



When We Work Together, Success Comes

By Eduardo Salas, HFES President



Former President Bill Clinton came to the University of Central Florida (UCF) in May to deliver a commencement speech—at his own request. You see, he is a fan of UCF; he claims he is “UCF’s most ardent, unpaid flack.” In his brief speech he told us “the successes of UCF are all a testimony to the fact that no matter how smart we are, how righteous we are, how close to the truth we are, we all do better when we work together. Success comes.”

He was so right, I thought. There is nothing like collaboration for a common goal and good—that helps in overcoming any obstacle to success. When academia, government, and industry come together, success comes indeed. After some reflection, I thought this applies not only to UCF but also to our field—HFES! That is the core of who we are, and a part of our soul. We are a multidisciplinary group of scientists and practitioners from academia, government, and industry who come together to improve human-system integration in organizations . . . a tall order that we do every day against overwhelming odds (e.g., invited to the “table” after the fact) and with some success (e.g., Cannon-Bowers & Salas, 1998; Cooke & Durso, 2010). When we as a science-based Society work together, success also comes.

But despite our progress and achievements, more is needed. A banking organization’s slogan I once read emphasized “Success demands more.” That is true in our case as well—we need more. Your Executive Council works to increase our visibility, credibility, and viability as a science and practice. We know that when we work together, we succeed. But I submit that to continue on the path to success (and regain our lead position in the “parade,” as the late Bill Howell reminded us in his 2005 presidential address), we must be *energized* ourselves and energize others. We must *engage* in supporting what HFES does and represents. We need to continue to *educate* ourselves and those around us. We must *enjoy* our success and impact. And we must *embrace* other disciplines and work more with them, demonstrating what we do and that we make a difference. These five E’s are needed, in my opinion, so that we can work better as a collective in pursuit of a common goal through our science and practice. These five E’s should embody our soul and what we do. A few more words on these.

Energize. Yes, we need to be energized as a science and practice. This requires the creation of activities, policies, and incentives for undergraduate and graduate students, our scientists, our practitioners, our sponsors, our entrepreneurs, and our policy makers that energize them and attract them to us. We need passionate cheerleaders, champions, and believers in who we are as a discipline and what we do and offer to the world. All of us should be energized by our profession. If not, tell us (the Executive Council) how we can be better at this. We need all of you to be energized.

Engage. Yes, we all need to participate—and be engaged! *Engage* means to get involved, and we need to be engaged in what we do and what we stand for as HFES. Engagement is a must in our TGs, our annual meeting, our universities, labs and companies, our agencies. Tell us how

we can get you engaged. All of us should participate in some way or fashion in what we do. We want you to care and be engaged.

Educate. Yes, this is a journey—to continue to educate not only ourselves but also the public, policy makers, politicians, executives, investors, and agencies. We need to share the message that we have a robust science that can inform practice (and vice versa). Help us here as well. The Executive Council continues to seek advocates to do this.

Enjoy. Why not? Let's have fun while we do what we do. And make sure others have fun too. Why not enjoy when we make an impact or when we make a difference in people's lives?

Embrace. We live in an interdisciplinary world. The more we reach out to those in other disciplines, the better it is for all of us. From organizational and learning science to anthropology, biology, and others, we need to welcome these professionals in related fields. Partners will not only teach one another but also learn something new from one another as well.

Working together. We succeed when we all come together. And despite our differences and challenges as members of a multidisciplinary science and practice, we will always succeed as a collective when we think as such.

As your President in this brief year's term, and with the help of the EC, I will focus my efforts, along with you, on creating a culture in which these five E's become part of us. A culture in which we work together and succeed. When academia, government, and industry work together, we all succeed. When we are energized, engaged, enjoying, embracing others, and educating ourselves and others, HFES succeeds.

I invite you to do just that.

References

- Cannon-Bowers, J. A., & Salas, E. E., Eds. (1998). *Making decisions under stress: Implications for individual and team training*. Washington, DC: American Psychological Association.
- Cooke, N. J., & Durso, F., Eds. (2010). *Stories of modern technology failures and cognitive engineering successes*. Boca Raton, FL: CRC Press.

PUBLIC POLICY MATTERS

HFES Meets With Policy Makers on Capitol Hill

By Deborah A. Boehm-Davis, Chair, Government Relations Committee, and Lewis-Burke Associates LLC

On March 24–25, HFES launched its first direct interaction with Capitol Hill coordinated by the Society's government relations firm, Lewis-Burke Associates LLC. This foray to meet with congressional staffers was led by me, Executive Director Lynn Strother, and HFES Executive Council Member Cheryl Bolstad, along with Lewis-Burke representatives. The effort began with a strategy session and discussion on approaches with Democratic and Republican staff to begin a new chapter in HFES advocacy.

The main goal of these meetings was to introduce HFES to Capitol Hill policy makers and to raise visibility of how human factors/ergonomics (HF/E) work cuts across the federal agencies. In these tight fiscal times, it is especially important to engage with Capitol Hill staffers who shape the policy that affects HFES members. During the meetings we highlighted how HF/E has a real impact for the betterment of society. We wanted to emphasize that HF/E is supported by diverse federal funding agencies but that our science is not explicitly mentioned in legislation authorizations. Finally, we wanted to ensure that policy makers would be able to access HFES expertise in the future; for example, requesting feedback on legislation or inviting HFES members to appear as witnesses for relevant congressional hearings.

Over the two days, HFES met with both Republican and Democratic staff from six committees and subcommittees in both the House of Representatives and Senate. These committees all have specific issues and federal agencies to manage.

- Senate Commerce, Science, and Transportation Subcommittees on Science and Space, Aviation, and Consumer Protection
- House Appropriations Subcommittee on Commerce, Justice, and Science
- House Science, Space, and Technology Subcommittees on Research, Space, and Technology
- House Transportation and Infrastructure Subcommittees on Aviation and Highways and Transit
- House Energy and Commerce Subcommittee on Health (Republican staff only)

The time spent on Capitol Hill was invaluable in raising the visibility of HFES with key policy makers. The Society delegation was introduced to a large number of congressional staff. We will continue to build these relationships going forward to ensure that policy makers remain aware of the importance of HF/E and that they engage HFES on relevant issues. We see this activity as key to developing and delivering HFES priorities as identified by HFES President-Elect Francis Durso in his [May 2013 HFES Bulletin article](#).

We would like to thank Cheryl Bolstad and Lynn Strother for the time and energy they contributed to these meetings.

Deborah A. Boehm-Davis is University Professor in Psychology and incoming Dean of the College of Humanities and Social Sciences at George Mason University in Fairfax, Virginia. She holds an MA and PhD in cognitive psychology from the University of California, Berkeley and an AB in psychology from Rutgers University (Douglass College).

INSIDE HFES

2013 Human Factors Prize for HF/E In Social Media Deadline Extended to July 15

By William S. Marras, Editor in Chief, and Nancy J. Cooke, Chair, Human Factors Prize Board of Referees



NEW!

The submission deadline for the \$10,000 Human Factors Prize has been extended to July 15, 2013. The topic for the 2013 Human Factors Prize is **the human factors/ergonomics (HF/E) of social media.**

Topic

We seek articles that describe HF/E research that pertains to the effective and satisfying use of social media. Social media is broadly defined to include technology that supports communication among individuals, organizations, or communities. Examples include e-mail, Facebook, Twitter, blogs, wikis, LinkedIn, instant messaging, Skype, internet meetings, and collaborative games. This technology can be used to communicate professionally or personally.

We are not seeking examples that apply HF/E/usability to the design of such technology, which may be more suitable for a venue such as *Ergonomics in Design*. Rather we are seeking contributions to the science of human factors/ergonomics that involve social media. Suitable sample topics include effects of communication modality on comprehension of messages, effec-

tive ways to integrate social media into emergency response or health care coordination or education, use of social network data for HF/E applications, and human factors of computer-supported cooperative work.

Submissions (research articles or extended multi-phase studies are welcome) must adhere to the [policies of general submissions](#) to *Human Factors*. This includes length restrictions, originality, and formatting. For additional details, including a link to submit a paper for the 2013 Prize, go [here](#).

Background

In 2010, the Human Factors and Ergonomics Society instituted The *Human Factors Prize*, which recognizes excellence in HF/E research through an annual competition in which authors are invited to submit papers on a specific topic for that year. The topic is selected by the editor in chief in consultation with a Board of Referees chaired by Past Human Factors Editor Nancy J. Cooke. The prize carries a \$10,000 cash award and publication of the winning paper in the Society's flagship journal, *Human Factors*.

Board of Referees

This year's Board of Referees includes a distinguished group of HF/E researchers and practitioners.

Continuing Board Members:

- Nancy J. Cooke (Chair), PhD, Professor of Cognitive Science and Engineering, Arizona State University, and Science Director, Cognitive Engineering Research Institute
- John D. Lee, University of Wisconsin, Madison
- David Rempel, University of California, Berkeley

Social Media Board Members:

- Laurie Damianos, Mitre Corp.
- Jonathan Grudin, Microsoft Research
- Sara Kiesler, Carnegie Mellon University

Examples from Past Issues of *Human Factors*

The following papers on subject matter related to the 2013 Prize topic illustrate the types of Prize submissions we are seeking.

Fussell, S. R. (1995). Social and cognitive processes in interpersonal communication: Implications for advanced telecommunications technologies. *Human Factors*, 37, 228-250.

<http://hfs.sagepub.com/content/37/2/228.abstract>

Park, S., & Catrambone, R. (2007). Social facilitation effects of virtual humans. *Human Factors*, 49, 1054-1060.

<http://hfs.sagepub.com/content/49/6/1054.abstract>

Champness, B. G. (1973). Attitudes toward person-person communications media. *Human Factors*, 15, 437-447.

<http://hfs.sagepub.com/content/15/5/437.abstract>

Green, C. A., & Williges, R. C. (1995). Evaluation of alternative media used with a groupware editor in a simulated telecommunications environment. *Human Factors* 37, 283-289.

<http://hfs.sagepub.com/content/37/2/283.abstract>

Candidates for 2013 Election of Officers and Executive Council Members

The nomination ballots have been recorded, and the candidates listed below have agreed to run for office.

President-Elect

Andrew S. Imada, A S Imada & Associates
Scott A. Shappell, Embry-Riddle Aeronautical University
Joel S. Warm, U.S. Air Force Research Laboratory

Secretary-Treasurer-Elect

James P. Bliss, Old Dominion University
S. Camille Peres, Texas A&M University
Esa M. Rantanen, Rochester Institute of Technology

Executive Council Member At Large

Petra Alfred, Pacific Science & Engineering Group
Beth Blickensderfer, Embry-Riddle Aeronautical University
Bruce Bradtmiller, Anthrotech
Pascale Carayon, University of Wisconsin, Madison
Paul Green, University of Michigan Transportation Research Institute
Linda G. Pierce, Federal Aviation Administration

For the upcoming election of officers, members will be directed to a secure online site hosted by VoteNet Solutions, Inc., a third-party supplier of election services to professional organizations. VoteNet will also supervise the return of ballots sent via postal mail. Barring any unforeseen delays, the election will open on **July 2** and close on **August 2**.

Voting members who would like to opt out of online voting may call the HFES central office at 310/394-1811 or e-mail membership@hfes.org. All voting members should ensure that the e-mail address is current in their member records. Log in at hfes.org to check your record. If you have forgotten your user name and password, please contact the Central Office.

HFES Division Spotlight: Technical Standards

By Bruce Bradtmiller, Chair, Technical Standards Division

[Throughout the year, the HFES Bulletin will feature brief reports on progress within the Society's five divisions: Internal Affairs, Outreach, Professionalism, Scientific Publications, and Technical Standards.]

Wait a minute! Technical Standards Division? Where did that come from? As it turns out, we've been here all along, just under a different name.

When the Society instituted the division structure, all the standards-making activity was centralized under a division called "HFES Institute," which was also set up to accept donations intended to support standards-making activity. As time went on, however, and members got used to the idea of divisions, we found that the name HFES Institute Division was not descriptive of the work that we do and was the source of more confusion than clarity. That being the case, at the 2013 midyear meeting, the Executive Council changed our name to the Technical Standards Division.

Developing and maintaining standards is what we do, and we hope that will be clearer to the membership with our new name. However, just so you know, the Institute itself is still going strong, and if you or your employer wants to make large or small gifts to the Institute, they are still tax deductible and will still go toward support standards work!

HFES Standards

There are two broad components of standards work supported by HFES. We have U.S. standards, which are issued under the auspices of the American National Standards Institute (ANSI), and we participate in international standards by representing ANSI for U.S. participation in the International Organization for Standardization (ISO). Our first standard, ANSI/HFES 100 *American National Standard for Human Factors Engineering of Visual Display Terminal Workstations*, was published in 1988. It was revised for a 2007 edition (*Human Factors Engineering of Computer Workstations*) and is under revision again to include updated research and best practices, as well as taking into account accessibility for people with disabilities. It is our most popular standard and is widely used in industry. There are chapters on installed systems, input devices, visual displays, and furniture and integration. The work has been led by Thomas Albin and, after the revision, will transition to Michael Bartha. Expert help and input is always welcome, and those interested can contact either [Tom](#) or [Michael](#).

The second U.S. standard is ANSI/HFES 200, *Human Factors Engineering of Software User Interfaces*, published in 2008. This significant work is in five parts, including an introduction followed by sections on accessibility, interaction techniques, interactive voice response, and visual presentation and use of color. The standard is harmonized with—but does not duplicate—appropriate sections of ISO 9241, *Ergonomics of Human System Interaction*. Paul Reed is organizing the review, and the update process for ANSI/HFES 200 has started already, with a draft anticipated later in 2013.

HFES Participation in Other Standards

Unlike other countries, the United States does not have a government-based standards office; that work falls to nongovernmental organizations such as ANSI. Given that ANSI doesn't have specific scientific expertise on its own, it relies on other organizations, such as HFES, to provide the subject-matter expertise to represent the U.S. position on many different technical areas. Therefore, HFES participates in ISO human factors standards work by representing ANSI, and thus the United States, on ISO Technical Committee 159 "Ergonomics." When approving new standards or revising old ones, each member body, such as ANSI, gets one vote. This means that our vote counts as much as, for example, Denmark's, even though the population sizes and potential national impacts are very different. Voting aside, however, the best way to influence a standard is well before the voting phase. U.S. experts, typically from the HFES membership, have been very active in writing and revising human factors standards, making sure that U.S. opinions are heard. By forging collegial relationships with experts from other countries, we find that our opinions and expertise are welcomed.

There are too many ISO human factors standards to describe individually, but I'll highlight a few recent changes. Daryle Gardner-Bonneau has been working very hard with the group revising an application guideline for the ISO guide on older persons and persons with disabilities. This has been a difficult task because of some disagreements among the various national representatives. We anticipate that during 2013 this guide will either move forward fairly dramatically or the project will be dropped. Daryle is also the key U.S. expert and Convener of a new working group on process standards. HFES Executive Director Lynn Strother has been appointed as Secretary of that group, meaning that HFES is responsible for tallying votes and making sure that documents progress on schedule. It's a big task, but HFES staff and experts are up to the challenge!

On the anthropometry side, I'm one of the U.S. experts and have been appointed as liaison to ISO Technical Committee 133, which has to do with standardizing the sizing of clothing. I think there is little hope of any U.S. manufacturers or retailers adopting a worldwide sizing standard, much as American consumers might appreciate it. But we will try to get agreement on some anthropometric definitions between the ergonomics committee and the clothing committee. If we can do that, we'll have accomplished a great deal.

Finally, it's time for the U.S. to provide comments on ISO 10075-3, *Ergonomic principles related to mental workload—Part 3: Principles and requirements concerning methods for measuring and assessing mental workload*. I know we have a number of mental workload experts in the HFES membership. It would be extremely helpful to have some of you volunteer to review this draft and provide comments. To help out, please contact [me](#) or [Daryle Gardner-Bonneau](#).

Bruce Bradtmiller has worked in the field of applied anthropometry for 30 years. He is president of Anthrotech, Inc., a small consulting firm specializing in collecting, analyzing, and applying anthropometric data. He is an appointed U.S. expert to ISO Technical Committee 159, Ergonomics.

Proposals Invited for Specialized Events and Meetings

By Anthony D. Andre, Chair, Specialized Events Committee

The Specialized Events Committee was formed to develop events that promote our members, the Society, and the profession and that help to disseminate the latest in HF/E science, guidelines, and best practices in areas that represent current “hot topics” throughout the world.

The events planned by this new committee would generally be separate from the HFES Annual Meeting and shorter in duration (one to three days), although an event could also be scheduled to precede or follow the Annual Meeting. Many of these events would take the form of workshops, one- or two-day summits, or miniconferences. They are also intended to be focused events—typically on one topic or domain—and to attract attendees from both within our profession/Society and among professionals in related fields who could make use of our science, knowledge, and techniques.

The HFES International Symposium on Human Factors and Ergonomics in Health Care, now in its third year, is an example of a larger specialized event, but we are equally interested in smaller gatherings. I am currently soliciting specialized meeting/event topics from members via a [proposal template](#). Please note that the proposed event on any proposed topic should, at a minimum, achieve the following:

- provide HFES members with opportunities to increase their visibility by disseminating their science or practice expertise to those outside our profession (end-users). Speakers need not be HFES members;
- be focused on a single topic or domain;
- be no less than one and no more than three days in length;
- not compete with the Annual Meeting program; and
- be low-risk from a financial perspective and enable HFES to make a profit (thus seeding more future events or other HFES initiatives).

I welcome your proposals. If you have any questions, please contact me [directly](#).

HFES Executive Council Midyear Meeting Report

The HFES Executive Council, Division Chairs, and senior staff met March 22 and 23 in San Diego, California, to discuss new initiatives, review the accomplishments and plans of committees and divisions, and consider priorities for the future. (See a list of all Executive Council Members and other leaders [here](#), along with the HFES Organization Chart.)

Joining the meeting for a half-day strategic-planning session were Barry H. Beith and Patricia R. DeLucia, members of the Policy and Planning Committee, which was described by Chair Francis T. Durso in the [April Bulletin](#). The session, which focused on defining strategic priorities, helped to inform the Council's discussion and decisions during the rest of the meeting.

Council Committees

Committees, task forces, and individuals reporting directly to the Executive Council include the president and executive director, as well as the following:

- Executive Committee, Eduardo Salas, Chair
- Finance and Budget Committee, Kermit G. Davis, Chair
- Meetings Policy Committee, Francis T. Durso, Chair
- Nominations and Elections Committee, Barrett S. Caldwell, Chair
- Policy and Planning Committee, Francis T. Durso, Chair
- Web Site Advisory Committee, Anthony D. Andre, Chair
- Design Competition Task Force, Anthony D. Andre, Chair
- Health-Care Meeting Task Force, Anthony D. Andre, Chair
- Federal Spending Impact Task Force, Nancy J. Cooke, Chair
- Futures Task Force, Waldemar Karwowski, Chair

President Eduardo Salas kicked off the meeting with a call to action focused on engaging members, energizing students and early-career professionals, and educating the public and government decision makers about the value of our field and the importance of what we do. (See the [article by Salas](#) in this issue.) Salas highlighted efforts to introduce innovation at the annual meeting and to plan for the HFES of the future.

Secretary-Treasurer Kermit Davis reviewed information provided by HFES Executive Director Lynn Strother on the Society's finances and the challenges HFES faces in this era of restricted travel and funding cutbacks. The Council reviewed plans for contingencies and recognized the importance of maintaining sufficient reserves to ensure that operations are sustained in this environment. Also highlighted was the need to develop new meetings, such as the Society's successful health-care symposium, as a way of delivering value and creating revenue streams. A summary of the revised budget recommended by the Finance and Budget Committee and adopted by the Council appears at the end of this article.

The Meetings Policy Committee, chaired by Frank Durso, recommended a new policy, subsequently approved by Council, to give the HFES president a greater role in the selection of keynote speakers for the Annual Meeting. Council received reports on the successful 2013 Health-Care Symposium (Andre), the effect of federal spending decisions on the academic pipeline (Cooke), and current activities and plans to update the HFES Web site (Andre).

Council approved Philadelphia as the site of the 2018 Annual Meeting.

Internal Affairs Division

The Internal Affairs Division (David C. Kaber, chair) covers activities and groups devoted to enhancing the value of HFES membership through the parent society, its annual meeting, and

its components (local, regional, and student chapters, and technical groups). Carlos de Falla, director of Member Services, serves as staff liaison to this division and its committees, as follows:

Annual Meeting Host Committee, Nancy Heacox, 2013 Chair
Chapter Affairs Committee, Frederick Rudolph, Chair
Council of Technical Groups (COTG), Caroline Cao, Chair
Early-Career Professionals Committee, Josh Hoffman and Enid Montague, Cochairs
Technical Program Committee, Christopher B. Mayhorn, Chair
Special Meetings Committee, Anthony D. Andre, Chair
Student Affairs Committee, Kim Vu, Chair
Student Support Task Force, Kermit G. Davis, Chair

The division is supporting a number of activities, including the transition to providing chapters with additional staff support for dues collection and accounting, providing Annual Meeting travel assistance to students through the technical groups and the COTG, attending to the needs of early-career professionals, and creating new opportunities for topical conferences sponsored by HFES (see the [article](#) by Andre). Council discussed how HFES components and their officers can be better trained and supported through webinars and other mechanisms, and how our meetings can be enhanced to meet the education and networking needs of professionals and students. De Falla presented the division report and updated the Council on staff activities to attract and retain members.

Outreach Division

The HFES Outreach Division is chaired by Scott Shappell and includes the following committees:

Government Relations, Deborah A. Boehm-Davis, Chair
International Ergonomics Association (IEA) Representatives, William S. Marras, Chair
Public Outreach, Gary Orr, Chair
Social Networking Operations, Maryam Ashoori, Chair

Representatives of Lewis-Burke Associates (L-B), the Society's Washington, D.C.-based government relations consultants, joined the meeting via teleconference. The team, led by Wendy Naus, described the group's efforts on behalf of HFES since the Annual Meeting, many of which have been detailed in [previous *Bulletin* articles](#). Council engaged in a broad-ranging and comprehensive discussion of the current environment in the federal government and provided input to activities and initiatives, including visits to Capitol Hill in May ([see related article in this issue](#)). The group is planning a webinar for HFES members in the near future and an advocacy training session at the Annual Meeting in San Diego. Future issues of the *Bulletin* will provide details on these and other efforts to continue to acquaint Congress and federal agencies on the value of the discipline and the need to incorporate HF/E into a wide variety of initiatives.

Council reviewed the activities of the committees within the division, commending the newly created Public Outreach Committee for plans to participate in the 2014 USA Science and Engineering Festival and to continue supporting National Ergonomics Month. Council also expressed appreciation for the work of the Social Networking Operations Committee and staff efforts to reach out through LinkedIn, Twitter, and other vehicles. The value of HFES's external organizational relationships were discussed, and a future in-depth look will take place regarding how to maximize that value.

Professionalism Division

S. Camille Peres chairs the Professionalism Division, which seeks to enhance and acknowledge the professional standards and activities of the Society and its members through the following committees:

Accreditation Committee, Patricia R. DeLucia, Chair
Awards Committee, Michelle M. Robertson, Chair
Education and Training Committee, Nancy Stone, Chair
Fellows Selection Committee, Carol Stuart-Buttle, Chair
Webinar Series, Christina Mendat, Chair

Peres reviewed progress on a number of fronts, including greater involvement for HFES Fellows, surveying members regarding their education and training needs, and support for the webinar series. Council approved two new awards for early-career professionals (watch for details in an upcoming *Bulletin* issue) and finalized policy guidelines for the *JCEDM* Best Paper Award.

Scientific Publications Division

C. Melody Carswell serves as chair of the Scientific Publications Division and its Scientific Publications Committee, which oversees the following publications:

Ergonomics in Design, Carol Stuart-Buttle, Editor
Human Factors, William S. Marras, Editor
Journal of Cognitive Engineering and Decision Making, Amy R. Pritchett, Editor
Reviews of Human Factors/Ergonomics series, Douglas H. Harris, Editor

Council received reports from Communications Director Lois Smith as well as the editors of all the aforementioned periodicals. Council discussed the challenges and opportunities posed by the open access (OA) movement and was briefed by Lois Smith on the scholarly publishing community's recent response to developments in this area, most notably the policy statement by the Office of Science and Technology Policy (OSTP). Council also discussed how to increase the impact of our journals, the best venue for review articles, and the optimal policies on author OA fees. The division will be keeping Council and the membership apprised as policy in these areas is developed, both internally and externally.

Carswell reminded the Council that Bill Marras's term as *Human Factors* editor will be expiring at the end of the year and that a search for a new editor is under way. The division is also planning a "Meet the Editors" session for the HFES 2013 Annual Meeting.

Technical Standards Division (formerly HFES Institute Division)

Chaired by Bruce Bradtmiller, the Technical Standards Committee covers standards development groups within HFES operating at the national ([ANSI](#)) and international ([ISO](#)) levels. The division includes a Board of Supervisors, which reviews the standards enterprise and looks for new opportunities for HF/E standardization. (Also see [Bradtmiller's article](#) in this issue.) Included in the division are the following groups and their chairs:

[HFES 100](#) – Thomas J. Albin, Chair
[HFES 200](#) – Paul S. Reed, Chair
ISO Standards Committees – Daryle Gardner-Bonneau, Chair
U.S. Technical Advisory Group (TAG) to ISO/TC 159 – Ergonomics, Daryle Gardner-Bonneau, Chair
U.S. TAG to ISO/TC 159/SC 1 and SC 5, Daryle Gardner-Bonneau, Chair
U.S. TAG to ISO/TC 159/SC 3, Robert R. Fox, Chair

All standards groups provided progress reports to the Council on their activities. Thomas Albin and Paul Reed informed Council members that their committees are working on revisions/updates to the existing standards. As the administrator of U.S. Technical Advisory Groups to International Standards Organizations committees, HFES facilitates the work of experts and stakeholders alike to ensure that international standards reflect the state of knowledge and practice in the field. Bradtmiller reported to the Council on efforts to encourage authors of HFES journal articles to cite relevant standards wherever applicable. Visit the HFES [standards Web page](#).

2013 Revised Budget Summary

INCOME

Membership dues	650,000
Member Services	36,100
Communications/pubs	366,050
Meetings	502,980
Technical Standards	20,500
<u>Misc Income</u>	<u>15,100</u>

TOTAL INCOME **1,590,730**

EXPENSE

Member services	17,800
Communications/Pubs	149,925
Administrative	957,116
Committees/officers	221,400
Meetings	214,600
Technical standards	56,095
<u>Interorganizational</u>	<u>40,126</u>

TOTAL EXPENSE **1,657,062**

EXCESS OF RECEIPTS **-66,332**

OVER EXPENSES

2013 HFES Salary Survey Available

In late May, HFES released the results of its 2013 Salary and Compensation Survey. The results show an average 8% increase in base salary for human factors/ergonomics professionals, from \$103,376 in 2009 to \$111,762 in 2011.

In 16 tables, the survey report describes members' demographic data (region, market sector, degree held/discipline, degree/years of experience, years since highest degree, population, and employment size), as well as total pay summary statistics by those same characteristics.

Summary tables include the following:

- Profile of Survey Respondents by Region; Market Sector; Degree and Discipline; Degree and Total Experience; Employment Size
- Total Pay Summary Statistics by Region (Employees and Consultants)
- Contract Earnings Summary Statistics by Market Sector
- Mean and Median Total Pay by Region and Highest Degree Earned
- Mean and Median Total Pay by Region and Years of Experience
- Summary of Total Pay by Experience (Employees and Consultants)
- Mean and Median Other Annual Cash by Market Sector
- Summary of Benefits (health insurance, paid time off, retirement accounts) by Market Sector.

Also reported are somewhat optimistic trends in the HF/E employment and business environments: About 40% of the participants reported that employers have not laid off staff or don't anticipate layoffs, nor do they expect hiring or salary freezes.

The Department of Labor listed HF/E as one of eight emerging careers for 2013, with an average annual wage of \$78,860. HFES survey respondents earned, on average, \$32,902 (29%) more than that DOL estimate.

The [report is available for purchase](#) by individuals, recruiters, and companies. HFES members who contributed data to the survey will receive a complimentary copy via e-mail.

San Jose State Student Chapter Helps Students “Hack” Into Technology

By Sin Lee Loh, Past President, San Jose State University Student Chapter

In response to the need for local children to be introduced to technology, the HFES San Jose State University Student Chapter recently got involved with the nonprofit organization “Hack the Future.” Based in the Bay Area, Hack the Future is a “one-day party and hackathon” for youths in grades 5–12 to learn, program, design, and build various aspects of technology. The youths (or pretend “hackers”) are organized and mentored by volunteers to work on projects they initiate. There is no strict curriculum or structure for the one-day program; the youths create or bring projects they want to work on, and mentors guide them through the process and encourage exploration, discovery, and critical thinking.



SJSU Student Chapter mentors, in blue shirts, assist in prototyping objects with craft materials.

Our student chapter is typically in charge of the “Design Table” section of the process, where we help the hackers focus on how to think critically about design, users, and context. Youths are taught how to conceptualize and create prototypes, which range from sketching low-fidelity mobile app wireframes, to creating Web sites, to physical prototyping with craft materials. We also assist the youths in creating design briefs for business ideas for those who want to participate in the entrepreneurship competition portion of the day. One of the students we guided was a bright 10-year-old who was given an honorable mention as a future entrepreneur for his elevator pitch for a design of an aerodynamic, self-driving, single-passenger vehicle.

By exposing tomorrow's designers and engineers to human factors/ergonomics at an early age, the SJSU Student Chapter hopes that it will inspire the students to keep thinking from a

user's perspective whenever they design products. And of course it is rewarding to see the youths have fun while creating projects that they get to show off at the event. Frank Oppenheimer once said, "The best way to learn is to teach," and our student chapter volunteers use this event to cement our knowledge in HF/E while guiding the youths. In turn, we are constantly inspired by the young hackers' fearless creativity. The opportunity to network with the other mentors at the event (who were mainly software and computer engineers based in Silicon Valley) has also increased awareness of HF/E and allowed student chapter members to pass on various HF/E methods and perspectives to the community.

The Student Chapter plans to continue volunteering with Hack the Future over the next year to influence the engineers and designers of tomorrow.

Sin Lee Loh is an international student from Malaysia and served as president of the SJSU Student Chapter in 2012–2013. Upon graduation at the end of summer, she plans to delve into research on how to create engaging, usable, and memorable interactive products.

HFES Exhibits at Puerto Rico IIE Conference

By Carlos de Falla, Director of Member Services

As an outcome of an outreach proposal, HFES participated as an exhibitor at the 2013 Institute of Industrial Engineers Annual Conference in Puerto Rico. The meeting, held May 18–22, brought together 1,500 individuals interested in the field of industrial engineering. The HFES Executive Council approved this initiative as a way to promote diversity within the Society and to expand the reach of HFES to underrepresented groups. Purdue University School of Graduate



UPRM students (from left) Lourdes Murphy, Juan Carlos Rodriguez, and David Del Pilar were among the 14 who signed up as Student Affiliates.

Engineering student Jeremi S. London volunteered to assist at the HFES booth. She also presented two papers at the conference.

Students and nonstudents alike stopped by the HFES booth to find out about the Society and the field. HFES members were among the conference presenters, and some chaired tracks during the IS-ERC (Industrial and Systems Engineering Research Conference) program on May 19–20.

Students from the Industrial Engineering Department at the University of Puerto Rico, Mayagüez (UPRM), met with Secretary-Treasurer-Elect Barrett Caldwell, and with me to process the 14 Student Affiliate applications they had brought with them. The UPRM students have organized and plan to submit an application for HFES student chapter status on their campus.

JCEDM Podcast on System Dynamics Modeling Now Online

The *Journal of Cognitive Engineering and Decision Making* has just released the fifth podcast in its series of author Q&A and discussions, as an opportunity to illuminate the personal side of material published in the journal.

The podcast, available [here](#), features a conversation between *JCEDM* Editorial Board member Alex Kirlik and Robert Earl Patterson, lead author of the article "System Dynamics Model-

ing of Sensory-Driven Decision Priming,” which was published in the March 2013 issue. Bookmark the [site](#) and return often for updates on new podcasts and articles.

Member Milestones: Mica Endsley Appointed Air Force Chief Scientist



Effective June 1, HFES Immediate Past President Mica Endsley will be taking a leave of absence from her role as president of SA Technologies to serve a two-year term as chief scientist of the Air Force. In this position, created more than 60 years ago, Endsley will provide independent scientific advice to the Air Force secretary and chief of staff and its senior leadership. She will be working with top Air Force scientists and engineers as well as those in academia, industry, and the other armed services to ensure that the Air Force’s research and development efforts remain relevant and effective. Endsley is the first human factors engineer and first woman in the position.

In Endsley’s absence, Bill Jones, current executive vice president, will be moving into the position of president of SA Technologies. Debra Jones, manager of Atlanta operations, will take on the role of vice president of operations, and Laura Strater, manager of the Dallas office, will serve as vice president of innovation and business development. Endsley can be reached at mica.endsley@pentagon.af.mil.

ANNUAL MEETING

Place a Space Request for Special Meetings

Groups that wish to conduct special meetings at the 2013 Annual Meeting are invited to submit requests for meeting space. Generally, meetings will be accommodated on a first-come, first-served basis; however, priority is given to meetings that are open to all interested attendees. Meetings that are open to all members and attendees will be listed in the final program, which is distributed at the meeting.

To request a meeting time and space, contact HFES Executive Director Lynn Strother at 310/394-1811, lynn@hfes.org.

Showcase Your University Lab

This year’s Annual Meeting will once again feature university laboratories that are conducting work in HF/E research and applications. The aim of this showcase is to demonstrate the variety of HF/E educational and research programs, not to describe specific research projects. University lab posters may be attended or unattended by lab representatives. There is no proceedings paper associated with lab displays. Each lab’s display will measure 8 feet wide by 4 feet high on a single side of a poster board.

University lab posters will be on display Thursday, October 3, 8:30–10:00 a.m. To reserve space to display your university’s HF/E lab, send a request to [Susan Marschner](#) at the HFES central office by **July 15, 2013** and include the following information:

- Name of lab and university
- Name, phone number, and e-mail address of person responsible for the poster
- Description of the lab

Space will be allocated on a first-come, first-served basis. Confirmation and instructions for displaying your lab poster will follow via e-mail in August.

CALENDAR

July 2013

ISIATM 2013, The Interdisciplinary Science for Innovative Air Traffic Management, July 8-10.

COLLA 2013, July 21-26, Nice, France, <http://www.iaia.org/conferences2013/COLLA13.html>.

HCI International 2013, July 21-26, Las Vegas, NV, <http://www.hcii2013.org/>.

August 2013

ISRCS 2013, 1st International Symposium on Resilient Cognitive Systems, August 13-15, San Francisco, CA, <http://cognitivesystems2013.inl.gov>.

Infotech@Aerospace 2013, August 19-22, Boston, MA, <https://www.aiaa.org/Secondary.aspx?id=13141#Infotech>.

September 2013

3rd International Conference on Driver Distraction and Inattention, September 4-6, Lindholmen Science Park, Gothenburg, Sweden, <http://www.chalmers.se/hosted/ddi2013-en>.

[AIHA Fall Conference 2013](#), Miami, FL, September 28-October 2, 2013.

[2013 Human Factors and Ergonomics Society International Annual Meeting](#), Hilton San Diego Bayfront, San Diego, California, September 30-October 4, 2013.

October 2013

61st International Congress of Aviation and Space Medicine (ICASM), October 6-10, Jerusalem, Israel, <http://www.icasm2013.org>.

2013 IEEE International Conference on Systems, Man, and Cybernetics, October 13-16, Manchester, United Kingdom

GaLA 2013, October 23-25, Paris, France <http://www.galaconf.org/>.

CENTRIC 2013, The Sixth International Conference on Advances in Human-Oriented and Personalized Mechanisms, Technologies, and Services, October 27-November 1, Venice, Italy
<http://www.iaia.org/conferences2013/CfPCENTRIC13.html>.

November 2013

2013 International Design Alliance Congress, November 15-17, Istanbul, Turkey, www.idacongress.com/2013istanbul.

December 2013

49th Annual Human Factors and Ergonomics Society of Australia Conference, December 2-4, Perth, Australia.

ICA 2013, 166th Meeting of the Acoustical Society of America, December 2-6, San Francisco, CA, <http://www.acousticalsociety.org/meetings/>.

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