

Technical Group Officers and Activities

COUNCIL OF TECHNICAL GROUPS

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AEROSPACE SYSTEMS TECHNICAL GROUP

The Aerospace Technical Group (ASTG) works to further the application of human factors/ergonomics to the development, design, certification, operation, and maintenance of human-machine systems in the aviation and space environments. The group addresses issues relevant to civilian and/or military systems.

The ASTG program for the 2008 Annual Meeting involved 4 panels, 7 lecture sessions, and 4 posters. The ASTG continued sponsorship of the popular "Lunches With an Expert," which last year included Nancy Cooke (Arizona State University), Valerie Gawron (MITRE Corp.), Kathleen Mosier (San Francisco State University), Dino Piccione (FAA), Scott Shappell (Clemson University), and Christopher Wickens (Alion Science & Technology Corp.). The ASTG also granted a student paper award to Selina Fothergill (University of Queensland). As a new initiative, the ASTG secured a grant from the Federal Aviation Administration, which enabled it to cosponsor, along with Division 21 of the American Psychological Association and the FAA, a conference titled Human Factors and NextGen: The Future of Aviation. There were 100 on-site registrants and 20 remote attendees. Dino Piccione (FAA) gave the keynote and Herman Nijhuis (Eurocontrol) provided a global perspective. Other featured addresses came from NASA, Delta Airlines, and MITRE.

The group had 434 members as of December 31, 2008.

Contact the HFES Aerospace Systems Technical Group, c/o Valerie Gawron, MITRE Corp., 7515 Colshire Dr., M/S N420, McLean, VA 22102-7539, 703/983-7001, fax 703/983-1917, vgawron@mitre.org, <http://www.hfes.org/astg/>.

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AGING TECHNICAL GROUP

It is generally acknowledged that age-related changes in physiological and cognitive functioning affect, to some extent, the ability of older people to successfully perform or function in many life activities. The performance problems encountered by this population are becoming increasingly important given demographic changes and the “graying” of society. Human factors/ergonomics, with its emphasis on the analysis of human capabilities and design to fit these capabilities, is highly suited to solving problems encountered by older individuals in work, home, and leisure activities. The Aging Technical Group consists of people interested in HF/E applications appropriate to meeting the needs of older people and other special populations in a wide variety of life settings. This includes understanding the performance capabilities and user needs of these populations in homes, at work, and at leisure and identifying and designing environments, products, and activities that best fit these needs and characteristics.

In 2008, a new slate of officers was elected through electronic balloting. In addition, the Aging TG published a summer newsletter with contributions from the membership and an editorial by our newsletter editor, Calvin Orok. The newsletter was distributed to the membership electronically through the Aging TG list server.

The Aging TG business meeting luncheon was held during the HFES Annual Meeting in New York. The agenda included the introduction of officers and discussions of the Aging TG’s technical session, the student paper award, the budget, and the Web site. As an outcome of the meeting, a committee was formed to examine the formation of a research grant program to support students in their dissertation or thesis research. Surplus revenue would be used to support this program. The committee includes Diana Schwerha, Lila Laux, and Christopher Mayhorn.

The group had 310 members as of December 31, 2008.

Contact the HFES Aging Technical Group, c/o Richard Pak, Clemson University, Dept. of Psychology, 418 Brackett Hall, Clemson, SC 29634, 864/656-1584, richpak@clemson.edu, <http://www.psychology.gatech.edu/atg/>.

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AUGMENTED COGNITION TECHNICAL GROUP

The Augmented Cognition Technical Group (ACTG) is concerned with fostering the development and application of real-time physiological and neurophysiological sensing technologies that can ascertain a human’s cognitive state while interacting with computing-based systems; data classification and integration architectures that enable closed-loop system applications; mitigation (adaptive) strategies that enable efficient and effective system adaptation based on a user’s dynamically changing cognitive state; individually tailored training systems; and roadmaps for future directions concerning augmented cognition science and technology and guidelines of use for the technology and the user information that may be garnered from it.

The ACTG had another exciting year of activities, culminating in a full program of paper, poster, and demo sessions at the HFES Annual Meeting in New York. Sessions included “New Kids on the Block: Multidimensional

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Perspectives on Augmented Cognition”; “Foundations of Augmented Cognition; Applications of Augmented Cognition”; “Engaging, Noninvasive Brain-Computer Interfaces (BCIs) for Improving Training Effectiveness and Enabling Creative Expression”; and “A First Step Toward a Generalized Physiological Measurement Framework.” The ACTG events included a well-rounded mix of academic, industry, and government perspectives from ACTG colleagues all over the world. We also held our annual ACTG business meeting, which included presentation of the Leland S. Kollmorgen Spirit of Innovation Award to Denny Proffitt of the University of Virginia and to the late Randy Pausch of Carnegie-Mellon University. These individuals have been most instrumental in the current success of the new scientific discipline of augmented cognition. The ACTG also held officer elections.

The group had 201 members as of December 31, 2008.

Contact the HFES Augmented Cognition Technical Group, c/o Denise M. Nicholson, Applied Cognition and Training in Immersive Virtual Environments Lab (*ACTIVE*), Institute for Simulation and Training, University of Central Florida, 3100 Technology Parkway, Ste. 319, Orlando, FL 32826, 407/882-1444, fax 407/882-1335, dnichols@ist.ucf.edu, <http://www.augmentedcognition.org/actg.htm>.

COGNITIVE ENGINEERING AND DECISION MAKING TECHNICAL GROUP

The Cognitive Engineering and Decision Making Technical Group (CEDMTG) encourages research on human cognition and decision making and the application of this knowledge to the engineering of sociotechnical systems, the design of organizations, and the implementation of training programs. Emphasis is on characteristics of human cognition in real-world settings for individuals, teams, or individuals teamed with intelligent systems; factors that affect decision making and cognition in naturalistic task settings; technologies for measuring, assisting, modifying, or supplementing human decision making; descriptive models of cognition and learning; and training strategies for assisting or influencing cognitive processes.

In 2008, the CEDMTG hosted nine lecture sessions, two discussion panels, and two invited symposia at the HFES 52nd Annual Meeting, as well as eight poster presentations.

The group had 833 members as of December 31, 2008.

Contact the HFES Cognitive Engineering and Decision Making Technical Group, c/o Catherine Burns, Systems Design Engineering, University of Waterloo, Waterloo, ON Canada N2L 3G1, 519/888-4567 ext. 33903, fax 519/746-4791, c4burns@uwaterloo.ca, <http://www.hfes.org/cedm/>.

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Jennifer J. Ockerman
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Erik Connors
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COMMUNICATIONS TECHNICAL GROUP

The Communications Technical Group (CTG) is concerned with all aspects of human-to-human and human-to-machine communications, with special emphasis on communications mediated by technology. In addition to work in traditional telephone services, there is an increasing emphasis on social networking, mobile communications, multimedia communications (such as Internet services), Internet telephony, interactive television, desktop video conferencing, collaborative communications, and multimedia information services. Work includes the design and evaluation of the user interfaces for communication products, systems, and services, as well as work in enabling technologies such as speech, telephone, and television input devices. These technologies and services are being applied in areas as diverse as consumer and business products and services, education, military operations, and medicine.

The CTG organized a discussion panel and a lecture session at the 2008 HFES Annual Meeting in New York. The CTG total membership dropped to 130 members from 143 the previous year. The CTG's primary goal in the coming year is to encourage growth of the group through outreach to HFES members who are working with mobile communications and social networking applications, and to increase awareness among HFES members of the diverse nature of human factors work in the communications area.

The group had 130 members as of December 31, 2008.

Contact the HFES Communications Technical Group, c/o James H. Pratt, AT&T Labs, 9505 Arboretum Blvd., Austin, TX 78759, 512/372-5730, fax 512/241-5730, james-pratt@labs.att.com.

James H. Pratt
Chair

Aaron W. Bangor
Program Chair

Sarah P. Everett
Secretary-Treasurer

COMPUTER SYSTEMS TECHNICAL GROUP

The Computer Systems Technical Group (CSTG) is concerned with human factors in the design of computer systems. This includes the user-centered design of hardware, including both displays and input devices; software; applications; documentation; work activities; and the work environment. Working within the broader context of other wide-ranging subspecialties within HFES, practitioners and researchers in the CSTG community take a holistic, systems approach to the design and evaluation of all aspects of user-computer interactions. The short-term goal is to ensure that computer systems are useful, usable, safe, and, where possible, fun. One long-term goal is to enhance the quality of work life and recreational/educational computer use by ensuring that the computer interface, function, and job design are interesting and provide opportunities for personal and professional growth in the context of traditional concerns for costs and systems performance. CSTG is the organizational meeting place for many HF/E practitioners and researchers interested in computer systems, including hardware and software, cognition and anthropometry, graphical and character-based UIs, the Internet and intranets, usability and design, and local and distributed applications.

The CSTG's major activities centered on the preparation of the technical program for the HFES 52nd Annual Meeting. The technical program included three well-attended sessions with 14 papers that focused on qualitative evaluation, controls and displays, and accessibility. A proposal to create a best paper award developed by former Program Chair Joseph

Joel S. Greenstein
Chair

Douglas L. Gardner
Program Chair

Douglas E. Fox
*Newsletter Editor/
Webmaster*

Lorraine Normore
Assistant Webmaster

Goldberg is still being debated. The CSTG brochure has been updated and a dues decrease from \$6 to \$4 was put in place. The election for technical group and program chair positions has taken place, and the transition to new TG officers is complete.

The group had 326 members as of December 31, 2008.

Contact the HFES Computer Systems Technical Group, c/o Joel S. Greenstein, Clemson University, Dept. of Industrial Engineering, 110 Freeman Hall, Box 340920, Clemson, SC 29634-0920, 864/656-5649, fax 864/656-0795, iejsg@clemson.edu, <http://www.hfes.org/cstg/>.

EDUCATION TECHNICAL GROUP

The Education Technical Group (ETG) is concerned with the design of educational systems, environments, interfaces, and technologies and with human factors/ergonomics education. The group consists of educators, researchers, students, employers, and other members who are interested in educational HF/E that is directed at improving educational design and in addressing the educational needs of those seeking to increase their knowledge and skills in the field. ETG members are primarily interested in furthering the education of new HF/E practitioners, exchanging information with other HF/E educators or other educators in need of such information, and applying HF/E principles to the design of educational systems (educational ergonomics).

In 2008, the ETG's activities were centered on the technical program, organized by Program Chair Terence Andre, at the HFES Annual Meeting in New York. The ETG had two paper sessions ("Instructional Methods and Techniques in Education" and "Topics in Education and Training from a Student Perspective") and two panel sessions ("The Need for International Human Factors Engineering Education Programs," organized by Stephanie Guerlain, and "Self-Globalization: Strategies in HFES Education, Research, and Practice," organized by Tonya Smith-Jackson). Sahika Vatan Korkmaz received the first ETG Best Student Paper Award for her paper, "A Pilot Test of Participatory Ergonomics and Technology Teams Among High School Teachers." The ETG also published three newsletters in 2008, all of which are accessible through the ETG Web site.

The group had 208 members as of December 31, 2008.

Contact the HFES Education Technical Group, c/o Carolyn M. Sommerich, Ohio State University, 210 Baker Systems Bldg., 1971 Neil Ave., Columbus, OH 43210, 614/292-9965, fax 614/292-7852 sommerich.1@osu.edu, <http://www.hfes.org/etg/>.

Carolyn M. Sommerich
Chair

Terence S. Andre
Program Chair

Rebecca W. Boren
Newsletter Editor

Francis T. Durso
Program Chair-Elect

Sahika Vatan Korkmaz
Webmaster

ENVIRONMENTAL DESIGN TECHNICAL GROUP

The Environmental Design Technical Group (EDTG) is concerned with the relationship between human behavior and the designed environment. Common areas of research and interest include ergonomic and macroergonomic aspects of design within home, office, and industrial settings. An overall objective of this group is to foster and encourage the integration of ergonomics principles into the design of environments.

The EDTG membership grew by 5% in 2008, to 182. Two newsletters were published in September 2008, and the EDTG brochure was updated with the help of Alan Hedge. The EDTG session at the 52nd Annual Meeting was well attended and included the following papers: "Task-Specific Speed Preferences When Sitting on a Rotary Dynamic Seat" by Erin Lawler and Alan Hedge; "Comparisons of Seated Postures Between Office Tasks" by Dan Nathan-Roberts, BingYune Chen, Matt Camilleri, and David Rempel; "Importance of Arm Support Optimization on Comfort and Working Posture Preference" by Scott Haynes; and "Backpack Usage and Self-Reported Musculoskeletal Discomfort in University Students" by June Mung Yuing Hu and Karen Jacobs. A joint business meeting was held with the EDTG and the Macroergonomics TG. There were more than 40 attendees, and members of the Health Care TG joined us for a portion of the meeting.

The group had 182 members as of December 31, 2008.

Contact the HFES Environmental Design Technical Group, c/o Michelle M. Robertson, Liberty Mutual Research Institute for Safety, 71 Frankland Rd., Hopkinton, MA 01748, 508/497-0248, fax 508/435-8136, michelle.robertson@libertymutual.com, <http://www.hfes.org/edtg/>.

Michelle M. Robertson
Chair

Karen Jacobs
Program Chair

Courtney R. Sherman
Newsletter Editor

Justin W. Owens
Webmaster

FORENSICS PROFESSIONAL GROUP

The Forensics Professional Group (FPG) comprises people interested in all aspects of human factors/ergonomics as applied to litigation matters, both civil and criminal. The FPG encourages research and reporting of studies related to the furtherance of knowledge about forensic human factors and how HF/E data and techniques can be applied to standards of care, behavioral expectations, product safety, and workplace safety.

FPG presented a workshop at the HFES 52nd Annual Meeting in New York, which provided insights for novices and experts in the practice of human factors forensics as expert witnesses. It covered many aspects of expert witnessing, including record keeping, testifying, and administrative requirements. FPG publishes a semiannual newsletter that summarizes the activities of the group and includes articles on topics of interest to the membership. Submissions can be sent to Newsletter Editor Kenneth Nemire or to Marc Resnick at the address below.

The group had 269 members as of December 31, 2008.

Contact the HFES Forensics Professional Group, c/o Marc L. Resnick, Industrial and Systems Engineering, Florida International University, University Park, Miami, FL 33199, 305/348-3537, fax 305/348-3721, resnickm@fiu.edu, <http://www.hfes.org/fpg/>.

Marc L. Resnick
Chair

Tonya L. Smith-Jackson
Program Chair

Kenneth Nemire
Newsletter Editor

HEALTH CARE TECHNICAL GROUP

Members of the Health Care Technical Group (HCTG) are interested in maximizing the contributions of human factors/ergonomics to the effectiveness of medical systems, patient safety, and the quality of life for people who are sick or functionally impaired. We seek to bring together people who share our interests. The health care domain is a growing sector of HFES, with interest being spurred by the patient safety movement, the growth of medical informatics, and concerns for the medical needs of the aging population. Many HF/E professionals routinely face human factors–related challenges in providing for the health and well-being of people. Accordingly, our goal is to share new ideas that can help respond to these challenges. All who seek quality health care can benefit from our work. HF/E practitioners in health care can find satisfaction in the process of applying their abilities and knowledge to help others.

Membership in the HCTG has continued to expand, adding 6% since January of 2008. The HCTG now has more than 500 members and is the fifth largest TG in HFES. The 52nd Annual Meeting in New York included seven HCTG sessions, one of which was cosponsored by the Industrial Ergonomics TG. We cosponsored one session each with the Cognitive Engineering and Decision Making and the Macroergonomics TGs, for a total of nine health care–related sessions. In addition, five posters accepted by HCTG were presented during the poster sessions. Papers addressed such issues as simulation, clinical communication, patient safety, teamwork, rehabilitation, and human performance during critical procedures. In 2008, the designation of Best Student Paper in Health Care was awarded to Shilo Anders for her work at the Ohio State University. Her paper was titled, “Shifts in Functions of a New Technology Over Time: An Analysis of Logged Electronic Intensive Care Unit Interventions.”

The group had 507 members as of December 31, 2008.

Contact the HFES Health Care Technical Group, c/o F. Jacob (Jake) Seagull, 22 S. Greene St., Room S4B14, Division of General Surgery, University of Maryland Medical Center, Baltimore, MD 21201-1594, 410/328-8448, fax 410/328-4084, jseagull@smail.umaryland.edu, <http://hctg.wordpress.com/>.

F. Jacob Seagull
Chair

Ayse Gurses
Program Chair

Michelle Rogers
Newsletter Editor

Sandra Garrett
Webmaster

Stephanie Guerlain
*List Server Moderator/
Manager*

HUMAN PERFORMANCE MODELING TECHNICAL GROUP

The Human Performance Modeling Technical Group (HPMTG) is concerned with the development and application of predictive and reliable quantitative models of human performance. The scope of the models of interest to the HPMTG encompasses the scope of the systems of interest to human factors/ergonomics professionals. Hence, we equally promote models of isolated aspects of human performance; models of memory, attention, perception, and action; and models that are integrative in the sense that they receive task-related information from the environment and produce thoughtful, human-like action. The HPMTG is interested in promoting and disseminating the basic science foundation of such models, engineering research needed to apply human performance models to HF/E applications, new formalisms for human performance modeling, and techniques for evaluating the predictive success of such models.

The HPMTG is a forum for testing modeling approaches that are emerging from the basic research community against the hard realities of HF/E problems. Conversely, we see the identification of challenges faced by the HF/E community in human performance modeling as providing significant feedback to basic researchers on the problems to be overcome and the opportunities for improvement to the research base.

The HPMTG produced a newsletter in the fall of 2008. A primary activity for the year was developing the technical program for the HFES 52nd Annual Meeting. This included funding for one of the panels. Wayne Gray (RPI, also a past TG chair) organized a panel entitled "Models of Motor Control and Performance." The TG funded the participation of David Rosenbaum, Pennsylvania State University, a leading authority on models of motor control.

The group had 350 members as of December 31, 2008.

Contact the HFES Human Performance Modeling Technical Group, c/o Michael Byrne, Rice University, Psychology Dept., 6100 Main St., MS-25, Houston, TX 77005, 713/348-3770, fax 713/348-5221, byrne@rice.edu, <http://www.hfes.org/hpmtg/>.

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Tiffany Jastrzembski
Program Chair

Charneta Samms
Newsletter Editor

Steven Landry
Program Chair-Designate

Kevin Rider
Membership Chair

Matthew Bolton
Webmaster

INDIVIDUAL DIFFERENCES IN PERFORMANCE TECHNICAL GROUP

The Individual Differences in Performance Technical Group (IDTG) was established to serve HFES members who share an interest in any of the wide range of individual differences or personality variables that are believed to mediate human performance. Members of the IDTG believe that the study of these differences as related to human performance leads to improvements in the design of equipment, in the prediction of human task performance, in operational environments, and in training selection. IDTG members share an interest in how individual differences variables and personality relate to human performance in some important theoretical or applied manner. Research and applied topics within the group include such individual differences as performance ability, gender, intelligence, education, training level, and anthropometric variables. The IDTG domain also includes a wide range of modern personality aspects of social, cognitive, and biological origins. Most of the research related to personality and individual differences in human performance is conducted at universities,

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Angela Fellner
Newsletter Editor

Timothy Flemming
Webmaster

government and military agencies, and companies, many of which are concerned with training, selection, or improving performance. In addition, many researchers are interested in exploring the basic theoretical foundations that underlie individual differences or the personality and human performance relationships.

The IDTG sponsored two lecture sessions at the HFES 52nd Annual Meeting: "Individual Differences in Performance Under Stress" and "Individual Differences Potpourri." Presenters in the sessions considered different approaches to individual differences in human performance and their theoretical and practical implications for the design of human-technology interfaces and training procedures. The panelists presented the results of recent studies using cognitive and psychometric measures to examine individual differences in human performance under stress.

The group had 169 members as of December 31, 2008.

Contact the HFES Individual Differences in Performance Technical Group, c/o Krystyna Gielo-Perczak, MultiBiomech Consulting, 40 Allen Hill Rd., Holland, MA 01521, 413/245-4268, Krystyna.GieloPerczak@gmail.com, <http://www.hfes.org/idtg/>.

INDUSTRIAL ERGONOMICS TECHNICAL GROUP

The Industrial Ergonomics Technical Group (IETG) is concerned with the application of ergonomics data and principles for improving safety, productivity, and quality of work in industry. It concentrates on service and manufacturing processes, operations, and environments, including the design of products that form the basis of industrial employment.

The IETG organized five sessions during the HFES 52nd Annual Meeting in New York, including four lecture sessions and one panel session. Topics included upper-extremity ergonomics, ergonomics interventions, low back pain and lifting, and neuromuscular responses; the panel session was on ergonomics in the biosciences. The IETG also presented two student paper awards.

The group had 532 members as of December 31, 2008.

Contact the HFES Industrial Ergonomics Technical Group, c/o Thurmon E. Lockhart, 557 Whittemore Hall, Virginia Tech, Blacksburg, VA 24061, 540/231-9088, fax 540/231-3322, lockhart@vt.edu, <http://ietg.hfes.org/>.

INTERNET TECHNICAL GROUP

The Internet Technical Group (ITG) seeks to create a community for professionals from industry, academia, and government who share a common interest in Internet technologies and related behavioral phenomena. The ITG provides value to members through enabling and encouraging an immediate exchange of research, ideas, and technical innovations. This is considered crucial, given the rapid pace of development in this field. Areas of interest include user interface design of Web content, Web-based applications, Web browsers, Webtops, Web-based user assistance, and Internet devices; behavioral and sociological phenomena associated with distributed network communication; human reliability in the administration and maintenance of data networks; and accessibility of Web-based products.

Thurmon E. Lockhart
Chair

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Christopher Hamrick
Newsletter Editor

Susan E. Kotowski
Webmaster

Ania Rodriguez
Chair

Marc L. Resnick
Program Chair

The ITG hosted one discussion panel session at the HFES 52nd Annual Meeting in New York (“Information Everywhere: Exploring the Potential of the Mobile Web”), which was cosponsored by the Computer Systems Technical Group. The TG maintains a blog at <http://hfesitg.blogspot.com>. Membership in the ITG is free; to join, go to http://www.hfes.org/Web/TechnicalGroups/TG_memb_app.pdf.

The group had 429 members as of December 31, 2008.

Contact the HFES Internet Technical Group, c/o Marc Resnick, Industrial Engineering, Florida International University, University Park, Miami, FL 33199, 305/348-3537, fax 305/348-3721, resnick@fiu.edu, <http://www.internetg.org/index.asp>.

MACROERGONOMICS TECHNICAL GROUP

The Macroergonomics Technical Group (METG) is concerned with improving productivity and the quality of work life through the integration of psychosocial, cultural, and technical factors with the interface of human-machine performance in the design of jobs, workstations, organizations, and management systems. Work in this field is diverse, spanning applications in a variety of organizations and industries. Macroergonomics focuses on improving system performance by understanding the impact of psychosocial, cultural, and other environmental factors on performance. This encompasses a broad range of issues, including organizational structures and job design; automation, computerization, and informatics; participatory work strategies that include total quality management (TQM), quality of work life (QWL), and quality circles; corporate culture and communications; leadership roles and styles; psychosocial and cultural characteristics of the work force; management and implementation of organizational and technological change; team and group work, social networks, and communities; and occupational stress and shift work.

The METG sponsored two sessions during the HFES 52nd Annual Meeting in New York: a panel on the challenges of implementing information technology in the health care industry and a lecture session on the application and practice of macroergonomics. During 2008, many METG members were recognized for their research contributions in medical and office environments, and special journal issues on organizational design and management were completed. In March, METG members presented papers, gave keynote presentations, and participated in panels at the Ninth International Conference in Organizational Design and Management (ODAM IX) in Brazil. Upcoming events include a special symposium on ODAM at the IEA 17th Triennial Congress in Beijing, and sessions at the HFES 53rd Annual Meeting in San Antonio, Texas. The next two ODAM conferences will be held in South Africa (2011) and Denmark (2014).

The group had 201 members as of December 31, 2008.

Contact the HFES Macroergonomics Technical Group, c/o Mark Hoffman, NCR Corp., 2651 Satellite Blvd., Duluth, GA 30096, 770/623-7463, mark.hoffman@ncr.com.

Mark S. Hoffman
Chair

Nancy L. J. Larson
Program Chair

Samuel J. Aper
Newsletter Coeditor

Kara Shultz
Newsletter Coeditor

Carla J. Avarado
Webmaster/Secretary

PERCEPTION AND PERFORMANCE TECHNICAL GROUP

The primary goals of the Perception and Performance Technical Group (PPTG) are to promote the exchange of information about perception and its relation to human performance and to increase outreach, nurturing, and networking to enhance the visibility of the group and its members. The group's scope encompasses all sensory/perceptual modalities; it encourages multimodal approaches to human factors/ergonomics research. 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 the actions and behaviors that result from information presented to the various sensory systems. Design implications and display principles emerging and codified from this body of work are of great interest.

During the HFES 52nd Annual Meeting in New York, the PPTG continued its tradition of organizing a series of technically excellent sessions with outreach to other technical areas. There were seven PPTG sessions consisting of 30 lectures, with two cosponsored sessions (one with the Aerospace Systems Technical Group and one with the Cognitive Engineering and Decision Making Technical Group), and one discussion panel. The PPTG also honored one of its preeminent researchers, Christopher D. Wickens, by organizing a special discussion panel composed of his "dream team" of HF/E researchers. The panelists discussed issues related to workload measurement and countermeasures. Two graduate students received awards of \$500 each: Felix Portnoy of the University of Toronto and Jihun Kang of Mississippi State University. Also at the meeting, Keith Jones (Texas Tech University) was welcomed as TG program chair for the 53rd Annual Meeting, and Adrian Salinas (Air Force Research Lab) as TG program chair for the 54th Annual Meeting. Issues of the newsletter, *INSIGHT*, were published, and a new sponsor, Cambridge Research Systems, was brought on board.

The group had 439 members as of December 31, 2008.

Contact the HFES Perception and Performance Technical Group, c/o Harvey Smallman, Pacific Science & Engineering Group, 9180 Brown Deer Rd., San Diego, CA 92121, 858/535-1661, fax 858/535-1665, smallman@pacific-science.com, <http://www.hfes.org/pptg/>.

Harvey S. Smallman
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Keith S. Jones
Program Chair

Shelley Rosenbaum-Lipman
Newsletter Editor

Adrian O. Salinas
Program Chair-Designate

Keith S. Jones
Treasurer

PRODUCT DESIGN TECHNICAL GROUP

The Product Design Technical Group (PDTG) is dedicated to developing products that are useful, usable, safe, and desirable by applying the methods of human factors/ergonomics, consumer/user research, and industrial design. Members of the group are concerned with creating an appealing total user experience for consumer, commercial, medical, and industrial products and systems. Their work focuses on both physical and cognitive user interactions. PDTG members work for governments, industries, the service sector, and universities. The membership is distributed across many countries and includes industrial designers, human factors engineers, usability specialists, interaction designers, behavioral psychologists, safety specialists, market researchers, and product manufacturers. The PDTG is one of the largest technical groups in HFES.

The group conducted its 7th Annual Product Design Award competition for innovative and user-centered approaches to human factors and industrial design. The award recognizes both the design and the methods used to achieve the design. Past winners represent a diverse range of product types, including consumer, office, and industrial products. In 2008, the panel of judges identified two submissions for recognition – a mobile device and a software application. Motorola was declared the overall winner for its WT4000 Wearable Product Family, an arm-mounted scanner/computer used by warehouse workers to pick and handle orders. The award was presented to Chandra Nair, human factors lead of Motorola's Innovation and Design Group. Sage Software received an honorable mention for its Peachtree Accounting 2007 software program, which enables people to perform a wide variety of complex accounting and financial management tasks. Team Leader Paul Sherman accepted the award on behalf of his User-Centered Design and Usability Team. These and previous years' award winners can be seen at <http://www.hfes.org/pdtg/>. In addition to the special award session at the HFES 52nd Annual Meeting, PDTG hosted 10 papers in two lecture sessions, 2 poster sessions, and a Boeing panel session discussing how HF/E has been incorporated into product design, maintenance, and manufacturing of the new 787 Dreamliner aircraft. Also, a successful off-site evening networking event was cohosted by PDTG and the New York City Chapter of the Industrial Designers Society of America and was sponsored by Design Science, Tenor Design, and Usability Associates. Stan Caplan presided over the well-attended PDTG business meeting, which included a lively discussion of potential initiatives that could enhance the value of PDTG membership.

The group had 563 members as of December 31, 2008.

Contact the HFES Product Design Technical Group, c/o Steven M. Belz, AT&T Labs, 9505 Arboretum Blvd., Austin, TX 78759, 512/372-5775, fax 512/241-5775, stevenbelz@gmail.com, <http://www.hfes.org/pdtg/>.

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Patrick E. Patterson
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Farheen Khan
Program Chair

Joy Kempic
Secretary-Treasurer

Jean Schiller
Newsletter Editor

Stanley H. Caplan
Award Cochair

Dianne McMullin
Award Cochair

Andrew Morton
Webmaster

Jay G. Pollack
At Large

M. Susan Hallbeck
At Large

Eddie Adams
At Large

SAFETY TECHNICAL GROUP

The Safety Technical Group (STG) is concerned with the improvement of safety and the reduction of incidents and injuries through the investigation of accidents, the evaluation and development of products and systems, and the education of individuals and companies about the application of sound human factors/ergonomics principles. Members of the STG come from diverse backgrounds including academia, consulting, aviation, transportation, manufacturing, military, government, construction, and health care. Members of the STG are heavily involved in safety and health efforts, such as developing standards, contributing to public and labor policy, and engaging in safety and health research and practice.

In 2008, the STG held its first online election, which dramatically increased voter response. The STG continued to sponsor the Arnold Small Lecture in Safety series, and Charles Perrow, professor emeritus of sociology at Yale University, delivered the 21st of these lectures at the HFES 52nd Annual Meeting. The STG also presented two student paper awards in 2008. The first-place winner was Dyani Saxby from the University of Cincinnati for the paper, "Effect of Active and Passive Fatigue on Performance Using a Driving Simulator." In 2009, the STG will attempt to increase the level of interaction between members and the leadership. One method that is being explored is the development of quarterly online meetings, which would be open to all members of the group. It is hoped that these online meetings will allow those who cannot attend the Annual Meeting to interact with the STG officers and allow the officers a means to solicit feedback from members.

The group had 607 members as of December 31, 2008.

Contact the HFES Safety Technical Group, c/o Steven Arndt, 185 Hansen Ct., Ste. 100, Wood Dale, IL 60191, 630/274-3200, fax 630/274-3299, sarndt@exponent.com, <http://www.hfes.org/stg/>.

SURFACE TRANSPORTATION TECHNICAL GROUP

The Surface Transportation Technical Group (STTG) provides a forum for individuals involved or interested in transportation human factors to exchange information, research methods, and ideas that are being developed and/or applied in the international surface transportation field. Surface transportation encompasses numerous mechanisms for conveying humans and resources: passenger, commercial, and military vehicles, on and off road; mass transit; maritime transportation; rail transit, including vessel traffic services; pedestrian and bicycle traffic; and highway and infrastructure systems, including intelligent transportation systems. In essence, surface transportation refers to all forms of transit outside the aviation/aerospace sector.

In 2008, the STTG held officer elections and extends its thanks and appreciation to the outgoing officers. At the HFES 52nd Annual Meeting, Paul Green (University of Michigan Transportation Research Institute), a long-time member of the STTG, assumed his new role as president of HFES. At the business meeting, we recognized the winner of the STTG Best Student Paper Award for 2008, Nichole Morris (Wichita State University), for her paper, "Sources of Secondary Task Interference With Driving: Executive Processes or Verbal and Visuo-Spatial Rehearsal Processes?" The STTG held its annual dinner at the Transportation Research Board meeting in January 2008.

Steven Arndt
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Program Chair

John K. Lenneman
Newsletter Editor

Jay G. Pollack
Program Chair-Designate

John K. Lenneman
Secretary-Treasurer

Rebecca Iden
Webmaster

The group had 381 members as of December 31, 2008.

Contact the HFES Surface Transportation Technical Group, c/o William J. Horrey, Liberty Mutual Research Institute for Safety, 71 Frankland Rd., Hopkinton, MA 01748, 508/497-0237, fax 508/435-0482, william.horrey@libertymutual.com, <http://www.hfes.org/sttg>.

SYSTEM DEVELOPMENT TECHNICAL GROUP

The purpose of the System Development Technical Group is to promote (a) the development of methodologies for predicting and assessing human capabilities and limitations; (b) the creation of principles that identify the role of humans in the use, operation, maintenance, and control of systems; (c) the application of HF/E data and principles to the design and enhancement of human-system interfaces; and (d) the full integration of human requirements into system and product design through the application of human-systems integration (HSI) methods. HSI is the systems engineering discipline that is responsible for ensuring the technical and programmatic integration of human considerations into systems acquisition and product development processes. HSI is concerned with managing the performance, availability, accommodation, safety, and survivability of the user population and the impact on overall system or product cost and performance.

SDTG Program Chair Dennis White organized six excellent, well-attended sessions at the HFES 52nd Annual Meeting in New York. Dennis was also responsible for administering the selection process for the first SDTG David Meister Best Paper Award. The 2008 recipient was Diane Kuhl Mitchell for her paper, "United We Stand: Using Multiple Tools to Solve a Multidimensional Problem." Jennifer Narkevicius advanced the SDTG mission of promoting human-systems integration beyond HFES by serving as the SDTG liaison to INCOSE and the DoD Human Factors Engineering Technical Advisory Group. Larry Avery, immediate past secretary-treasurer, administered the process for nominating and electing new officers and also initiated a revision to our bylaws, which will be completed in 2009.

The group had 186 members as of December 31, 2008.

Contact the HFES System Development Technical Group, c/o Ryan L. Urquhart, P.O. Box 13491, Durham, NC 27709-3491, 919/405-4261, urquhart4@nc.rr.com, <http://www.hfes.org/sdtg/>.

TEST AND EVALUATION TECHNICAL GROUP

The Test and Evaluation Technical Group (TETG) focuses on all aspects of human factors/ergonomics testing and evaluation (T&E). It is a forum for the exchange of ideas about the art, science, and application of measurement when conducting tests, making assessments, and performing evaluations. Over the years, the methods and metrics used in testing and evaluation have changed as technology has evolved and critical HF/E issues have emerged. More than ever, measuring and assessing human performance, human-system performance, and factors that influence that performance remain a primary focus. In today's world, T&E activities play an important role during product/system research, development, testing, and evaluation processes. Early in this life cycle, T&E activities can provide information to support design decisions; later, they can provide information

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Chair/Newsletter Editor

Rebecca A. Grier
Program Chair

to assess performance and compare it with requirements. Depending on the situation, T&E methods and metrics can be formative or summative, analytical or empirical, quantitative or qualitative. They can be used to assess myriad dimensions of performance using traditional metrics such as speed and accuracy or more recently developed metrics related to cognitive workload or situation awareness.

Members of the TETG are concerned about the development, reliability, and validity of T&E methods and metrics and about the selection of the most appropriate methods and metrics for use in a particular situation. TETG members are particularly interested in comparative evaluations of alternative methods, procedures, and tools when applied to T&E and in studies that provide high-quality examples of the use of T&E methods and metrics.

During 2008, the TETG sponsored several technical sessions at the HFES 52nd Annual Meeting in New York. One of the most interesting was an interactive session proposed and chaired by Karla E. Allan of the U.S. Army Natick Soldier Research Center and Rebecca A. Grier of the U.S. Naval Sea Systems Command. The purpose of this session was to provide a forum in which participants (both presenters and audience members) could present proposed future T&E projects for the purpose of receiving direct feedback and “peer review” from other participants. This session proved to be extremely popular and may have been the first example of an exciting new means of professional interaction at the Annual Meeting. The TETG provided financial support to the Annual Meeting by sponsoring a social event. We also elected Rebecca Grier as technical program chair for 2009–2010.

The group had 242 members as of December 31, 2008.

Contact the HFES Test and Evaluation Technical Group, c/o Lawrence J. Hettinger, 57 Myrick Lane, Harvard, MA 01451, 978/772-1017, fax 978/772-4646, larry.hettinger@ngc.com.

TRAINING TECHNICAL GROUP

The Training Technical Group (TTG) consists of people interested in all aspects of human factors/ergonomics as applied to training systems. This includes the design and evaluation of training systems, the use of innovative technologies for training, and the application of instructional design principles within training systems. Members represent academia, training and consulting firms, industry, and government agencies. The largest sponsor of HF/E training research is the Department of Defense, and training researchers have been involved in efforts such as setting standards for performance measurement within training simulators for the Naval Aviation Simulation Master Plan; designing the instructor/operator stations that control distributed, networked simulation-based training exercises; and integrating neural and physiological measures with performance data to increase the efficiency and/or effectiveness of simulation-based and live training exercises.

Each year at the HFES Annual Meeting, the TTG offers a Best Student Paper Award in the amount of \$250 and a Student Grant Award in the amount of \$750. In 2008, Michael Curtis (University of Central Florida) won the Student Grant Award for his proposal, “Using a Dynamic Performance Measure to Assess an Aviation Discrimination Training Method.”

Gwendolyn E. Campbell
Chair

Camilla C. Knott
Program Chair

Michael Curtis
Newsletter Editor

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Jemma Harris (University of Western Sydney) won the Best Student Paper Award for the paper she coauthored with Mark Wiggins, "Evaluating Cognitive Competence: Does Eye Movement Behavior Represent the Missing Piece of the Puzzle?" The TTG hosted two discussion panels, one on training and assessing teams of teams, the other on the psychosocial aspects of training, which was cosponsored by the Cognitive Engineering and Decision Making TG. Three paper sessions were also presented on the role of feedback in training, aviation training (cosponsored by the Aerospace Systems TG), and training and education from the student's perspective (cosponsored by the Education TG).

The group had 326 members as of December 31, 2008.

Contact the HFES Training Technical Group, c/o Gwendolyn Campbell, Naval Air Warfare Center Training Systems Div., 12350 Research Pkwy., Code 4651, Orlando, FL 32826-3275, 407/380-4831, fax 407/380-4063, gwendolyn.campbell@navy.mil, <http://www.hfes.org/ttg>.

VIRTUAL ENVIRONMENTS TECHNICAL GROUP

The Virtual Environments Technical Group (VETG) is concerned with human factors/ergonomics issues associated with the interaction of humans and virtual environments, including virtual reality, simulation, and gaming. Issues of interest include maximizing human performance efficiency in virtual environments and ensuring health, safety, and enjoyment while circumventing potential social problems through proactive assessment. For VE/VR systems to be effective and well received by their users, researchers need to focus significant effort on addressing human factors issues.

During the HFES 52nd Annual Meeting, the VETG sponsored two lecture sessions ("Human Interfaces for Virtual Environments" and "Applications of Virtual Environments for Training and Human Performance Assessment") and one poster presentation. The group also held a business meeting to discuss future directions. The VETG presented two Student Paper Awards at the Annual Meeting. Jonathan Bakdash, a graduate student in psychology at the University of Virginia, received an award for his paper, "Comparing Decision Making and Control for Learning in a Virtual Environment: Backseat Drivers Learn Where They are Going," and Ines Ann Heber, a diplomate of psychology at the Universität Aachen, was given an award for "Attentional Asymmetries in Virtual Space." Both awardees also received complimentary meeting registration. The VETG updated its Web site, which is available at <http://www.hfes.org/vetg>.

The group had 210 members as of December 31, 2008.

Contact the HFES Virtual Environments Technical Group, c/o Yingzi Lin, Northeastern University, Mechanical and Industrial Engineering Dept., Boston, MA 02115, 617/373-8610, fax 617/373-2921, yilin@coe.neu.edu, <http://www.hfes.org/vetg>.

Yingzi Lin

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