Some of the best achievements of modern U.S. society, as well as a growing number of its problems, can be attributed to human behavior. That is the premise of the Decade of Behavior, a new initiative to promote the behavioral and social sciences in the United States. The initiative was developed and organized by the American Psychological Association and is being supported by many other professional organizations, including the Human Factors and Ergonomics Society. Three years in the planning, the Decade of Behavior initiative was officially launched in Washington on September 25, 2000, in the historic Cannon Caucus Room of the U.S. Congress on Capitol Hill.

The Decade of Behavior initiative is a long-term public education program with five major themes: health, education, safety, prosperity, and democracy. The launch event was a gala occasion featuring 13 prominent researchers in the behavioral and social sciences, who presented interactive exhibits showcasing research that best exemplified these themes. The audience was an eclectic but enthusiastic gathering of congressional staffs, representatives of federal funding agencies, and other assorted “movers and shakers” from the science and public policy worlds. APA’s Executive Director for Science, Richard McCarty, presided. A few members of Congress were also present, including U.S. Representative Brian Baird (D-Washington), in whose speech emphasis was placed on the tremendous economic gain to the nation of a public policy informed by the best behavioral and social science research.

All five Decade of Behavior themes were represented. I was asked to present research relevant to the safety theme. My exhibit highlighted my work in the area of aviation human factors and its potential contribution to the future development of safe and efficient systems for air transportation. I was the only human factors scientist among the 13 invited participants. This was therefore an excellent opportunity to publicize our field, and I took some pains to do so.

Aided by two Catholic University graduate students (Jacqueline Duley and Ulla Metzger) who have participated in this research, we prepared an exhibit that defined human factors in lay terms, described the problem that we are attacking (how to increase the capacity of the aviation system in response to increased demand for air travel, without compromising safety), and summarized some of our key results. Our exhibit also emphasized that new aviation technologies must be designed with early human factors input if they are to be used effectively and safely. Two large computer monitors in our booth displayed a simplified version of our air traffic control simulator. Visitors could see a simulated display of a radar console with an additional display showing advanced concepts for controller-pilot communication (electronic datalink and electronic flight strips). An additional TV monitor played a videotape illustrating our eye movement recordings of air traffic controllers.

Air travel is expected to double over the next decade. Advanced technologies and new traffic management methods are being implemented to enhance an overloaded aviation system. Our exhibit showed some results from our cockpit and air traffic simulator studies of the performance of pilots and controllers. Such studies indicate that if the anticipated benefits for capacity and safety are to be realized, new computer support tools must be designed that take human factors into account. We demonstrated how free flight, in which pilots will be granted greater freedom in selecting and changing routes, will affect air traffic controllers.

Visitors to our booth enjoyed controlling the simulated air traffic and gained a better understanding of human factors methods and the issues involved in the implementation of free flight and other advanced air traffic management concepts. We believe that most came away with a healthy respect for the skill with which professional air traffic controllers handle large numbers of aircraft in congested airspace.

(continued on page 2)
Seeking Proposal Reviewers

Technical reviewers are needed to assist with the evaluation of 45th Annual Meeting proposals. Proposals are due March 19, and the review period extends through mid-April.

If you are interested in serving as a proposal reviewer in a particular Technical Group or for General Sessions, Workshops, or Special Sessions, please contact the appropriate program chair. Program chair contact information is included in the Call for Proposals, which was mailed to members in January and is posted at the HFES Web site (http://hfes.org; “Where to Submit Your Proposal”).

Calling All Exhibitors

HFES invites companies providing publications, products, and services to exhibit at the 45th Annual Meeting in Minneapolis. More than 90% of attendees report visiting the exhibit hall during the meeting, seeking books and standards; hardware and software measurement, modeling, and design tools; and furniture and work aids.

The rate for a 10’ × 10’ booth is $2000; $750 for a tabletop. Coffee break and other sponsorships are available. Corporate sponsorships are welcome for any aspect of annual meeting support. For more details, contact Lois Smith in the HFES central office (310/394-1811, lois@hfes.org).

Human Factors and the Decade of Behavior

(continued from previous page)

The results of our research indicate that automation and other technologies that are implemented to cope with the anticipated doubling of air traffic over the next decade must be designed to support rather than supplant these skills. One visitor, NASA Chief Scientist Kathie Olsen (see photo), praised our work and our exhibit’s emphasis on the important role of human factors science in aviation. Several others commented that they were surprised and pleased to see that human factors was more than “knobs and dials” and was being applied to important societal problems.

The Decade of Behavior has ambitious goals (visit the Web site at http://www.decadeofbehavior.org). As human factors scientists and practitioners, we should support these goals because our field is an important component of the behavioral and social sciences. Will the goals be met? Broad political support will be essential. At the launch event, a letter from former President Clinton recognizing the importance of the behavioral and social sciences was read by Representative David Price (D-North Carolina). Clinton stated in part that “the consequences of untreated behavioral problems are staggering in both human and economic terms…. The behavioral and social sciences offer us invaluable resources in identifying and eliminating the causes of many of these seemingly intractable problems.” One can only hope that his successor in the White House agrees.

Raja Parasuraman is professor of Psychology and director of the Cognitive Science Laboratory at the Catholic University of America. His research interests include automation, aviation and air traffic control, aging, vigilance, and workload.

What You Can Do

My colleagues and I were very pleased to have Dr. Parasuraman and his students play a key role in the Decade of Behavior launch event. His research exhibit was highly interactive and provided clear evidence to the many guests that human factors researchers will play an increasingly important role in our society.

Whether we are addressing air traffic control, medical device error, or ground traffic safety, the study of human factors is key. Part of what we hope the Decade of Behavior initiative accomplishes is to encourage behavioral scientists to think about how they can communicate to laypersons the relevance of their research to the quality of life in our society. Dr. Parasuraman certainly set an excellent example of this.

We are delighted that the Human Factors and Ergonomics Society is involved in the initiative and was represented in such a compelling manner by Dr. Parasuraman. We look forward to working with HFES throughout the Decade initiative.

Richard McCarty, Executive Director
Decade of Behavior
Ann M. Bisantz was awarded the National Science Foundation’s Faculty Early Career Development award for “Studies of Decision Making in Complex, Dynamic Environments.” This four-year award supports junior faculty for an integrated program of research and teaching. Ann is an assistant professor at SUNY Buffalo and may be reached at 342 Bell Hall, Department of Industrial Engineering, University at Buffalo, Amherst, NY 14260; 716/645-2357; bisantz@eng.buffalo.edu.

Joseph S. Dumas has joined Oracle Corporation in Waltham, Massachusetts. He can be reached at 781/684-7745 or via e-mail at joc.dumas@oracle.com.

News

HF and Medical Device Design Telecon

The Food and Drug Administration will sponsor “Integrating Human Factors Engineering into Medical Device Design and Development,” a live satellite teleconference at 1:00 p.m. EST, on February 14, 2001. The teleconference will focus on the role of the medical device industry in reducing errors involving medical device use. In a case study format, a panel of experts will describe how and why medical device manufacturers should integrate human factors engineering into their design processes to address use error and discuss techniques.

For more information, contact Jay Crowley, FDA, 301/594-1161, fax 301/594-0067; jjc@cdrh.fda.gov.

More News on page 4.
IEA/Liberty Mutual Prize

Applications are now being accepted for the 2001 International Ergonomics Association (IEA)/Liberty Mutual Prize in Ergonomics and Occupational Safety. This $5,000 award recognizes individuals who have made significant contributions to the reduction or prevention of work-related injuries and/or to the advancement of theory, understanding, and development of occupational safety research.

In addition, the award recipient will be eligible for the 2003 Liberty Mutual Medal, to be awarded at the 2003 IEA Triennial Congress in Seoul, Korea. The Medal recognizes the best of three Liberty Mutual Prize awardees from the previous three years and consists of a medal and a $15,000 stipend.

Candidates for the Liberty Mutual Prize must submit a letter of application and an original, previously unpublished research paper relevant to the field of occupational safety and ergonomics, in electronic format, by March 15, 2001. An international review committee will select the winning contribution. The prize will be presented at an IEA-sponsored conference or a conference in the country of the recipient. For more information, contact Y. Ian Noy, IEA Awards Chair, c/o Transport Canada, 330 Sparks Street, Tower C, Ottawa, Ontario, Canada, K1A 0N5; 613/998-2268, fax 613/998-4831; noyi@tc.gc.ca. Applicants will be notified by mid-June.

Assessing WMSDs

The Quick Exposure Check (QEC) was developed by Guangyan Li and Peter Buckle at the University of Surrey as the result of a research project aimed at creating a practical, user-friendly method for assessing exposure to physical risks for work-related musculoskeletal disorders (WMSDs).

The QEC tool consists of a checklist for the assessor and worker, an exposure score table, and a user guide. This tool enables the assessor to identify risk factors for WMSDs, evaluate risk exposure levels for different body regions, suggest actions that need to be taken in order to reduce the risk exposure, evaluate the effectiveness of an ergonomics intervention in the workplace, and educate users about the musculoskeletal risks in their workplace.

International Master’s Programs

Applications are being accepted for the International Master’s Programs at the Institute of Technology at Linköpings Universitet, Sweden. Four programs are offered: communication and interactivity, which features courses in telecommunication theory and human-computer interaction; manufacturing management, which focuses on product and process technology and operations management; materials physics, which features courses in electronic materials and devices; and traffic environment and safety management, which includes courses in human factors in road safety and driving simulation and accident investigation. The courses are taught in English, and there are no tuition fees. For details, contact Ms. Anja Norlund, International Exchange Coordinator, Linköpings Universitet, anjno@tfk.liu.se, http://www.lith.liu.se/en/master.

Safety and Health Grant

The American Society of Safety Engineers and the American Industrial Hygiene Foundation have combined efforts to create a $12,000 grant that will be awarded to a safety and health researcher(s) exploring the issue of “Developing Future Safety Cultures in Industry.” The goal is to enhance the occupational safety and health performance of managers, supervisors, and employees.

Applications are now being accepted by both organizations. The document should include a proven history of effectiveness, measurability of results, efficient use of resources, and a well-defined target population, and the work should easily be transferred to other work environments. Deadline for application is March 1, 2001. For more information, contact Mary Goranson, ASSE, 1800 E. Oakton St., Des Plaines, IL 60018; 847/699-2929; http://www.asse.org/community/safetyfound.html or http://www.aiha.org/community/safetyfound.html.

Transportation Management MBA

Dowling College announces a new MBA program in Intermodal Transportation Management. The program prepares students to excel in both private and public transportation, to impact the way transportation business is being conducted, to apply proven solutions to complex problems, and to assume leadership in the industry. Course topics include transportation system safety, transportation workplace safety, and transportation system design that considers the human factors aspects related to transportation vehicle design and operation. Human factors is considered an integral component of the program, and key faculty members have human factors backgrounds. For more information, contact Carl Berkowitz, 631/244-3261; berkowic@dowling.edu, http://www.dowling.edu.

New International Journal

Original research submissions are invited for Universal Access in the Information Society, which begins publication this month. This interdisciplinary refereed journal addresses the accessibility, usability, and acceptability of information society technology. Contact Alfred Hofmann, Executive Editor, Computer Science Editorial III, Springer-Verlag, Tiergartenstrasse 17, D-69121 Heidelberg, Germany; +49 6221 487 599, fax +49 6221 487 588; hofmann@springer.de, http://www.springer.de/journals/uais/.
Cognitive Modeling

Submissions are welcome for the 4th International Conference on Cognitive Modeling, ICCM-2001, to be held in Fairfax, Virginia, July 26–28, 2001. The goal of ICCM-2001 is to bring researchers from diverse backgrounds together to compare cognitive models, to evaluate models using human data, and to further the development, accumulation, and integration of cognitive theory. Submissions are due March 1, 2001. Contact Wayne Gray, Program Director, George Mason University, ARCH Lab/HFAC Program, MSN 315, Fairfax, VA 22030-4444; 703/993-1357, fax 703/993-1330; gray@gmu.edu; http://hfac.gmu.edu/iccm/.

CIC-9

Abstracts are invited for the ninth Color Imaging Conference, to be held November 5–9, 2001, in Scottsdale, Arizona. Areas of interest include color engineering, color and computer graphics, color in software and hardware development, and psychophysics concerning human color vision. Submissions are due April 1, 2001. Electronic submissions are strongly encouraged. Contact the Society for Imaging Science and Technology, 7003 Kilworth Lane, Springfield, VA 22151; 703/642-9090, fax 703/642-9094; info@imaging.org, http://www.imagin.org.

Work in the Global Village


CAES 2001

Proposals are invited for the International Conference on Computer-Aided Ergonomics and Safety, to be held July 29–August 1 at the Outrigger Wailea Resort in Maui, Hawaii. The objectives are to facilitate the exchange of information about recent advances in computer-aided methods, techniques, and tools for human factors/ergonomics, safety, and health applications. Areas of interest (26 in total) include virtual technology, telecommunication, office ergonomics, hand tool design, medical applications, and cognitive modeling. Electronic abstracts are due March 15, 2001. Contact Biman Das, Dept. of Industrial Engineering, Dalhousie University, Halifax, Nova Scotia B3J 1B6 Canada; +902/420-3286, fax +902/420-7858, buman.das@dal.ca.


International Conference on Applications of Human Performance in Health and Disability, March 26–29, 2001, Cairo, Egypt. Continuing Medical Education Office, University of Cincinnati, P.O. Box 670567, Cincinnati, OH 45267-0567; 800/207-9399; http://www.med.uc.edu/meded/continuing/egypt/.


Intelligent Transportation Society of America’s 11th Annual Meeting and Exposition, June 4–7, 2001, Miami Beach, FL. ITS (continued on page 6)


★ 17th World Congress of the International Association of Gerontology, July 1–6, 2001, Vancouver, Canada. Congress Secretariat, Gerontology Research Centre at Simon Fraser University, 2800-515 W. Hastings St., Vancouver, BC, Canada V6B 5K3; 604/291-5062, fax 604/291-5066; iag_congress@sfu.ca, http://www.harbour.sfu.ca/iag/.


★ 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.
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