SAFETY NEWS

A Publication of the Human Factors & Ergonomics Society
Safety Technical Group

In this issue

45th Annual Meeting: October 8-12th 2001

Note from the Chair

Stephen L. Young

The Human Factors and Ergonomics Society 45th Annual Meeting will be held in Minneapolis/St. Paul, Minnesota, October 8-12, 2001. It will be held at the Minneapolis Hilton and Towers and the Minneapolis Convention Center. I am looking forward to seeing many of you there, as I think it will be an exciting meeting.

The deadline for registration for the meeting is September 7th. You should have already received your registration packet in the mail. If you have not received a packet, contact the central office and they can send you one.

We have been allocated two lecture sessions (one on Tuesday 1:30 to 3:00 pm and one on Thursday 3:30 to 5:00 pm) and a poster session (Tuesday 1:30 to 5:00 pm). Unlike previous years, the Safety TG will be presenting a symposium and a panel session. The symposium (Wednesday 8:30 to 10:30 am) deals with warnings and older users, while the panel session (Friday 8:30 to 10:00 am) discusses a case study of the warning-design process. More information about these sessions can be found in the abstracts presented on the following pages of this newsletter.

In addition to the papers and posters that the Safety TG will have on hand at the meeting, we are very honored to have Baruch Fischhoff as the presenter of this year's Arnold Small Lecture. His talk is entitled "What's worth knowing—and saying—about risk and safety." Having seen Dr. Fischhoff lecture in the past, I feel certain that this will be a very interesting talk. I recommend that you make every effort to attend this presentation. If you cannot attend, Dr. Fischhoff's presentation will be available on videotape as part of the Arnold Small Lecture Series. You can contact Mike Kalsher or Jake Pauls for copies of this or other presentations of the Arnold Small Lecture.

The Safety TG business meeting is going to be held at 4:30 pm (until 5:30 pm) on Wednesday. There will be a cash bar, as usual, so come by find out what is happening in the technical group. In addition to the normal business issues, we will be soliciting nominations for officers in the TG. You do not have to be present to be considered for nomination, nor does a nomination have to be entered only at the business meeting—we will be soliciting nominations via the newsletter (see page 6) and other means (feel free to send me an e-mail).

Also, at this year's meeting, we will be looking for ways to increase member involvement in the technical group. Over the past two years, we have taken several steps to try to increase membership and to improve communication between members of the TG. We hope to evaluate this progress at the meeting and look for ways to improve things overall. I look forward to seeing you there!

Human Factors and Ergonomics Society
Abstracts of Safety Sessions

LECTURE: Tuesday 1:30-3:00pm

Fentress: "The Effects of an Arm-Fire Mechanism on Operator Performance in a Simulated Crane Control Task"

Incidents involving overhead crane operations at Kennedy Space Center have resulted in a desire to investigate alternative crane control operator interfaces for potential safety improvements. This study examines one such interface, which integrates an arm-fire mechanism into the existing crane control console. Two mock crane control console configurations were used in a counterbalanced, repeated-measure design to determine the effects of the arm-fire mechanism on experienced and inexperienced subject performance and subjective workload ratings. A tracking task was used to increase overall task workload and to serve as a secondary measure of operator performance. Subjective workload ratings were collected through use of the NASA Task Load Index (TLX). The addition of an arm-fire mechanism produced both positive and negative operational results. Use of the arm-fire mechanism increased operator reaction time, subjective workload ratings, and mean RMS error scores on the secondary-tracking task. However, the number of incorrect command inputs was reduced and potential injuries or damage to expensive space flight hardware were averted by the arm-fire mechanism.

Kalsher: "Allocating Blame for Airbag Deployment Injuries"

In this study, we examine how people allocate blame for injuries sustained from the deployment of a driver-side airbag. Participants were asked to read one of several versions of a fictitious scenario in which the driver of an automobile is injured by a deploying airbag after a driver swerves into oncoming traffic to avoid striking a child who has run into the road. The scenarios depicted a driver sitting within the airbag's deployment zone and varied in the following ways: the stature of the injured driver (small or large); severity of the injury resulting from the deployment of the airbag (permanent blindness in one eye versus quadriplegia); vehicle speed at impact (15 m.p.h. above versus driving at the posted speed limit); and the safety-worthiness of the vehicle (an elaborate system of safety features versus the absence of these features).

When assigning blame for the injuries sustained in the crash, participants appeared sensitive to both the quality of the vehicle's safety system and the driving behavior of the injured party. The manufacturer of the "safe" vehicle was held significantly less responsible than the manufacturer of the vehicle lacking these safety features. However, driver behavior also exerted a significant effect on allocation of blame. Injured drivers depicted as traveling significantly above the speed limit were assigned significantly more blame than their counterparts depicted as driving at the speed limit. This finding suggests that people take other factors into account, including personal responsibility, when assigning blame. Perhaps the most important finding of this research, and one that supports previous research on this topic, is that "safety pays." Specifically, these results show that when companies are perceived as making a "good faith" attempt to look out for the safety of their customers, their customers, in return, may be less likely to hold them responsible when injuries do occur.

Zackowitz: "Responsibility Allocation for Workplace Accidents"

The purpose of this study was to investigate responsibility allocation for workplace accidents. Both situational factors (safety climate, task familiarity, presence of warnings and perceived risk) and individual difference variables (locus of control and participant supervisor status) were studied because both characteristics of the observer and the situation moderate individual interpretations regarding the cause of accidents. Work scenarios were developed to manipulate two levels of the situational factors. The Adult Nowicki-Strickland Internal-External Scale was used to assess participant locus of control orientation. Participants (n=320) were employed individuals from San Diego County. Significantly more responsibility was allocated to the employer when safety climate was perceived to be weak. There were significant interactions of locus of control with both perceived risk and task familiarity. Results indicate that employees in organizations with strong safety climates are more likely to take personal ownership of their tasks and feel personally responsible for outcomes.

Freeman: "Evaluation of Pictorial Symbols to Warn Computer Keyboard Users about Carpal Tunnel Syndrome (CTS)"

Carpal tunnel syndrome (CTS) is an upper-extremity disorder that can cause chronic pain and disability. Although CTS can arise from a wide variety of repetitive tasks with awkwardly positioned hands/arms, a large percentage of cases are attributed to or exacerbated by computer input devices such as keyboards. One potential way to

Highlights of Safety Sessions

Tuesday	1:30-3:00pm	Lecture Session
	1:30-5:00pm	Poster Session
Wednesday	8:30-10:00am	Symposium
	1:30-3:00pm	Arnold Small Lecture
	4:30-5:30pm	Business Meeting
Thursday	3:30-5:00pm	Lecture Session
Friday	8:30-10:00am	Panel

reduce the development of debilitating CTS in keyboard users is to warn them about the disease's early symptoms so that corrective actions might be taken. The present research systematically examines one of the components of a potential CTS warning, pictorial symbols. Participants were told to examine a set of 12 simulated ANSI Z535 style warnings with one, two or four pictorials and to rate them on their ability to inform and motivate users to exercise correct arm and hand posture to avoid or minimize further CTS development. Individual pictorial symbols depicted the incorrect posture overlaid with either an "X" (cross-out) or "prohibition symbol" (circle-slash) or the correct posture with no overlay in a top or a side view. Warnings with four pictorials (with both postures and views) were rated significantly higher than warnings with one or two symbols. In the one and two pictorial conditions, the top view was preferred over the side view and there was no difference between the two prohibition symbols overlaid on the incorrect postures but these were both rated significantly higher than the non-prohibition, correct-posture pictorials. This pictorial assessment could serve as a partial basis for the development of a complete CTS warning which might also include textual information.

POSTER SESSION: Tuesday 1:30-5:00pm

Braun: "Free-Modulus Study on the Perceived Danger of Hazard Labels"

There is growing consensus among warning researchers about the relationship between warning explicitness and perceptions of product hazardousness. Early works by Wogalter, Desaulniers, and Brelsford (1987), Young, Wogalter, and Brelsford (1992), and Laughery, Rowe-Hallbert, Young, Vaubel, and Laux (1991) have all demonstrated a positive relationship between explicit warning messages and perceptions of risk and danger. Behaviorally, Wogalter and Barlow (1990) demonstrated that the severity of the injury described in a warning influenced the rate at which participants complied with warning instructions. Young and Wogalter (1998) considered the nature of warning explicitness or severity by decomposing the concept into five separate dimensions reflecting the duration of exposure, the amount of exposure, the probability of the consequences, the severity of injury, and the length of the resulting injury. Hazard ratings provided by participants revealed only dimensions contributed significantly to perceptions of hazard, injury severity, and the length of the injury.

To compare the relative contributions of the five warning dimensions, Young and Wogalter (1998) used "unfamiliar" or fictitious injuries such as "macroglossia" and "lysis." Although this method was necessary to compare these dimensions, it does not address the relative contribution known injuries or consequences might have on perceptions of hazard. This work extends the warning explicitness research by examining how individuals perceive potential consequences associated with the use of hazardous products. Participants provided ratings of severity for 58 different injury or illness conditions. These conditions were presented with the severity modifiers mild, moderate, and severe.

Wisniewski: "Safety-Related Information on the Web: Current Practices of Consumer Product Manufacturers and Issues to Consider"

Over the last several years, the internet has been growing at a fast pace, and this growth is expected to continue. Use of the internet, and specifically the world wide web (WWW), by product manufacturers as a medium to communicate and interact with their consumers poses several opportunities and challenges. One issue is the extent to which manufacturers might use the internet as a means to provide consumers with safety-related information about their products. This poster will provide an overview of the current practices for safety-related information on the web sites of consumer product manufacturers.

In order to assess current practices as they relate to the provision of safety information on the internet, a survey was conducted of 30 web sites. The results indicate that few of the sites evaluated in this study contained safety information. This poster presents some examples of the types of safety information that were identified on these sites. Examples of seven types of safety information include: embedded safety information, "frequently asked questions," general health/safety information related to product usage, on-product labels, owner's manuals/brochures, safety recalls, and web site disclaimers. This poster also presents specific example web pages that represent these types of safety information. In addition, implications for the presentation of safety information on the WWW will also be discussed.

Whitney: "Comparing Traditional and Computerized Data Collection Methods: Applications for Warning Research"

The use of computers and the Internet can expedite human factors research. Although personal computing technology and the Internet have been available for at least two decades, the transition from paper and pencil methods to computer facilitated data collection has been relatively slow and remains a topic of much investigation (e.g., Birnbaum, 2000). The slow rate of change is unexpected given the benefits of computer-aided data collection. Larger demographic groups that are more diverse in age, gender, and socio-economic status, true volunteers (Buchanan and Smith, 1999), and reductions in time and money (Schmidt, 1997) are a few of these benefits. Despite these benefits, there are several shortcomings that apparently have restricted the wide application of this technology.

The disadvantages of computerized data collection via the Internet vary from system differences (e.g., hardware and software) (Schmidt, 1997), lack of controlled data collection environments (Buchanan and Smith, 1999), possibility of multiple responses (Buchanan and Smith, 1999; Schmidt, 1997), increased dropout rate or incomplete responses (Reips, 2000; Schmidt, 1997). Finally, few software survey tools provide researchers with the ability to use the full capability of the computer.

Computerized data collection is unlikely to overcome the demands of experimental control and participant monitoring. If, however, computerized methods yield data comparable to traditional paper and pencil data collection methods, researchers are likely to benefit from the advantages discussed earlier. A couple of studies report favorable findings using personal computers and the Internet (Buchanan and Smith, 1999;Krantz, Ballard, and Scher, 1997).

Continued on p. 4

Although web based survey studies have been generally positive, Baron and Siepmanm (2000) reported a study where there were irregularities between the computerized and paper and pencil versions of their surveys. The authors attributed these irregularities to different Web browsers settings, different monitors, and different screen resolutions. These differences produced changes in the layout of their survey across computer systems and might have adversely affected the data. Fortunately these inconsistencies can easily be addressed.

This study compared responses from two studies of warning labels. In the first study, participants were shown warning labels printed on paper. In the second study, the same stimuli were shown via an Internet computerized survey. The computer-based stimuli were presented using recently developed PHP survey creation software. PHP is an open source web scripting language. The software allowed for randomization of every trial, and each image was scaled to the same image size as those printed on paper.

Gordon: "Designing a Human Factors Investigation Tool to Improve the Quality of Safety Reporting"

Engineers in the UK offshore oil industry endeavour to analyze the causes of accidents with regard to the human and organizational factors. However, their expertise tends to lie in the analysis of the technical failures. In an attempt to improve the investigation of the human factors causes of accidents, a human factors investigation system was developed for the UK Health and Safety Executive and five oil companies. The development and evaluation of two previous reporting systems provides the background to this current study, where both systems were found to increase the quantity of human factors information collected. The Human Factors Investigation Tool (HFIT) improves on these two systems, where it collects four types of human factors information including (i) the observable errors occurring immediately prior to the incident, (ii) the error recovery process, (iii) the information processing stage at which the error occurred, and (iv) the underlying causes.

Waters: "Behavioral Safety Programs in the Department of Energy"

Behavioral safety is the application of reinforcement theory to foster an increase in "safe behaviors." The behavioral safety process starts with a behavioral hazard analysis to identify those unsafe behaviors in the workplace. A process, guided by a safe acts checklist is then developed for behavioral observation for work behavior. Safe and unsafe acts are recorded and provided to the worker as feedback (reinforcement) which fosters the increase in safe over unsafe behaviors, continuous improvement and worker involvement. Behavioral safety was developed in the late 1970's, and has an impressive track record. Using the behavioral safety metric, % safe acts, the research has shown that as % safe acts increases, the number of safety incidents decreases.

Within the Department of Energy complex, behavioral safety has been instituted at industrial sites such as the Savannah River Site and the Strategic Petroleum Reserve, and at national laboratories such as Los Alamos National Laboratory, Idaho National Engineering and Environmental Laboratory (INEEL) and Lawrence Berkeley Laboratory. In all cases, the safety process has led to an increase in safe behavior and a decrease in overall safety incidents.

SYMPOSIUM: Wednesday 8:30-10:00am

Hancock et al.: "Warnings and Aging: What Warning Designers Do Not Know May Hurt Older Users"

Adults over the age of 65 comprise the fastest growing segment of the population in the world. Because older adult consumers have special cognitive and perceptual needs, warning designers should be informed about these issues to ensure the safety of this increasingly large user population. Each of the featured speakers (Holly Hancock, Melissa Meingast, Derek Schroeder, and Michael Wogalter) will present examples of research initiatives that investigate age-sensitive factors that influence warning compliance. For instance, cognitive variables such as the ability to make inferences about product information and perceptual variables associated with small print size of warning text may severely impact an older adult's ability to comprehend a warning. If warning comprehension is low, the likelihood of compliance is low and thus, safety is highly uncertain. Kenneth Laughery will serve as the discussant for the symposium, providing his insight into the future directions for this important area of research.

ARNOLD SMALL LECTURE
Wednesday 1:30-3:00pm

This year, the Safety Technical Group welcomes Baruch Fischhoff as the Arnold Small Lecturer. He is currently a University Professor in the Department of Social and Decision Sciences and Department of Engineering and Public Policy at Carnegie Mellon University. He holds a B.S. in mathematics from Wayne State University and a M.A. and Ph.D. in psychology from the Hebrew University of Jerusalem.

He is a Fellow of the American Psychological Association and recipient of its Early Career Awards for Distinguished Scientific Contribution to Psychology and for Contributions to Psychology in the Public Interest. He is a Fellow of the Society for Risk Analysis, as well as recipient of its Distinguished Achievement Award. He is a member of the Institute of Medicine of the National Academy of Sciences. He has served on various National Research Council panels, most recently, on the Committee on Criteria for Federal R&D, the Committee on Substance Abuse and Mental Health Issues in AIDS Research, the Committee on Environmental Justice, and the Commission on Behavioral and Social Sciences and Education.

Dr. Fischhoff was President of the Society for Judgment and Decision Making (1990-1991) and a member of its Board (1989-1992). His current research includes risk communication, risk management, adolescent decision making, evaluation of environmental damages, and protective behavior. He serves on the editorial boards of several journals, including Journal of Risk and Uncertainty, Journal of Behavioral Decision Making, and Journal of Experimental Psychology: Applied.

LECTURE: Thursday 3:30-5:00pm

Navai: "An Evaluation of Prescription Medical Labels by a Heterogeneous Sample Who Varied in Age, Capability, and Culture"

Symbols may be used to convey how and when to take medication and a number of dangers with use that should be avoided. Symbols also have the potential to convey this information to people despite differences in culture and language. Ten prescription medication labels were evaluated by 238 participants for comprehension. Eighty-nine were attending university and an additional 28 volunteered from a Chinese student association. Fifty were enrolled in English as a second language (ESL) curriculum at a college and seventeen more, from the same college, were enrolled in classes for low literacy students. Lastly, 54 volunteered from a senior citizen community center. Some pictorials were understood better than others. Symbols that indicated time such as how often to take a drug each day or over the course of a week were poorly understood. Other pictorials such as "do not take with alcohol" and "shake well before using" achieved ISO (International Organization of Standardization) recommended comprehension levels. Discussion centers on comprehension difficulties with certain labels, group differences, and the importance of representative sampling.

Resnick: "Task Based Evaluation in Error Analysis and Accident Prevention"

After a system failure that is attributed to human error, an accurate accounting of the factors that led to the error is critical for redesign efforts and any resulting litigation. Without data on the design components or environmental factors that contributed to the error, the human is indicted, either legally or in the press, no system redesign is conducted and the failure will be repeated at the cost of additional damage and/or lives. Accident investigations should be conducted to identify these factors and guide redesign efforts. An even better situation would be if this same testing occurred before the system was released to the market. This requires prediction and simulation of the people who will use the system, the tasks that will be attempted, the motivations of system users, and the environmental factors that will interact with the system. Testing systems under controlled laboratory conditions is generally insufficient to identify potential sources of human error. This paper describes the critical components of task-based evaluation and presents a case study to illustrate the consequences of failure to use TBE.

Leonard and Wogalter: "Behavior of Parents with Children in Autos: An Observational Study"

A serious concern for our society that is reflected by governmental interest in the problem is the number of injuries and deaths occurring to young children in automobile accidents. Surveys have indicated that many individuals are not familiar with some of the procedures and devices associated with safety for young children. The present study involved observations of behavior in vehicles at elementary schools. The results of the observations indicate that the surveys are likely correct in showing poor understanding of the necessity for locating children safely and using safety devices appropriately.

Cohen: "Hold On! An Observational Study of Staircase Handrail Use"

Handrails are the primary safety devices installed on staircases, yet it has not been empirically determined to what extent they are actually used. This study selected two staircases, one long and wide and another short and narrow, serving a newly remodeled shopping mall. Variables observed were: handrail use, ascent/descent, number of hands free, within arm's reach, gait, gender, and age. Less than a third of all staircase users utilized a handrail, with the likelihood of use increasing with age. Overall, 59% were observed to place themselves within arm's reach of a handrail. Staircase users were more likely to be within arm's reach during descent. Women were more likely to have just one hand free, while men more frequently had both hands free. Handrail use was observed to be 10% greater during descent than ascent. The study shows that even with handrails having high usability characteristics, actual handrail use is minimal. This finding has implications for behavioral compliance in situations where a safety device is provided, but its need is not perceived to be immediate.

PANEL: Friday 8:30-10:00am

Watson, Rhoades, Young: "The Warning Development Process: A Case Study"

At the 2000 IEA/HFES Congress, the Safety TG presented a panel discussing the topic "Safety Research in the 20th Century – Have We Made a Difference?" One issue raised during this panel discussion was that, while the body of existing research on warnings is large, there is little empirical work examining how one actually uses existing theory and research to produce warnings and other safety communications. One reason for the paucity of such published and demonstrative work is that much of it is proprietary.

The panel we proposed is a case study outlining the development of on-product warnings for Person Watercraft (PWCs). The goal of this panel is to provide the audience with a rare glimpse into the warning-development process – to see how warning theory, research and practice may be used in the actual production of labelling for a consumer product.

See You in Minneapolis!!

October 8-12, 2001

Check out the preliminary program on the HFES Web Site, http://hfes.org, for all the sessions.

Don't forget to register by September 7th in order to take advantage of registration discounts. Register through the HFES website or the form in the registration packet you should be receiving soon.

Human Factors and Ergonomics Society
Safety Technical Group

Call for Officer Nominations

Are you interested in running for a Safety TG officer position? Would you like to nominate someone for a position?

You do not need to be present at the Safety TG Business meeting to be nominated or to nominate someone else. Email syoung@appliedsafety.com with your nomination. Nominations will be accepted at the annual business meeting. After the business meeting, expect to receive a ballot in the mail with all of the nominations.

Below are the officer positions and a brief description of the responsibilities. If you have any questions about the nomination or election process, please contact Steve Young at syoung@appliedsafety.com. If you have specific questions about an officer position, please contact those officers (see their contact information on page 8 of this newsletter).

Keep in mind that all officer positions, with the exception of the Newsletter Editor and the Web master/Email Moderator, require that the HFES nominee be a full member in HFES.

Chair (1 person)

The TG chair has overall responsibility to ensure that the group meets its minimum requirements. The chair works with the HFES executive director in scheduling the TG's annual business meeting and arranging other events; with the newsletter editor regarding timing, content, distribution method, and cost of newsletters; and with other officers to ensure that TG activities are being carried out. The chair is also the TG's liaison to the Council of Technical Groups.

Program Chair (1 or 2 people)

The program chair is responsible for overseeing the technical review of proposals submitted for the HFES Annual Meeting.

Secretary-Treasurer (1 person)

The secretary-treasurer is responsible for the TG's finances and recording minutes from the business meetings.

Arnold Small Lecture Chair (1 or 2 people)

The Arnold Small Lecture Chair is responsible for identifying potential candidates for the lecture series. This chair is also responsible for planning and coordinating the lecture at the annual meeting.

Web master/Email Moderator (1 person)

The web master/email moderator is responsible for maintaining the TG website and moderating the email listserve.

Newsletter Editor (1 or 2 people)

The newsletter editor is responsible for producing at least two newsletters per year and distributing them to TG members.

Safety TG Business Meeting

The Safety Technical Business Meeting will be held Wednesday, October 10 from 4:30pm to 5:30pm. This will be your opportunity to learn about what the Safety TG has been doing this past year and how you can become involved in the upcoming year. It is also a time to mix and mingle with others in the Safety TG.

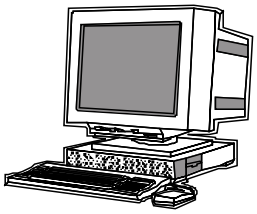
Also, remember that you can become more involved in the Safety TG by volunteering your time as an officer. If you do have some time (or know someone that does), please consider becoming an officer candidate.

Check out the Safety TG's Web Site!

We recently obtained a new domain name. Go to:

http://www.HFES-SafetyTG.org

We welcome all comments and suggestions about the site. Please email the web master Jean Schiller (jschiller@appliedsafety.com).



Course Offering from Klein Associates

"Putting Cognitive Task Analysis to Work: Understanding Users, Customers, and Experts."

This interactive course will address how to capture aspects of cognition and decision making in context, and leverage that knowledge for a range of applications. It is intended for professionals who seek a better understanding of the decision making and problem solving strategies of users, customers, and subject-matter experts. The next sessions is planned for September 10-12, 2001. Space is limited to 16 participants. For more information or to register, go to www.decisionmaking.com or call Bianka Hahn at (937) 873-8166 X140.

Seminar Offering from The University of Wisconsin - Madison, Department of Engineering Professional Development

"The Role of Warnings and Instructions"

The seminar will benefit managers, engineers, technical writers, product safety specialists, and others. It will be held from September 19-21, 2001 in Madison, WI.

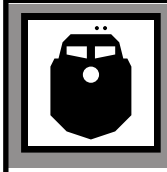
By attending, you will learn about: (1) factors useful in evaluating effective warnings and instructions, (2) current legal duty to warn and instruct, (3) recent court interpretations of this duty, (4) how to test and revise warnings and instructions, and (5) resources and techniques available to help write clear warnings. To register or for information, go to epdweb.engr.wisc.edu/contact or call Amy Lensing at custserv@epd.engr.wisc.edu or 1-800-462-0876.

Call for Papers

The Ergonomics Society 2002 Annual Conference will be held Wednesday, April 3 through Friday, April 5, 2002 at Homerton College, Cambridge. Offers of papers and workshops are invited. The Ergonomics Society Annual Conference covers all areas of ergonomics research and application and is intended for all ergonomists and human factors professionals and all those with related interests.

The closing date for receipt of submissions is Friday, August 24, 2001. The closing date for camera-ready copy of papers is Friday, December 21, 2001. The proceedings of the conference will be published in book form by Taylor & Francis Ltd as "Contemporary Ergonomics 2002."

Please contact c.greenwood@ergonomics.org.uk for submission guidelines and further information. Please send submissions to: Annual Conference Programme Secretary, The Ergonomics Society, Devonshire House, Devonshire Square, Loughborough Leicestershire, LE11 3DW, UK.




CONFERENCES


August 5-10, 2001 – HCI International: 9th International Conference on Human-Computer Interaction

This conference will take place at the Fairmont Hotel in New Orleans, LA. The conference will be held jointly with the (1) Symposium on Human Interface (Japan) 2001, (2) 4th International Conference on Engineering Psychology and Cognitive Ergonomics, and (3) 1st International Conference on Universal Access in Human-Computer Interaction, and in cooperation with the Chinese Academy of Sciences, Human Factors and Ergonomics Society, International Ergonomics Association, Japan Ergonomics Society, and Japan Management Association. For information on the conference, see the web site at http://hcii2001.engr.wisc.edu.

August 21-24, 2001 – SafeComm Nord-4: 4th Nordic Safe Community Conference

This year's SafeComm Nord-4 conference theme is: "*Building bridges between research and practice*". It will be held in Vejle og Fyns Amter, Denmark. For more information, email safe4@vejleamt.dk.

September 2-5, 2001 – Nordic Ergonomics Society Annual Congress

The annual NES Congress will be held in Tampere, Finland in September 2001. The theme for this Congress is *Promotion of Health through Ergonomic Working and Living Conditions – Outcomes and Methods of Research and Practice*. Safety at work and at home are among the relevant topics to be addressed at the Congress. For more information on the program, contact Clas-Hakan Nygard, meclny@uta.fi.

September 11-13, 2001 – SAE Advances in Aviation Safety Conference and Exposition

This conference will take place in Seattle, WA. For more information visit http://www.sae.org.

September 16-20, 2001 – European Safety and Reliability International Conference

This conference will take place in Torino, Italy. For more information please contact Raffaella Damerio, Conference Secretariat, Esrel 2001 c/o AIDIC, Via Colombo 81A, I-20133 Milano, Italia; +39 02 76021175, fax +39 02 799644; esrel2001@aidic.it. Please also visit http://www.aidic.it/esrel2001/esrel2001.html.

September 19-21, 2001 – 12th International Conference on Traffic Safety on Three Continents

This conference will take place in Moscow, Russia. For more information please contact Conference Secretariat, Dr. Kenneth Asp, VTI, SE-581 95 Linkoping, Sweden; +46 13 20 40 00, fax +46 13 12 61 62; info@vti-utveckling.se.

Volume XXIX, Number 2

Safety News is a publication of the Safety Technical Group of the Human Factors and Ergonomics Society. The Safety Technical Group is interested in research and applications concerning human factors for safety in all settings and attendant populations, including transportation, industry, military, office, public building, recreation, and home environments. Contributions to *Safety News* should be sent to the Editors.

Safety News

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