
THE Interface

NEWSLETTER OF THE
HUMAN FACTORS &
ERGONOMICS SOCIETY
SOUTH JERSEY
CHAPTER

MARCH 2010

President's Column, Visitors to RDHFL, Talks, Meeting Highlights, Karl Peglau Obituary

President's Column

By Mike McAnulty

Welcome to the 2010 edition of the South Jersey Chapter of the Human Factors and Ergonomics Society. I hope to see you at many of our activities this year. The Executive Council target is to have meetings or social outings approximately once a month and to publish four newsletters this year. The meetings will include professional presentations, relevant videos, a panel discussion, and possibly a tour of the Transportation Security Lab. We will also engage in youth outreach activities. By the time of publication of the first Interface, we will already have held three meetings and participated in the Jersey Shore Science Fair as judges in the Behavioral Science category and by providing prizes for the division winners. Our agenda is to help meet the professional and social needs of our membership by providing a forum for learning and discussion about our discipline, and interaction with other members. We actively solicit your suggestions on ways the chapter can be even more beneficial to you.

I thank the membership for a very successful election last year. Many of you submitted nominations, nearly everyone nominated was willing to accept (those who could not had very valid reasons), and the percentage of members voting was as high as I have ever seen it (I've been a member for 15 years now), despite or perhaps because of a short turnaround time for returning ballots. De-

mocracy in action! I also believe it represents your commitment to our chapter and discipline. The continuing officers (Treasurer Atul Deshmukh, Program Chair Jennifer Ross, and Membership Chair Karen Buondonno) and I welcome Mark Hale as President-Elect, Sonia Alvidrez as Secretary, Mike Cluff as Publications Chair, and Kate McDevitt as Nominations Chair. Everyone nominated would have made significant contributions to the chapter; it was a tough choice among them, but I believe this group will work well together to meet your needs. Please note that several of our officers' roles have "Chair" in their title. If any members would like to contribute to their efforts, please get in touch. Also, please keep your membership up to date in support of our activities.

Finally, I thank our retiring and departed officers who have served our chapter. Ben Willems and Ken Schulz served the last two years as President-Elect/President and Secretary/Publications Chair, respectively. Ken shifted positions after Shantanu Pai moved on to a new job, and Mark Hale assumed the Secretary position. Also retiring is Jessica Romanelli, who assumed the Nominations position after Jennifer Librizzi left on maternity leave. Finally, Jen Ross assumed the Program Chair position after Scott Terrace returned to California this past summer and will continue to fill out its 2-year term. I hope that 2010 will be much more stable for the Chapter leadership and that it will provide new opportunities

for growth and mutual support for all of us.

VIPs Visit the Human Factors Lab

By Mike McAnulty



Congressional visitors at the virtual tower.

On Dec 14, five members of Congress (including Chairman Costello and Ranking Member Petri of the House Aviation Subcommittee and our 2nd District of NJ representative LoBiondo), Administrator Babbitt, COO Krakowski, Senior VP Cox, Technical Center Director Felder, and other staff members spent an hour at the Research, Development, and Human Factors Laboratory (RDHFL). Mike McAnulty gave them an overview of the human factors work we do in the laboratory. They broke into two subgroups and each was given three demonstrations of our laboratory capabilities. Todd Truitt showed them the tower simulator, the surface and air surveillance systems, the Tower Operations Digital Data System, and the Taxi-Out Data Communica-

tions system. Ben Willems and Carolina Zingale demonstrated the en route simulation capabilities and talked about our recent work on En Route Data Communications and the Future En Route Workstation, which tested several NextGen concepts. Finally, Kenneth Allendoerfer and Ferne Friedman-Berg demonstrated our Terminal simulator and recent work on the Future Terminal Workstation and current work on Terminal Data Communications. All the visitors appeared impressed by the demonstrations and discussions, and asked lots of questions (Congress people seem to do that).

As an aside, Congressman Ehlers commented in Experiment Room 1 that he was glad to see that we were using color coding more on the Standard Terminal Automation Replacement System than when he saw it some 10 years ago. I reminded him that I was the researcher who did that demonstration and had tried to explain to him that, from a human factors guidelines perspective, he really didn't want the display to "light up like a Christmas tree," as he put it then. From my personal perspective, this visit was a lot more enjoyable than the previous one!

SJC at JSSF

by **Mike McAnulty**
Photos by: **Kate McDevitt**



Ben Willems reviews a student entry.

On March 20th, 11 members of the South Jersey Chapter served as judges in the annual Jersey Shore Science Fair at Stockton College. This is the largest of 10 science fairs in New Jer-

sey and included 598 students, 528 projects, and 36 schools. Nine members judged in the Behavioral and Social Science (BSS) category, one of thirteen individual categories, plus a team category. The BSS category had more entries than any other.



Behavioral and Social Science Judges

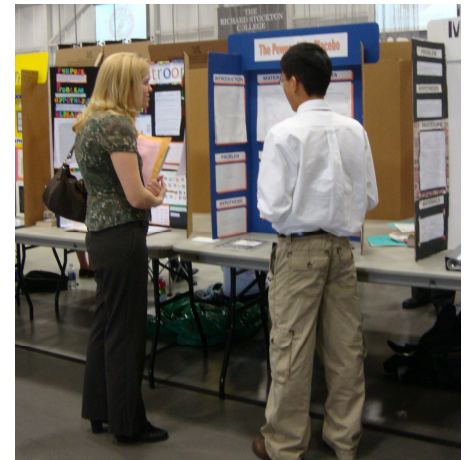
Toni Iaria of Toms River High School won first place in the Upper Division (11-12 grade) with a project entitled *The Frequency of Illness Correlated with Sleep Duration of High School Students*.



Sehchang Hab discusses a poster

Angela Zhou of High Technology High School won first place in the Intermediate Division (9-10 grade). Her project was entitled *Effect of Social Networking Conducted by Incoming Freshmen Students on Acclimation to a New School*. Finally, Susan Bluhm of Fernwood Middle School won first place in the Junior Division (6-8 grade) with project called *Red Eyes, Blue Eyes, Three Eyes, Four Eyes*. The Chapter awarded \$50 gift certificates to Borders to the Junior Division winner (over 60 projects contended) and the Intermediate winner (only 12 projects contended in each division, so we gave the award to best overall). They also received letters of congratulation and offers to present their projects to

the Chapter this summer. We are pleased to report that winner Angela Zhou has accepted our invitation.



Jennifer Ross talks with a student

The first, second, and third place winners will compete in the Delaware Valley Science Fair in Philadelphia.

Dr. Mary Bravo Speaks to SJHFES

By **Michael Cluff**
Photo by: **Kate McDevitt**



Ferne Friedman-Berg and Mary Bravo

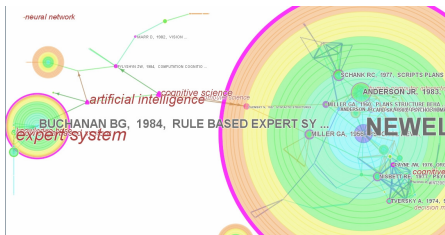
Dr. Mary Bravo, Psychology Department Chair at Rutgers Camden visited the RDHFL in February, and gave a talk entitled "Naturalistic Visual Search." She described research she had conducted to determine how the nature of a pre-cue image can affect visual search.

Her choice of tropical fish to use as search targets for participants made for a very colorful presentation. Her results

indicated that the way that participants were cued prior to searching for fish (whether blocked by fish or blocked by species) affected their ability to find their targets.

March Meeting Talk: Information Visualization

By Michael Cluff



At the March meeting of the SJHFES, Dr. Kenneth Allendoerfer described his dissertation research in a talk entitled, “How Information Visualization Systems Change Users’ Understandings of Complex Data.”

Especially with the onset of the web, the graphical depiction of data has become more dynamic, with many sites providing user controls to filter and adjust the way complex data are displayed. But will users find this capability truly useful? Dr. Allendoerfer discussed the challenges inherent in testing the usefulness of information visualization (InfoVis) in facilitating user understanding. He described his research concerning a new metric for testing usefulness for an InfoVis system depicting the relative importance of different research articles. Results from his study have led to improvements in this tool.

Treasury Report for March 2010

By Atul Deshmukh, Treasurer

Checking and Savings: \$711.67
Petty Cash: \$138.00

Highlights of Recent SJHFES Meetings

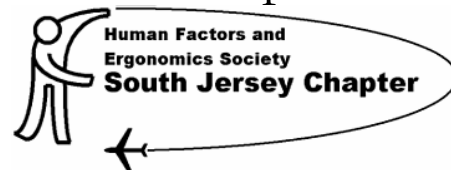
By Sonia Alvidrez, Secretary

January– Chapter members watched a video titled "Aircraft Investigations (Mayday): Deadly Crossroads."

Synopsis: The video described an incident from July 2002 in which a late-night flight controller was facing a “perfect storm” of human factors issues. As was standard practice in European late night traffic control, the controller was covering two workstations. Also, unbeknownst to him, maintenance had disabled or reduced the accuracy of some of the systems he was using. For these reasons, the controller didn’t notice that a Boeing and a Tupolev airliner were on a collision course until well after an automated anti-collision system had signaled in the airplanes’ cockpits. In a panic, the controller ordered each flight to take evasive action that directly contradicted the automated systems. The planes collided and all aboard were killed. The program described the aftermath of the accident, the ensuing investigation, and the horrific human toll.

Spring: A group outing is being planned....stay tuned for further information!

Membership Drive



Please renew your membership in the South Jersey Chapter of the Human Factors and Ergonomics Society (HFES). Membership fee is just \$15 per year.

Membership is open to anyone with an interest in human factors. You do not need to be a member of the national HFES to join. The benefits include a newsletter, hearing guest speakers, touring facilities with human factors programs or issues, sharing information and networking with colleagues, video presentations...and, of course, the good company.

If you’ve never joined or are new to the area, please join us. To join or renew your dues for 2010, please complete the form in this newsletter and/or contact Karen Buondonno, Membership Chair.

Meet Sonia Alvidrez

By Michael Cluff

Sonia, the newly elected SJHFES secretary, joined the FAA Traffic Flow Management HF group last year. Prior to her arrival here she has been a Human Factors Engineer for a little over 10 years.

After obtaining a Masters degree in Engineering Psychology from New Mexico State University, she has worked for Compaq (now HP), Klein Associates, and SAIC.

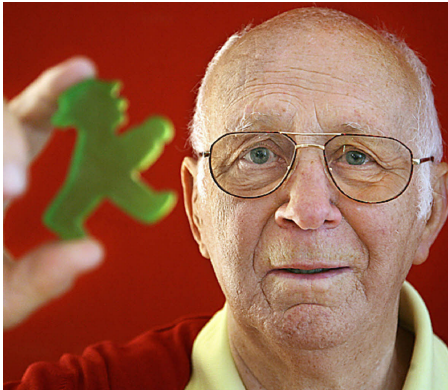
Much of this work has been in the systems engineering process, where she has focused on developing and evaluating technologies for various branches of the US Military.

Her favorite part of Human Factors is the process of understanding human needs and designing a technology that enhances work performance based on these needs.

When not trying to understand the work performance needs of Traffic Managers, she spends time with her family, watching her adorable daughter grow up.

Karl Peglau, 1927-2009

By Michael Cluff



In 1961, glowing green men were spotted all over East Berlin, each paired with a stocky red partner. Instead of little men from Mars, they were what the Germans called “little men of the traffic signal,” or Ampelmännchen. At traffic lights all over the city, the green man with a long stride and brimmed hat signaled safe crossing while his red counterpart warned pedestrians to wait.

They were commissioned by Karl Peglau, who died last November as a celebrated figure in his city.



The dawn of Ampelmänn

Though Peglau originally began his professional life as a sports trainer, his education in engineering and psychology led to a job as traffic psychologist for East Berlin in 1957. As traffic increased, he questioned the utility of a single indicator for every type of traffic. He thought that pedestrians needed their own signal, one which could be understood by all, especially elderly people with poor color differentiation and children who might not grasp the concept of color coding alone. Instead, a friendly icon might be more readily understandable.

The Ampelmännchen kept their jobs

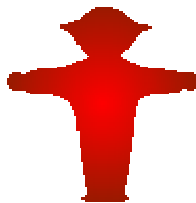
until the fall of the Berlin Wall, when our poor heroes fell victim to European standardization. The whimsical characters were displaced by the comparatively stiff, soulless, nameless – and *hatless* – figure we know in the West.



Ampelmänn's Western Doppelgänger

But the Ampelmännchen were important to East Berliners craving remnants of their cultural identity, and to West Berliners feeling “Ostalgie,” a kitschy nostalgia for pre-unification culture. They showed up on handbags and t-shirts, artists borrowed their likenesses, and popular coffee-table books kept their spirit alive. After years of protest, they were given back their jobs in 1997, albeit on less-traveled side roads so that visiting outsiders wouldn't somehow misinterpret the red Ampelmänn and walk blindly into traffic.

Herr Peglau argued that his figures had more surface area and were thus more visible than their round-headed Western counterpart. Sadly, he lost the battle, and his dream to change the European standard was not realized. But we celebrate his contribution and appreciate how it demonstrates that good design can provoke passion in users.



South Jersey HFES Chapter Membership and Renewal Application

For the Year 2010

Applicant Name: _____

New Member (*complete all fields*)

Renewal (*complete this section only*)

I am (a Fellow / a Full Member / an Associate Member / Not a Member) of the National HFES (*circle one*)

Organization/Company: _____

Mailing address: _____

Daytime phone: () -

Evening phone: () -

Fax number: () -

E-mail address: _____

Endorsing SJC-HFES Member: _____

SJC HFES dues for 2008 are \$15. Make checks payable to the "Human Factors Society." Submit applications and checks to:

KB
ACB-220, RDHFL Bldg 28
William. J. Hughes Technical Center
Atlantic City Int'l Airport, NJ 08405