\$745,185
Exhibit fees	248,937	188,416
Ticketed events	143,000	100,575
Other	293,017	183,349
_ TOTAL	\$1,475,108	\$1,217,525
Expenses		
Salaries and benefits	\$ 328,936	\$323,714
Facilities and equipment	58,566	132,069
Catering	223,287	226,817
Travel and related	63,438	58,384
Printing and postage	138,069	83,168
Contractors/professional services	132,317	112,546
Overhead	226,448	191,358
Other	235,262	117,056
TOTAL	\$1.406.323	\$1.245.112

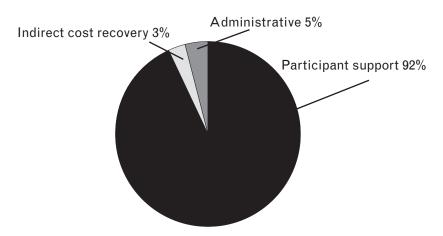
#### **Expenses**



#### Revenue



#### **Expenses**



#### **Federal Awards**

FOR THE FISCAL YEARS ENDED SEPTEMBER 30

Revenue	FY2001	FY2000
Department of Defense	\$15,947,597	\$10,596,752
National Science Foundation	175,537	77,090
Department of Energy	223,000	80,833
NASA	77,423	78,430
TOTAL	\$16,423,557	\$10,833,105

#### **Expenses**

	TOTAL\$16.423.557\$	10.833.105
Administrative	753,204	636,980
Indirect cost recovery	492,520	412,585
Participant support	\$15,177,833	\$9,783,540