



CONTENTS

HUMAN FACTORS	2	HFES	5
ELECTION	2	REVIEWS OF HF/E	5
ANNUAL MEETING	3	IEA	5
NATIONAL ERGONOMICS MONTH	4	INTERORGANIZATIONAL	6
NEWS	4	CALL FOR PAPERS	6

HFES and SAGE Publications to Copublish *Human Factors*

By Lois Smith, Communications Director

On April 26, during its midyear meeting in Philadelphia, the HFES Executive Council approved a recommendation by a group of key stakeholders within the Society to partner with SAGE Publications on the production, marketing, and distribution of *Human Factors*. This decision followed almost two years of research, analysis, contract negotiations, and consensus building.

Joint publication will begin with the February 2009 issue. HFES retains ownership of the journal and control over editorial policies. SAGE will lend its considerable expertise in international marketing and sales and will help the editor and Editorial Board find ways to increase the journal's scholarly impact.

The Process

In late 2006, Council directed me to investigate the potential benefits of a partnership with a commercial publisher for *Human Factors*. Following communication with the Editorial Board and Publications Committee, I worked with a scholarly publishing consultant and the committee to draft a request for proposals, which outlined the Society's goals: to maintain editorial control over the journal's content, to increase exposure to the journal among libraries and other institutional subscribers, to increase the journal's impact, and to realize at least as much income as under the existing self-publishing program.

RFPs were sent to 16 commercial and university press publishers, and 5 were returned, all from commercial publishers. The publishing consultant produced a side-by-side comparison of the proposals, recommending two for final consideration on the basis of their completeness in addressing the points in the RFP and on the strength of their offers. A task force chaired by HFES Past President Douglas H. Harris then evaluated the proposals, concluding that the SAGE offer appeared to be the most advantageous for HFES, followed closely by that of another publisher.

At the fall 2007 Council meeting, the Publications Committee and I were asked to request detailed publishing agreements from the two final candidates. Over the next five months, negotiations continued with both publishers, one aim of which was to equalize and optimize the contract terms as much as possible. The final Communications Department report and analysis, as well as a final analysis and recommendation from the consultant, concluded

that although the offers were similar in many ways, SAGE remained the best candidate, for at least two reasons.

First, as a large privately held business, SAGE appears to be more flexible than the other candidate, which is a very large public company. This flexibility is demonstrated through, among other things, contract guarantees that the Society will be fully involved in many critical decisions, such as subscription rate-setting, as well as total control over the editorial review process.

Second, SAGE hosts its content on the award-winning Stanford University HighWire Press platform, the mission of which is to support scholarly societies. HighWire just launched a major upgrade of its system to enable Web 2.0-style interactions around the hosted content. HFES members who follow reference links from *Human Factors* papers to work published in other journals on HighWire will be able to view full-text articles free even if they are not subscribers to that content. In addition, the SAGE online journal collection won the Association of American Publishers Professional and Scholarly Publishing Division's Award for Excellence for best platform in the electronic publication category.

Our recommendation to partner with SAGE was endorsed by the Publications Committee, Scientific Publications Domain Leader Kermit Davis, and Executive Director Lynn Strother.

What Happens Next

The final contract negotiations will conclude at the end of May, and the agreement officially takes effect on January 1, 2009. However, transitional work will begin immediately, in preparation for 2009 library renewals and production of the February issue.

The initial contract term is three years. HFES will evaluate the effectiveness of the partnership annually and will review regular progress reports throughout each year. The Communications Department will closely monitor quality of production and prompt delivery of finished issues.

What Changes, What Stays the Same

Two differences in process with our partnership are that authors will work with a team of SAGE staffers regarding manuscript queries and page proofs, and members who opt for online delivery of their issues will be transitioned to the HighWire platform. Further details will be sent as we move closer to the transition.

continued on page 2

Because HFES retains full ownership of the journal and control over all editorial policies and decisions – including manuscript review and acceptance – the editor, the Editorial Board, and reviewers will see no change in processes. The staff will continue to monitor timeliness of the review process and work with authors to obtain final manuscripts prior to delivering them to SAGE for production.

No change in interaction with HFES members will occur under the publishing collaboration. Members will continue to communicate with the Society's central office staff on all matters, including changing delivery preference (online, print, or both), inquiring about submissions, and communicating any quality or timeliness concerns.

Advantages to HFES

There are many significant advantages to working with SAGE, among which are the following:

- Its international sales outreach from offices in England, India, and Singapore will increase the readership of *Human Factors*, which can in turn increase article citations and further drive up the Impact Factor (.86 in 2006). The greatest area of growth is expected through sales to library consortia around the world.
- Our team at SAGE will assist us in promoting subscriptions, submissions, and membership via representation at technical meetings and marketing campaigns.
- SAGE will bolster the Society's public relations efforts by promoting work of interest to the general public through press releases.
- By hosting the journal on the award-winning Stanford University HighWire Press platform, SAGE will greatly enhance the Internet presence of *Human Factors*.

"The move to partner with SAGE Publications is an important step forward in the history of *Human Factors*," says Editor Nancy J. Cooke. "With this change, we hope to realize significant growth in readership and in the impact of our work."

We are looking forward to our new partnership with SAGE and will report periodically to members via future *HFES Bulletin*

articles. Questions about our collaboration with SAGE may be addressed to me (lois@hfes.org) or to HFES Publications Committee Chair John D. Lee (jdlee@uiowa.edu). ☒

HUMAN FACTORS

Seeking Special *Human Factors* Section Proposals

By Nancy J. Cooke, Editor, *Human Factors*

The *Human Factors* editor and associate editors are requesting proposals for special section topics. Preference will be given to topics that are timely and of broad interest (e.g., HF/E and homeland security; neuroergonomics) and for which potential papers are complete or nearly complete. This latter requirement is necessary given an accelerated timeline from topic selection to publication (about 12 months).

Guidelines for submitting a proposal for a special section and criteria for selection are available at <http://www.hfes.org/Web/PubPages/HFSSprocedures.html>. Proposals are due **July 15, 2008**, and will be reviewed by the *Human Factors* editorial team. One topic will be selected from among the submissions. Based on the suggested timeline, the approved special section will be published in September 2009. Proposals not selected can be resubmitted next year. ☒

ELECTION

HFES Election

This year's nomination ballots have been tallied, and the following candidates have agreed to run for office. Ballots will be mailed to all Full Members and Fellows in good standing in June. Completed ballots are due July 23.

President-Elect

Kathleen Mosier, San Francisco State University
Joel S. Warm, University of Cincinnati
Michael S. Wogalter, North Carolina State University

Secretary-Treasurer-Elect

Michael J. Kalsher, Rensselaer Polytechnic Institute
Brian M. Kleiner, Virginia Tech
Scott A. Shappell, Clemson University

Executive Council At-Large Member

Caroline G. L. Cao, Tufts University
Francis T. Durso, Texas Tech University
Anand K. Gramopadhye, Clemson University
M. Susan Hallbeck, University of Nebraska-Lincoln
David B. Kaber, North Carolina State University
Dianne L. McMullin, Boeing Commercial Airplane Group ☒



Human Factors
and Ergonomics
Society

Bulletin

Volume 51, Number 6

June 2008

The *HFES Bulletin* (ISSN 1527-3660) is published 12 times a year by the Human Factors and Ergonomics Society, 1124 Montana Ave., Suite B, Santa Monica, CA 90403 USA, <http://hfes.org>. Address inquiries and address changes to HFES, P.O. Box 1369, Santa Monica, CA 90406-1369 USA, 310/394-1811, fax 310/394-2410, <http://hfes.org>.

Copyright © 2008 by the Human Factors and Ergonomics Society. Printed in the USA. POSTMASTER: Send address changes to the Human Factors and Ergonomics Society, P.O. Box 1369, Santa Monica, CA 90406-1369 USA. The *HFES Bulletin* is provided to members of the Society (\$10 of annual dues covers member subscriptions); nonmembers may subscribe for \$42/year. Periodicals postage paid at Santa Monica, CA, and additional mailing offices. USPS #018-206.

2008 Student Career and Professional Development Day

By *Sandra K. Garrett, Student Affairs Committee Chair*

Save the date! Monday, September 22, will be a packed day targeted at today's student and tomorrow's HF/E professional.

I will begin the morning session with a brief talk on the student resources that HFES offers. Although it is designed to be a short presentation, I will provide plenty of information on how you can access those resources to enhance your remaining time as a student and prepare for your chosen career. During the second part of the morning session, we will focus on what employers and recruiters are looking for in future employees. A panel of HF/E recruiters (many of whom conduct interviews at the Annual Meeting) will discuss the "do's and don'ts" of getting a real job and what students can be doing now to prepare themselves for the big interview.

The afternoon session, cohosted by the Old Dominion University and University of Idaho Student Chapters, is titled, "Developing Human Factors and Ergonomics Society Student Chapters: Building New Chapters and Enhancing Existing Chapters." The purpose of this panel session is to provide information to new and existing HFES student chapters about how to further expand their chapter membership. The panelists will represent a variety of student chapters with diverse backgrounds and experiences. During the discussion, HFES student members and their faculty advisers can gain new insights and strategies for enhancing their respective chapters, promoting the HF/E discipline, encouraging new members, and increasing chapter activity.

Following the second session, there will be an early-evening student gathering, also cohosted by the student chapters from Old Dominion University and the University of Idaho. The purpose of this gathering is to allow students to network with other students and with members of the Student Career Day panel. HFES student chapter members are strongly encouraged to develop a poster about their chapters to raise awareness about who they are and what they do.

Please plan to attend this special day of events devoted to students. For additional information about the Student Career and Professional Development Day program, feel free to contact me at garrett@clemsun.edu or 864/656-3114.

Mentor-Mentee Luncheons

By *Haydee M. Cuevas*

For the fourth year, a series of mentor-mentee luncheons will be held during the HFES Annual Meeting to provide students and early-career and transitional professionals with information and opportunities to develop mentoring relationships with established professionals in the field. The luncheons will be held during the lunch break (12:00–1:30 p.m.) on Tuesday, Wednesday, and Thursday (September 23–25). Complimentary lunch will be provided to all attendees. Past participants have represented a "who's who" of some of the Society's most respected members, including past pres-

idents and officers. We expect many of these professionals to join us again this year, with different members participating each day.

To keep the lunches intimate and informal, attendance will be limited to 25 (20 students and 5 professionals) per session. Reservations will be accepted on a first-come, first-served basis; a waiting list will be established in case of cancellations. Please RSVP to Haydee Cuevas (haydee.cuevas@satechnologies.com) by **September 7, 2008**, to reserve your place. When responding, please indicate the specific day you wish to attend (Tuesday, Wednesday, or Thursday). Also indicate your field of interest (e.g., aviation, HCI, systems engineering) and career path (e.g., academia, industry, government).

To ensure the success of this initiative, however, we also need involvement from our most respected and established professionals. Contact me (haydee.cuevas@satechnologies.com) for more information about participating. With your support, this year's Annual Meeting will be a most rewarding experience for the next generation of human factors/ergonomics professionals!

Haydee M. Cuevas developed the Mentor-Mentee Lunch program for the 2004 Annual Meeting and has been hosting it ever since. She is a research associate at SA Technologies.

Perrow To Deliver Arnold M. Small Lecture

By *Michael J. Kalsber, Arnold Small Lecture Chair*

Charles Perrow will deliver the 21st Annual Arnold M. Small Lecture in Safety at this year's Annual Meeting in New York. The lecture will take place on Wednesday, September 24, from 1:30 to 3:00 p.m.

His talk will focus on software failures and the effect they have on critical infrastructure and safety. Perrow suggests that such failures could be reduced, though not eliminated, by requiring open-source software, whereby critical systems are linked to the Internet.

Perrow, professor emeritus of sociology at Yale University, has published 7 books and more than 60 articles on organizational theory. He is past vice-president of the Eastern Sociological Society and a member of the Committee on Human Factors of the National Academy of Sciences. Perrow is also a Fellow of the Center for Advanced Study in the Behavioral Sciences, the American Academy for the Advancement of Science, and several other organizations.

Showcase Your University Lab at the Annual Meeting

At this year's meeting in New York, university laboratories that are conducting human factors/ergonomics research and application will be showcased along with technical posters. The aim of this showcase is to demonstrate the variety of HF/E educational and research programs, not to describe a specific research project.

There is room for 11 individual displays during each of the first

continued on page 4

ANNUAL MEETING, cont.

and third technical posters sessions: Tuesday, September 23, from 3:30 to 5:00 p.m. and on Thursday, September 25, from 10:30 a.m. to 12:00 noon. Up to three lab displays may be submitted by a single institution. University lab posters may be attended or unattended by lab representatives. There is no proceedings paper associated with lab displays.

If you would like the opportunity to display a 4 x 8-foot poster about your university's HF/E lab, please submit a short description of your display to Lois Smith at the HFES central office (lois@hfes.org, 310/394-1811, fax 310/394-2410). Be sure to include the name and contact information for the person with whom HFES will coordinate to set up the display. Descriptions are due by **July 7**, and space will be allocated on a first-come, first-served basis. ☉

NATIONAL ERGONOMICS MONTH

Get Ready for NEM 2008!

By *Haydee M. Cuevas, NEM Committee Chair*

National Ergonomics Month (NEM) in October is targeted at promoting human factors/ergonomics to the general public through outreach and community service. The NEM Committee invites all HFES members, local chapters, and student chapters to create a plan of action that actively promotes NEM in your communities. No idea is too great or too small! Speak about HF/E at your local schools. Volunteer to serve as a judge at a local science fair. Organize a group volunteer day for a Habitat for Humanity building project. Hold a "design challenge" competition at work or at your university. The possibilities are endless! For more great ideas, visit <http://hfesnem.org/>.

To enter the 2008 NEM Best Action Plan Contest, please include the following information in a Microsoft Word file and send it to me as an e-mail attachment at haydee.cuevas@satechnologies.com. The submission deadline is **August 17, 2008**.

Please include the following:

- Proposer's name(s), address, e-mail, and daytime phone number.
- Whether the entry is on behalf of an official local or student chapter. If so, please specify the chapter's name.
- Names of other professionals and/or students participating in organizing or implementing your action plan.
- Title of your action plan.
- Brief description of your action plan. What activities are planned?
- Timeline for your action plan. When will you be implementing it?
- Goal(s) of your action plan. What do you seek to accomplish?
- What audience(s) are you targeting (e.g., community, students, corporations, government)?

Awards will be presented to the best individual, local chapter, and student chapter action plans at the HFES 52nd Annual Meeting in New York City in September.

Entries are also invited for the 2007 NEM Best Action Plan Implementation Contest. Contact me at the e-mail address above for submission instructions.

The NEM Committee seeks volunteers to serve on the Selection Committee for these two NEM contests. If you are interested, please contact me at 407/737-8909 or via the e-mail address above. Together, we can make NEM 2008 an outstanding success! ☉

NEWS

Chaffin Receives Engineering Award



The American Association of Engineering Societies has named HFES Fellow Don B. Chaffin the recipient of its 2007 National Engineering Award. HFES President John F. "Jeff" Kelley presented the award at the 29th Annual Awards Ceremony, held at the National Academies Great Hall in Washington, D.C., on May 5, 2008.

Chaffin is the R. G. Snyder Distinguished University Professor (Emeritus) of Industrial and Operations Engineering, Biomedical Engineering, and Environmental Health at the University of Michigan. He also has served on numerous government panels and currently chairs the NAS Advisory Panel for the Army's Human Research and Engineering Directorate.

The National Engineering Award is presented for inspirational leadership and tireless devotion to the improvement of engineering education and to the advancement of the engineering profession, as well as to the development of sound public policies as an engineer-statesman.

Chaffin was nominated by HFES, with support letters from Waldemar Karwowski (HFES past president) and William S. Marras (Honda Professor and Director, Biodynamics Laboratory, Ohio State University, and Executive Director, Institute for Ergonomics).

More information on the award and past recipients (including Neil A. Armstrong, Norman R. Augustine, and Thomas B. Sheridan) can be found at <http://aaes.org/communications/awards.asp>.

BCPE Certification Applications

The Board of Certification in Professional Ergonomics (BCPE[®]) is accepting Certification by Portfolio Review applications until **July 30, 2008**. The original closing date of April 30 was extended, partly because of a larger-than-expected number of applications.

Certification by Portfolio Review is available to accomplished professionals with at least 15 years of human factors/ergonomics/usability work experience.

Qualified candidates are invited to apply and can download a free application form at <http://bcpe.org/store/detail.asp?RecordID=51>. Once submitted, portfolio applications are evaluated in accordance with BCPE's stringent blind review process.

For more information about BCPE and its certification programs, please visit the BCPE Web site (<http://www.bcpe.org>) or contact the BCPE office at 888/856-4685. ☉

Corrected 2008–2009 Directory To Be Mailed in June

By Lois Smith, Communications Director, & Carlos de Falla,
Director of Member Services

Because of a number of errors in the first printing of the 2008–2009 Directory & Yearbook, HFES has reprinted a corrected version and will mail it to all members in June. If you do not receive your corrected edition by the end of the month, please contact us at the number below.

The following errors were corrected:

- erroneous e-mail and Web addresses in alphabetical listings of members, beginning on page 317;
- incorrect advertisement for NexGen (see page 7 of this issue);
- omission of Raymond Nickerson's report on *Reviews of Human Factors and Ergonomics* (see page 40); and
- errors in some non-U.S. telephone and fax numbers.

Note that the corrected directory reflects information that was in the member database as of the middle of February 2008, because providing updated details would have caused a significant delay in sending this corrected version.

This error affected only the printed directory; you can find correct information about other members by logging in to <http://hfes.org> and selecting the online Member Directory.

Please accept our apologies for any inconvenience these errors may have caused. ☒

REVIEWS OF HF/E

Reviews of HF/E

By Raymond S. Nickerson, Series Editor

About five years ago, HFES launched *Reviews of Human Factors and Ergonomics*. The idea was not entirely new. In 1984, the Human Factors Society, as it was then called, published *Human Factors Review: 1984*, under the editorship of Frederick Muckler. The hope then was that additional similar volumes might follow. That hope did not materialize right away, but the launching of *Reviews of Human Factors and Ergonomics* 20 years later, and the commitment to make its publication a recurring event, may be seen as its eventual fulfillment.

One of the purposes of this article is to inform you, the HFES membership, of the short history of *Reviews* to date and of its current status. Another is to enlist your support of this enterprise going forward.

Mission of Reviews of HF/E

In establishing *Reviews of HF/E* as a series, the long-range objective, as expressed in the preface to the first volume, was that the series would “become a primary resource for researchers,

practitioners, and other potential users of human factors and ergonomics research findings.” Our hope is that as the volumes accumulate, they will “become the first place one thinks to look for extensive reviews of the various areas of HF/E work.”

To date, three volumes have been published and are available for purchase and use. Volume 4 is scheduled to be published later this year. Volume 5 is in the works, and Volume 6 is being planned by editor Douglas H. Harris, who is in the process of identifying topics and authors.

If this HFES venture is to succeed, it needs the strong and continuing support of the membership. If you believe it to be a worthwhile undertaking, here are some of the ways you can support it.

Give us feedback regarding whether the series, in whole or in part, is meeting your needs as an important source of HF/E information. If you have found a particular chapter or chapters to be especially useful, we would like to hear about it. If you have been disappointed about the coverage of a specific topic or topics, hearing about that would be useful, too. If you wish to communicate directly with specific authors or editors, of course you should do so, but feedback to HFES Communications Director Lois Smith (lois@hfes.org, 310/394-1811) would be especially useful in influencing the planning of future volumes.

Suggest one or more topics that you would like to see covered in future volumes. Again, suggestions should be sent to Lois, who will see that they are forwarded to the series editor.

Nominate potential authors of chapters on specified topics. Self-nominations are welcome. Nominations should be accompanied by a brief explanation of why you think the nominee would produce a first-rate chapter that would be of interest to many HF/E researchers and/or practitioners.

Volunteer to serve as a reviewer of manuscripts submitted in specific topic areas. Although chapter manuscripts on specific topics are submitted by invitation, all such manuscripts undergo peer review – typically at least three reviews of each manuscript, in addition to those of the volume and series editors – and decisions regarding publication are made on the basis of those reviews. The commitment of competent reviewers is crucial to maintaining a high-quality publication.

Make sure your university, company, or governmental organization purchases the volumes for its library. Each volume has its own Web page on the HFES site at <http://hfes.org/Publications>.

Subscribe to the series yourself. HFES has made it possible to purchase Volumes 1–4 at a special set price. Details are on the Web page noted earlier. ☒

IEA

K. U. Smith Award Submissions

Submissions are being accepted for the IEA K. U. Smith Student Award, to be presented during the IEA 17th Triennial Congress on August 9–14, 2009, in Beijing, China.

Any student enrolled in an accredited postsecondary institution (college, university, technical, or vocational school) worldwide is eligible to apply for the award, which recognizes exceptional

continued on page 6

IEA, cont.

applications of or contributions to the human factors/ergonomics field. Two awards will be given.

Applications should include an abstract for the paper, the student's résumé, and a letter from the student's academic adviser. The research or project described in the paper referenced by the submitted abstract must be completed **after** June 2008. In the case of multiple authors, the applicant must be primarily responsible for carrying out the work described in the abstract.

The deadline for submissions is **October 6, 2008**. For more information, please e-mail Pascale Carayon (carayon@engr.wisc.edu), or visit the Awards section of the IEA Web site, <http://www.iea.cc>. ☒

INTERORGANIZATIONAL

Ergonomics Society Meeting in Robin Hood's Realm

By *P. A. Hancock*

Nottingham is known traditionally as the location for the adventures of Robin Hood, but very different adventures were to be had as the Annual Meeting of the Ergonomics Society began, interestingly, on All Fools Day – April 1, 2008.

The plenary, the Donald Broadbent Lecture, was given by Steve Tyler of the Royal National Institute for Blind People on reconsiderations of accessibility. Tyler, who is blind himself, regaled his audience with various illustrative cases, often injecting humor into a most enlightening presentation.

Attendees could choose from one of five purpose-directed tracks with a special embedded symposium on slips, trips, and falls. Among the profile of early papers were talks on police enforcement ergonomics, a historical perspective on Charles Babbage and the origins of ergonomics (or the “facility of using”), as well as an ergonomics paper on the running of ergonomics conferences. One of the highlights was the Society Lecture, given this year by John Wilson. Always a dynamic and involving speaker, Wilson articulated his views on risk and his personal reevaluation of his own stance toward resilience engineering. The latter is an interesting proposition, and Wilson brought his own unique perspective to the current discourse.

One personal highlight for me was the chance to attend Patrick Jordan's involving workshop on affective design. He brings the practical experience of the hands-on designer as well as the insightful eye of the theoretician to this new and important dimension of emotion-based response for ergonomics.

One thread intrinsic to the whole meeting was the evolution of ergonomics toward larger social issues such as pollution, carbon emission, recycling, sustainability, and other concerns encompassed under the umbrella of the environmental movement. This environmental emphasis is one outgrowth of the idea of social responsibility and the focus on global sociotechnical systems.

Kudos must go to Sue Hull, who, as facilitator-in-chief, ap-

peared to be everywhere and to solve each problem as it had the temerity to present itself. I strongly recommend this meeting to my American colleagues if their schedule and travel permit.

Peter A. Hancock is Provost Distinguished Research Professor at the University of Central Florida. He is a Fellow and past president of HFES. ☒

CALL FOR PAPERS

Sixth Annual HPEE Meeting and Call for Papers

By *Jason Kring, HPEE President*

The Society for Human Performance in Extreme Environments (HPEE) will hold its Sixth Annual Meeting on September 21–22, 2008, at the New York Marriott Marquis Times Square Hotel. The meeting will precede the HFES 52nd Annual Meeting.

Researchers, practitioners working in applied domains, and students are encouraged to submit proposals for lecture, poster, or discussion panel presentations. Proposals may be empirically based, theoretically based, or application based, as described in the Call for Proposals available at <http://www.hpee.org>. In addition, HPEE encourages student involvement, and a selected block of paper presentations will be set aside for papers for which the first author is an undergraduate or graduate student.

HPEE defines extreme environments as settings that possess extraordinary physical, psychological, and interpersonal demands that require significant human adaptation for survival and performance. Example settings and domains include space flight, high-altitude aviation, mountaineering, and polar, desert, and underwater environments. In addition, HPEE addresses specific occupations and activities occurring in extreme environments, such as military operations, firefighting, emergency response/disaster management, hazardous materials handling/disposal, search and rescue, emergency medical service, and recreational activities in extreme settings. Proposals addressing one or more of these environments or activities are welcome. Proposals for all presentation types (including a 2,000-word maximum summary) are due **June 20, 2008**.

We invite you to attend and learn more about HPEE. We are also offering a special reduced registration rate for HFES members. For more information, including registration, room location, and agenda, please visit <http://www.hpee.org>, or contact me at jason.kring@erau.edu. ☒



HFES The 52nd Annual Meeting
is in New York City on
September 22–26.

Online registration is open at <http://www.hfes.org/web/HFESMeetings/08AMregistration.html>

Advanced Technology for Ergonomics & Biomechanics

NexGen Ergonomics provides an extensive product line of instrumentation & software for ergonomic & biomechanical analysis, design, research & education.



Biometrics DataLOG and DataLINK systems offer multi-channel portable and tethered systems synchronizing EMG, goniometers, computerized dynamometers, pinchmeters, FSRs, and NexGen's VATS whole body and hand-arm accelerometers.

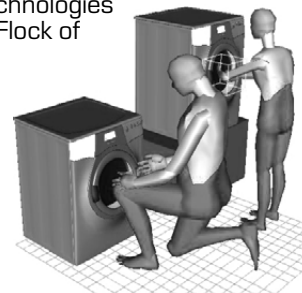
VATS hand-arm vibration analysis is based on the ISO 5349 and ACGIH standard for hand arm vibration (HAV). Whole body vibration analysis is based on the ISO 2631-1, BS 6841, and ACGIH standard for whole body vibration (WBV).

The new Industrial LMM (with telemetry) is an exoskeleton of the spine that measures the position, velocity and acceleration of the spine in the sagittal, lateral, and twisting planes. The LMM's risk model overcomes many traditional limitations in the analysis and redesign of the work environment.



Our motion analysis solutions include the Xsens Technologies' Moven, MTx Tracker and Xbus Master, Ascension Flock of Birds and MotionStar systems.

The new HumanCAD human modeling platform includes inverse and forward kinematics, dynamic distances and angles, geometry modeler, new 3D renderer, real-time interactive architecture. Other features include vision analysis, biomechanics and multiple population databases.



ErgoIntelligence™ MMH & UEA suites include NIOSH lifting equation, biomechanics, energy expenditure, Mital, Snook & Ciriello tables, RULA, REBA, strain index, Occupational Repetitive Actions Index (OCRA) and the CTD risk index.

Lumbar Analysis and Prediction II	
Company:	3M Corporation
Address:	1111 Old County Road
City:	Worcester
State:	MA
Zip:	01470
Phone:	(514) 749-2322
Operator:	John
Gender:	Male
Age:	28
Height:	70 in
Weight:	200 lb
Sex:	MALE
Level of Exposure:	50%
Level of Activity:	50%
Duration:	10 min
Maximum Heart Rate:	170 bpm (170)
Postural Moment:	
<small>Subject was required to lift a pallet on a spine board from floor level to knuckle level with the assistance of another person. When a complete upright posture was attained, a slight pause of 2 seconds was performed (note above subject). Additional forces on the same may have occurred from the lack of anteroposterior symmetry between the two lifts.</small>	
<input type="button" value="Calculate"/>	

ErgoMaster™ is a suite of software tools for performing ergonomic job analysis from digital/video images. These tools include posture analysis, a metabolic model, RULA, NIOSH lifting equation, and a variety of biomechanical models plus an interface to the University of Michigan's 3D SSPP.

MVTA™ enables users to easily perform time and motion studies and ergonomic analysis from video. Features include event editing, multiple timelines, VCR control or digital video files, search capability and event interactions.

FSA force measurement solutions include Hand Sensor Array, Industrial Seat & Back System, Glove Pressure Mapping System and Intelligent Sensor Series.

NexGen offers the full range of Thought technology products including the MyoTrac, ProComp and FlexComp Infiniti systems. Sensors include SEMG, EKG, Temp, HR/BVP, SCR and EEG.

We carry the full range of Ametek, Chatillon, Mark-10 and Mecmesin force and torque gauges as well as Jamar and Baseline dynamometers.



VISIT NEXGENERGO.COM FOR MORE INFORMATION ON ABOVE AND OTHER PRODUCTS

NEXGEN Ergonomics

6600 Trans Canada Highway, Suite 750
Pointe Claire (Montreal), Quebec, Canada H9R 4S2

Tel: (514) 685-8593 Fax: (514) 685-8687

E-mail: salesinfo@nexgenergo.com Web: www.nexgenergo.com

ErgoMaster, HumanCAD, ManneQuinELITE/PRO/BE and ErgoIntelligence are trademarks or registered trademarks of NexGen Ergonomics Inc. MyoTrac, ProComp and FlexComp Infiniti are trademarks of Thought Technology. Chatillon is a registered trademark of Ametek, Inc. MVTA is a trademark of Wisconsin Alumni Research Foundation. Flock of Birds & MotionStar are registered trademarks of Ascension Technology Corp.

Bulletin

Volume 51, Number 6 June 2008

Features Editor: Pamela Savage-Knepshield
Communications Director: Lois Smith
Assistant Managing Editor: Jason Dean
Advertising: R. C. Bubblitz & Associates,
800/485-5029; dick-rcb@juno.com

POSTMASTER:

Send address changes to the HFES Bulletin,
Human Factors and Ergonomics Society,
P.O. Box 1369, Santa Monica, CA 90406-1369 USA,
310/394-1811, fax 310/394-2410, <http://hfes.org>

General Information: info@hfes.org
Editorial/Advertising: lois@hfes.org
Placement Service: placement@hfes.org
Annual Meeting: lois@hfes.org

Opinions expressed in BULLETIN articles are those of the authors and should not be considered as expressions of official policy by the Human Factors and Ergonomics Society.

Reviews of Human Factors and Ergonomics

Volume 3 Edited by Deborah A. Boehm-Davis



Volume 3 of *Reviews of Human Factors and Ergonomics* includes the most comprehensive and up-to-date material on six topics within the human factors/ergonomics field. The chapters are designed to be accessible to a wide audience and thus should be an excellent basis for an upper-level undergraduate or beginning graduate course in human factors, as well as a concise overview for practitioners.

The *Reviews* series is broader in scope than handbooks and deeper in detail than encyclopedias, and it includes both discipline-oriented and problem-oriented chapters.

Volume 3 contents:

- Analysis of Cognitive Work** – Ann Bisantz & Emilie Roth
- Macroergonomics: The Analysis and Design of Work Systems** – Hal W. Hendrick
- Human Factors of Homeland Security** – Nancy J. Cooke & Jennifer L. Winner
- Task Interruptions** – J. Gregory Trafton & Christopher A. Monk
- Research-Based Guidelines for Multimedia Instruction** – Richard E. Mayer
- Railroad Human Factors** – E. Donald Sussman & Thomas G. Raslear

ISBN 978-0-945289-28-9, 210 pp., paperback. \$75 HFES members; \$85 nonmembers; plus shipping/handling. Secure online ordering is available at hfes.org (select "Publications > Reviews").

FLASH!

HFES Election

Full Members and Fellows: Election ballots will be mailed in June and are due back on **July 23**. If you don't receive your ballot, please contact Member Services at membership@hfes.org, 310/394-1811.

Corrected Directory & Yearbook

The Corrected Version of the 2008–2009 Directory & Yearbook will be mailed to all members in June.



Human Factors and Ergonomics Society
P.O. Box 1369
Santa Monica, CA 90406-1369 USA

PERIODICALS
POSTAGE PAID
AT
SANTA MONICA, CA
AND ADDITIONAL
OFFICES