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Technical Groups Undergo Transformation

As noted in the Executive Council mid-year meeting summary on page 2, Council approved two changes in technical group names: the Educators' Professional Group, now the Education Technical Group (ETG), and the Visual Performance Technical Group, renamed the Perception & Performance Technical Group (PPTG). This article describes the rationale for these changes.

Education Technical Group

For the ETG, driving the name change was recognition among EPG members of a need to "expand the scope of its concerns to encompass human factors issues with education generally, with a particular focus on human factors issues with educational technology." The following rationale for proposing the TG's name and mission statement are extracted from the document prepared by Thomas J. Smith and presented on the TG's behalf to the Council of Technical Groups and the HFES Executive Council.

"The time is long overdue for human factors/ergonomics (HF/E) science to play a more direct and influential role in the design of educational environments to promote human learning. . . . With its existing and established emphasis on education, the EPG represents the best candidate within HFES for spearheading more scientific and practical emphasis and attention on contributions that our science can and should be making to the interaction of educational design and learning."

Three factors supporting the change in the EPG's focus were identified: "(1) the concept of educational ergonomics as a distinct disciplinary emphasis within HF/E science; (2) the explosive growth of applications in educational technology, particularly evident in the growth of on-line education and distance learning; and (3) the potential for the EPG to serve both as a resource for information and expertise and as an organizational base for expanding the role and influence of HF/E science and practice in education."

"Educational ergonomics has its scientific origins in an extensive body of differential learning research dating back to the last century demonstrating that much of the variability in cognitive performance . . . is attributable neither to innate ability nor to learning ability but to specific design features of the learning environment. For some time now, a passionate debate has been raging regarding the performance of the educational system in the United States. . . . Sadly lacking in this debate has been any meaningful recognition of the contributions that HF/E science might make to improving the performance of the educational system relative to student and teacher participants as well as overall system management."

Evidence of the growth of applications in educational technology is provided by Michael Dolence, a consultant in the area of on-line learning. Among statistics reported by Dolence are the following: "40 states have adopted worldwide virtual university strategies;" there are more than 17,000 on-line courses; more than 350 companies are producing courseware; and there is an estimated growth rate in on-line education of 85% annually.

The ETG's revised mission statement now encompasses concern "with the design of educational systems, environments, interfaces, and technologies and with human factors education. The group consists of educators, researchers, students, and others interested in educational human factors and ergonomics, directed at improving educational design and in addressing the educational needs of those seeking to increase their knowledge and skills in the human factors and ergonomics field."

Under its new mission, the ETG, will focus on questions such as these: "What design factors, design factors related to the learning task, social and organizational design factors related to the learning environment, educational system design factors, and poverty-linked community design factors have the greatest influence on variability in student and teacher performance? Is improved educational performance of students and teachers one of the practical benefits of a community ergonomics program? How can principles, techniques, and potential benefits of HF/E be most effectively communicated to the education community?"

Perception & Performance Technical Group

Over the years, the Visual Performance Technical Group (VPTG) had observed an increase in annual meeting proposals that focused on human factors in sensory systems other than vision (e.g., auditory and tactile interfaces, multimodal displays). It was clear that the VPTG needed to expand its emphasis to fill the need to accommodate such proposals and recruit new members to the group and the Society. The matter was discussed at annual VPTG business meetings, the culmination of which was that members voted to change the scope of the group's charter with an accompanying change of name.

The expansion of VPTG to the Perception & Performance Technical Group enables human factors/ergonomics professionals who do work related to sensory systems other than vision (e.g., auditory, proprioceptive, haptic, vestibular) to submit their work to a technical group that is suited to their interests and activities. PPTG's greater breadth will also

(continued on page 5)

How Are We Doing?

by Betty M. Sanders

Membership Services Committee Chair

The Membership Services Committee (MSC) has a continuing commitment to the retention and growth of members in the Society. It is also interested in establishing and maintaining efficient and effective methods of communication with current and potential members. Therefore, as HFES gradually expands its membership categories and services (e.g., via the Internet), it seems appropriate from time to time to solicit feedback from members on the impact of these changes.

Rules governing the election and termination of membership in HFES are outlined in the Society Bylaws, which are found in the back of the 2001–2002 *Directory and Yearbook*. However, several aspects of the administration of these rules have changed recently and may require modifications to the HFES Operating Rules. For example, application for membership can now be made via the Internet rather than by mail. Also, qualified applicants for the full, Associate, and Student Affiliate member categories are assisted in identifying endorsers when needed rather than left to find their own. Finally, the central office staff was assigned the responsibility for the review and evaluation of all applications, thereby eliminating use of a Membership Admission Committee.

This article, therefore, is written to encourage members to review the current membership application bylaws and practices, reflect on personal application experiences, and submit feedback on how HFES is doing. The efficiency and effectiveness of the current process are of particular interest to the MSC. This feedback should be sent to the HFES central office (attention: Betty Sanders, MSC Chair) no later than *June 30, 2001*. All comments are welcome and will be used to help this committee assess the need for process improvements.

Midyear Executive Council Meeting Report

At its May 3–5 meeting, the HFES Executive Council devoted a full day to long-range planning and two days to budget and policy issues. A summary of the actions taken at that meeting follows.

Long-Range Planning

Council members spent May 3 in facilitated discussion of the HFES Strategic Plan. Four objectives were established: (a) identify critical initiatives necessary to revitalize the existing Strategic Plan; (b) identify ideas to integrate the Strategic Plan into the HFES decision-making process; (c) get Executive Council's commitment to create an implementation process/follow through; and (d) develop a vision for HFES in 2010.

Following a brief review of some preliminary results from the 2001 Membership Survey, Council members engaged in small- and large-group discussions about the Society's diversity and the perceived advantages of involving more people outside the field whose interests overlap those of members. Discussion also focused on changes and challenges the field and the Society will face in the next two to five years and how to respond to them. Council members generally agreed on a vision of HFES as more inclusive and as an information provider on a greater scale.

The day concluded with formulation of a process for revising the Strategic Plan. More member input will be invited via focus groups conducted at the 45th Annual Meeting this fall.

Accreditation Review

To enable the Accreditation Review Committee to function more effectively, the HFES central office staff will assume some of the administrative responsibilities (e.g., processing applications, managing correspondence).

Council endorsed the principle of expanding the Accreditation Review Committee scope to include accreditation of undergraduate programs. A task force will be formed to study and report on the feasibility of the proposed expansion, as well as to evaluate the existing graduate program accreditation process.

The Accreditation Review Committee will now become a subcommittee under the new Education and Training Committee. (For other changes to the HFES subcouncil/committee restructuring, see Bill Howell's article in the January 2001 issue of the *HFES Bulletin*.)

Budget


The 2001 budget was revised, as follows:

Estimated Income

Membership\$568,500
Member Services113,450
Communications/Publications462,175
Annual Meeting186,453
HFES Institute85,625
Other27,450
Total estimated income\$1,443,653

Estimated Expenses

Member Services\$109,945
Communications/Publications458,409
Administrative628,715
Committees/Officers100,100



Bulletin

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Annual Meeting	74,000
HFES Institute	73,638
Interorganizational	22,062
Total estimated expenses	\$1,466,869

Estimated 2001 net **-\$23,216**

The Council will be addressing long-term solutions to generate surplus budgets in the future.

Certification Endorsement

After considerable study, Council concluded that HFES will not at this time establish an accreditation program for agencies that issue human factors or ergonomics certification. This is in recognition of potential liability exposure and the fact that the International Ergonomics Association, of which HFES is a member, has established an accreditation process for certification providers.

Chapters

Revised bylaws submitted by the Chicago Metropolitan Chapter were approved.

Fellows Selection

Further refinements were made to facilitate the process of preparing and evaluating nominations for new HFES Fellows via wording changes to Operating Rules.

Membership

The following new members and changes of status were approved: 43 Members, 33 Associates, 77 Affiliates, 98 Student Affiliates, 135 Associate to Member, 52 Transitional Associate to Associate, 3 Transitional Associate to Member, 1 Fellow to Life Fellow, 5 Affiliate to Associate, 24 Affiliate to Member, 9 Member to Life Member, and 64 Student to Transitional Associate.

A budget request from the Diversity Committee was approved, which will enable HFES to participate in a summer camp held at Morgan State University in Baltimore, Maryland. Cosponsoring with HFES is the Mathematics, Engineering, and Science Achievement Program (MESA), which has developed and conducted similar summer camp programs for minority youth since the 1970s. The camp program will emphasize the importance of incorporating coverage of the capabilities and limitations of the human operator into system design. A major portion of the program is designed to introduce students to the various aspects of human factors engineering. Participating in the summer camp program will be HFES members Betty Sanders and Ron Shapiro.

Technical Groups

Supporting the recommendation of the Council of Technical Groups, Council approved name changes for two TGs. The Visual Performance Technical Group will now be called the Perception and Performance Technical Group (PPTG), and the Educator's Professional Group has been renamed the Education Technical Group (ETG).

Consultants Directory: An HFES Resource

The on-line Directory of Human Factors/Ergonomics Consultants, launched in February, has already proved an indispensable tool for the central office staff, who refer inquiries regarding consultants and expert witnesses to the on-line directory. In addition, it has also apparently been used by reporters for locating subject matter experts. It can also be a time-saving resource for members who are seeking other members with particular expertise.

If you are a full Member or Fellow and would like to place an individual or company listing, please visit <http://hfes.org> for more information (or call Lois at 310/394-1811). ☒

ANNUAL MEETING

Call for Student Volunteers

The HFES 2001 Annual Meeting Host Committee invites students who are planning to attend the meeting to serve as volunteers. More than 1500 people are expected to attend the annual meeting.

Serving as a volunteer affords students the opportunity to work closely with presenters and other students to help make the meeting a success. If a student volunteers for 8 hours, his or her registration fee for the entire meeting will be reimbursed afterwards. If a student decides to volunteer for 4 hours, half of the registration fee will be reimbursed. To volunteer, or for more information, contact Patty Costello, Center for Cognitive Sciences, 205 Elliot Hall, Minneapolis, MN 55445; 612/626-9516, fax 612/626-7253; coste006@tc.umn.edu; or Selma de Ridder, Human Factors Research Laboratory, 141 Mariucci Operations, 1901 Fourth St. S.E., Minneapolis, MN 55414; 612/626-7137, fax 612/625-8867; selma@hfri.umn.edu, <http://www.hfri.umn.edu>. ☒

PEOPLE

After 31 years of teaching at Tufts University, **John Kreifeldt** will be retiring as an Emeritus Professor of engineering design as of August 31, 2001. John plans occasional travels for limited teaching and lecturing, and he also plans to continue consulting in human factors, particularly as applied to consumer product design. He can be reached at 16 Prospect St., Winchester, MA 01890; 781/729-5873.

Mitchell A. Garber, medical officer for the National Transportation Safety Board, received the 2001 Harry G. Moseley Award on May 10. The Aerospace Medical Association presents this award for the most outstanding contribution to flight safety. Garber can be reached at NTSB, 490 L'Enfant Plaza East, S.W., Washington, D.C. 20594; 202/314-6508; garberm@ntsb.gov.

Call for Journal Special Section Papers

by *Michael Trimmel, Nicola Ann Wright, and Richard W. Backs*
Special Section Editors

Manuscript submissions are invited for an upcoming *Human Factors* special section, "Psychophysiology in Ergonomics."

The special section will be devoted to the usage of psychophysiological methods in the domain of human-machine systems. Appropriate papers may take a number of diverse forms, including empirical research featuring innovative methods; papers that use traditional psychophysiological methods to contribute to the ergonomic design or evaluation of human-machine systems; theoretical, empirical, and application-oriented papers; and debates among proponents of different well-established approaches. Of special interest is empirical research that features innovative methods or substantial contributions related to applied psychophysiology in ergonomics.

Please submit five copies of your manuscript by *January 15, 2002* to Editor, *Human Factors*, Attention: "Psychophysiology in Ergonomics" special section, P.O. Box 1369, Santa Monica, CA 90406-1369. Please contact Michael Trimmel at michael.trimmel@univie.ac.at if you have any questions. ☒

OTHER SOCIETIES

Ergonomics for Children and Educational Environments

by *Cheryl Bennett*
Ergonomics Program Manager
Lawrence Livermore National Laboratory

In November 2000, the International Ergonomics Association (IEA) approved a new technical committee. The Ergonomics for Children and Educational Environments Technical Committee was formed to promote the development and dissemination of ergonomics information related to children and educational environments. The committee promotes professional and public awareness of ergonomics related to children of all abilities in all aspects of their lives and the application of ergonomics in all educational environments.

The committee is developing Web pages that will be accessible through the IEA Web site. Membership is open, and currently no membership dues are levied. To be included on the membership roster and e-mail distribution list, please send name and full contact information to the committee chair, Cheryl Bennett of Lawrence Livermore National Laboratory, at 925/423-1978; bennett13@llnl.gov. ☒

IN THE NEWS

Marvin Dainoff, Rani Leuder, William S. Marras, and David Rempel were quoted in "Setting Ergonomics Standards" by Ronald D. White, which appeared in the *Los Angeles Times* on March 25, 2001. The article discussed elements of the on-going debate surrounding the development of a federal ergonomics law.

Paul Allie wrote "Aligning Ergonomics with Business Strategy," which appeared in the March 2001 issue of *The Construction Specifier*, the monthly publication of the Construction Specifications Institute, whose members include architects, engineers, manufacturers, and other construction professionals. Allie addressed the important role ergonomics principles play in creating a healthy and comfortable work environment. ☒

NEWS

Medical Design Awards Announced

The winners of the 2001 Medical Design Excellence Awards competition were announced on March 9, 2001. The annual competition recognizes product innovation, design and engineering excellence, end-user benefit, and cost-effectiveness in manufacturing and health care delivery. HFES participates as a supporting organization in the awards program.

The 28 winners were selected in 10 categories. Winning entries include LSTAT, a portable, networked ICU and surgical table that functions as a "smart" patient transport platform; Grab 'n Go III, a portable medical oxygen system that combines an oxygen cylinder with an integrated regulator and content gauge; Nucleus 24 Contour, a cochlear implant that safely places 22 stimulating electrodes adjacent to the inner wall of the cochlea; and the Pathfinder prosthetic foot, which combines shock absorption and energy storage capabilities with a unique ankle motion to provide users with a greater range of motion, less fatigue, and improved balance. ☒

CALLS FOR PAPERS

Industrial Engineering Conference

The 6th Annual International Conference on Industrial Engineering Theory, Applications, and Practice will take place November 18–20 in San Francisco. Topics of interest include human factors, industrial ergonomics and safety, system simulation, computer intelligence in industrial engineering, and safety management. Abstracts are due *July 16, 2001*. Contact Jeff Fernandez, Conference Chair, 703/518-0289; jfernandez@exponent.com.

Future Car Congress

Abstracts are invited for the 2002 Future Car Congress, to be held June 3–5, 2002, in Arlington, Virginia. Topic areas include crash avoidance, automated vehicle control systems, human factors, driver distraction issues, safety, and modeling/systems analysis. Submissions are due *August 1, 2001*. Contact Kris Gwin, Society of Automotive Engineers, 400 Commonwealth Dr., Warrendale, PA 15096; fax 724/776-1830; kgwin@sae.org.

Ergonomics Society Conference

The Ergonomics Society will hold its 2002 annual conference April 3–5 in Cambridge, England. Submissions are sought in all areas of ergonomics research and application and are due *August 24, 2001*. Contact the Ergonomics Society, Annual Conference Programme Secretary, Devonshire House, Devonshire Square, Loughborough, Leicestershire LE11 3DW, U.K.; +44 1509 234904, fax +44 1509 235666; ergsoc@ergonomics.org.uk, <http://www.ergonomics.org/uk/>.

HFES Europe Chapter Annual Conference

The Europe Chapter of HFES will hold its annual meeting November 7–9, 2001, in Turin, Italy. The theme of the meeting is “Human Factors in Transportation, Communication, Health, and the Workplace.” Submissions are invited on topics such as advanced driver assistance systems, multimedia and the Internet, situation awareness, and workplace design and evaluation. Abstracts are due *September 1, 2001*. Electronic submissions are encouraged. Contact Dick de Waard, University of Groningen, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands; fax +31 50 363 67 84; d.de.waard@ision.nl, <http://www.ision.nl/users/hfesec/conf.htm>.

Conference on Injury Prevention and Control

Abstracts are invited for the 6th World Conference on Injury Prevention and Control, to be held May 12–15, 2002, in Montréal, Canada. Areas of interest include road safety, occupational safety, trauma care and rehabilitation, home and institutional safety, urban safety, and product safety. Abstracts are due *September 1, 2001*. Contact Coplanor Congrès inc., 511 place d’Armes, Suite 600, Montréal, Canada QC H2Y 2W7; 514/848-1133, fax 514/288-6469; trauma@coplanor.qc.ca, <http://www.trauma2002.com>.

Internet Computing Journal

Papers are invited for a special theme issue of the *IEEE Internet Computing* journal, which will focus on usability and the World Wide Web. Topics include novel applications of human-computer interaction techniques to improve Web site design, site engineering and architecture improvements for enhanced performance and fidelity, and experimental studies of user response to Web site designs. Submissions are due *September 1, 2001*. Contact Hazel Kosky, Magazine Assistant, IEEE Computer Society Publications Office, 10662 Los Vaqueros Circle, Los Alamitos, CA 90720; 714/821-8380, fax 714/821-4010; hkosky@computer.org, <http://computer.org/internet/edguide.htm>. ☒

Technical Groups Undergo Transformation

(continued from page 1)

accommodate the increasing amount of work on multimodal systems and displays.

The group’s new mission is as follows: “The Perception & Performance Technical Group consists of individuals interested in the relationship between perception and human performance. Areas of concern include the nature, content, and quantification of sensory information and the context in which it is displayed; the physics and psychophysics of information display; perceptual and cognitive representation and interpretation of displayed information; assessment of workload using tasks having a significant perceptual component; and actions and behaviors that are consequences of information presented to the various sensory systems.

Any HFES member or nonmember may join either the ETG or the PPTG. Annual dues for the PPTG are \$7 (\$9 outside the United States), and there are no dues for the ETG. To join, contact the HFES central office at 310/394-1811 (membership@hfes.org). ☒

CALENDAR

- ★ **Manufacturing Industry and Work-Related Musculoskeletal Disorders**, July 5–6, 2001, Guildford, U.K. Peter Buckle, Robens Centre for Health Ergonomics, University of Surrey, Guildford, Surrey, GU2 7TE U.K.; +1483 259213, fax +1483 259395; p.buckle@surrey.ac.uk, <http://www.eihms.surrey.ac.uk/robens/erg/infomanu.htm>.
- ★ **International Society of Biomechanics 18th Congress**, July 8–13, 2001, Zurich, Switzerland. Congress Organizer, Department of Materials, ETH Zurich, Wagistr. 4, CH-8952 Schlieren, Switzerland; +41 1 633 61 17, fax +41 1 633 11 24; <http://www.isb2001.ethz.ch/info/info.html>.
- ★ **Fourth International Conference on Cognitive Modeling**, July 26–28, 2001, Fairfax, VA. Wayne D. Gray, George Mason University, ARCH Lab/HFAC Program, MSN 3f5, Fairfax, VA 22030-4444; 703/993-1357, fax 703/993-1330; gray@gmu.edu, <http://hfac.gmu.edu/iccm/>.
- ★ **CAES 2001: International Conference on Computer-Aided Ergonomics and Safety**, July 28–August 2, 2001, Maui, HI. Waldemar Karwowski, Center for Industrial Ergonomics, Academic Bldg., Room 445, University of Louisville, Louisville, KY 40292; 502/852-7173, fax 502/852-7397; karwowski@louisville.edu, <http://www.ergonet.net/caes2001.html>.
- ★ **23rd Annual Conference of the Cognitive Science Society**, August 1–4, 2001, Edinburgh, Scotland. Cognitive Science Society, 5618 Ann Arbor-Saline Rd., Saline, MI 48176; 734/763-0210, fax 734/429-9248; <http://www.hrcr.ed.ac.uk/cogsci2001>.
- ★ **Americas Conference on Information Systems**, August 3–5, 2001, Boston, MA. John Gorgone, Conference Cochair, Bentley College, 175 Forest St., Waltham, MA 02452-4705; 781/891-2248, fax 781/891-2473; jgorgone@bentley.edu, <http://ecampus.bentley.edu/org/amcis2001/index.html>.
- ★ **HCI International 2001: 9th Conference on Human-Computer Interaction**, August 5–10, 2001, New Orleans, LA. Gavriel Salvendy, General Chair, Grissom Hall, School of Industrial Engineering, Purdue University, West Lafayette, IN 47907-1287; salvendy@ecn.purdue.edu, <http://hciei2001.engr.wisc.edu>.
- ★ **IEEE International Conference on Advanced Learning Technologies**, August 6–8, 2001, Madison, WI. John P. Klus, Organizing Chair, University of Wisconsin – Madison, 432 N. Lake St., Madison, WI 53706; 608/262-8819, fax 608/263-3160; klus@engr.wisc.edu, <http://ltaf.ieee.org/icalt2001/>.
- ★ **Driving Assessment 2001: International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design**, August 14–17, 2001, Aspen, CO. Kathy HOLETON, University of Iowa/PPC, 223 S. Quadrangle, Iowa City, IA 52242; fax 319/335-6801; <http://www.driving-symposium.org>.
- ★ **9th International Vision in Vehicles Conference**, August 19–22, 2001, Brisbane, Australia. Conference Secretariat, VIV9, Institute of Behavioural Sciences, University of Derby, Kingsway House, Kingsway, Derby DE22 3HL, U.K.; +44 1332 593131; ibs@derby.ac.uk, <http://ibs.derby.ac.uk/viv9/>.
- 45th Annual Meeting of the Human Factors and Ergonomics Society**, October 8–12, 2001, Minneapolis, MN. Hosted by the Upper Midwest Chapter. HFES, P.O. Box 1369, Santa Monica, CA 90406-1369; 310/394-1811, fax 310/394-2410; lois@hfes.org, <http://hfes.org>.
- 2001 Human Systems Integration Symposium**, November 5–6, Arlington, VA. Trish Hamburger, Technical Program Chair, HIS '01, NSWC-DD, 17320 Dahlgren Rd., Dahlgren, VA 22448-5100; 540/653-2300; phambur@nswc.navy.mil.

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FLASH!

Visit <http://hfes.org> to read about new books from HFES:

Macroergonomics: An Introduction to Work System Design and

Readings in Training and Simulation: A 30-Year Perspective

Annual Meeting Dates to Remember:

July 20 – Registration Kits Mailed

September 7 – Early Registration Deadline

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