

Communiqué

Newsletter of the Southern Ohio Chapter, Human Factors & Ergonomics Society

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Mailing Address: Southern Ohio Chapter HFES, P.O. Box 31052, Dayton, OH 45437-0052

Web Site <http://www.cs.wright.edu/sochfes/>



**Happy New Year!!
& in with the New Chapter President
– me, Gloria Calhoun!**

...

Or should I say “old” ?

Not only are my body and mind “senior” these days, I’m also the “**old** Chapter President”, having served as President twice before! This is a record for the Chapter – serving as President three times. The previous record was two terms (Schohan and Topmiller). And speaking of records, Greg Barbato begins his seventh consecutive term as Program Chair (it’s true: there’s no fool like an **old** fool! ☺), and he has again arranged for a very interesting program for our next meeting.

Dr. Kevin Bennett, Wright State University professor, will be speaking midday, 27 January at Wright State on a cognitive systems engineering perspective on interface design. The word “**old**” certainly doesn’t fit Kevin (even though we cheated by using a ten-year-old picture of Kevin in the announcement), as he’s a **New** Fellow of the Human Factors and Ergonomics Society! Come to the next meeting and congratulate him in person!

More details about the next meeting are enclosed in this Newsletter, in addition to more “News”!

New column: first installment introducing you to our SOH **New** Chapter Officers

New Chapter Award Opportunity

New Chapter Member

New information about the Chapter Website

New Chapter Directory

New report on the past Annual Business Meeting, and

New (upcoming) meetings outside the Chapter.

All this “**New**”, I’m feeling younger already! See you at the 27 January meeting! **Gloria**



Human Factors and Ergonomics Society/Southern Ohio Chapter

Dr. Kevin Bennett

Wright State Univ. & Fellow of HFES

Interface Design: A Cognitive Systems Engineering Perspective

Thursday, 27 Jan '05, 1130-Wright State Univ.

**Invited Speaker!!!
Brown-Bag Lunch**

Rm 339, Fawcett Hall Presentation starting about 1145

The process of creating effective interfaces will be discussed from a Cognitive Systems Engineering perspective. There are three components that must be considered in designing effective computerized decision support: 1) the work domain, 2) the agents, and 3) the interface. Each of these components contributes a set of constraints on performance; the quality of mappings between the components will ultimately determine interface effectiveness. The general characteristics of a work domain determine the category of interface design strategy that will prove effective. Work domains that are driven by the laws of nature (e.g. process control) will benefit from analogical, geometric forms that reflect the inherent constraints. Work domains that are driven by user intentions (e.g., information retrieval) will benefit from metaphorical forms (e.g., icons) that relate domain constraints to pre-existing, familiar concepts. Interface design strategies for work domains that fall in the middle of this continuum (e.g., military command and control) present a different set of challenges and successful design solutions are less well-documented. An on-going project to develop decision support for mobile Army commanders has revealed potential solutions. The key elements of this interface will be discussed in terms of three principles of effective interface design: direct perception, direct manipulation, and an intact perception-action loop.



Dr. Bennett received a Ph.D. in Applied-Experimental Psychology from The Catholic University of America in 1984. He worked in industry for three years and was hired as an Assistant Professor in the Department of Psychology at Wright State University in 1988. Dr. Bennett is currently a Professor and the Graduate Program Director of WSU's Human Factors / Industrial Organization Ph. D. program. He teaches graduate courses in Systems Design, Human-Computer Interaction, Display Design, and Cognition.

Dr. Bennett is an active Member of the Human Factors Society. He served on the Editorial Board of the Human Factors Journal for over a decade. Dr. Bennett was a co-recipient of the HFES award for the most outstanding article in the 1993 Human Factors Journal. He was recently elected to the status of Fellow in the Society.

Dr. Bennett's research interests are in theoretical and applied aspects of computerized decision support. He has designed and evaluated interfaces and graphical displays in aviation, process control, and military command and control. Wright State University is an Academic Partner in the Army's Advanced Decision Architectures Collaborative Technology Alliance.

Directions: WSU campus is between visitor's parking lot on north side & Colonel Glenn Hwy on south side. Roads entering campus off Colonel-Glenn, University Blvd. (across Wendy's) & Center/Loop, have signs to Visitor Lot #6. From lot, walk towards campus, going between Rike & Allyn Hall towards mall area. Then veer left to get on east side of Oelman. Once there, Fawcett Hall is straight ahead (Room 339A). Bring Parking Ticket for stamping! Map available at http://www.wright.edu/aboutwsu/maps/map_bw1.html. Questions: Greg Barbato at 937-255-6670.

New 2004-2005 SOH Chapter President -- Gloria Calhoun

My “night job” typically finds me sitting on a hard bleacher watching my 13 year old daughter out score most other basketball players. Last year she was on the state champion Dayton Lady Hoopstars “A” team, which translates to lots of miles on the road! Fortunately, with cellular technology, my two older boys (structural engineering and chemical engineering student) can reach me for their queries. Why does it seem that 20+ year olds always call mom while waiting in the drive through lane and I have till the food is delivered to come up with an answer?!



My “day job” is Senior Engineering Research Psychologist at the Air Force Research Laboratory at Wright-Patterson Air Force Base. Starting in the early 1970s, I enjoyed seven years of research evaluating crew station design concepts (multifunction control and displays, color coding, pictorial display, and flight symbology – the beginnings of today’s “glass cockpits”). Trading a contractor hat for a civil service hat in 1982, my research focus change to the use of 3-D simulated auditory cues for directional cueing, as well as several mechanisms for alternative control (eye gaze, head position, hand gesture, and EMG/EEG signals). For the past several years I’ve been working with Mark Draper, evaluating ground control station design concepts for unmanned aerial vehicles.

For “moonlighting”, I’ve been involved with the Chapter in many capacities. Besides serving as Secretary (3 terms) and Newsletter Editor (3 terms), I was also President in 1988 and 2001. In my first term, I dug through the Chapter historical records and culled a history of the Chapter meetings which now appears in the Directory and has continued to be updated. In my second term, the Chapter By-Laws were revised (no more “President: He shall preside...!”). So, what about this term? See the next column for one possibility!

New Local Chapter Distinguished Service Award

I had the pleasure of attending the “Chapter Presidents’ Luncheon” at the past Annual Meeting and heard from Don Lassiter, Head of the Chapter Affairs Committee, that there are plans to make awards annually, starting the next 2005 HFES meeting. The award may even be monetary (e.g., \$500.). Criteria have not yet been finalized, but, to date, the following have been drafted:

- A) Show a presence at the Annual Meeting (chapter members presenting, chairing sessions, etc.)
- B) Promote student knowledge of human factors by working with student chapter, sponsoring career workshop, giving money to student to travel to conference, providing forum for them, etc.
- C) Provide a human factors engineering service to a non HFES group (e.g., free workshop). Impact group of community not affiliated with HFES (local school or business).
- D) Perform a non HFES service in a fashion promoting HFES. For instance, participate in a charity walk, habitat for humanity or something else wearing HFES t-shirts, badges, etc.

As the Southern Ohio Chapter is one of the more active chapters, I think we are in a good position to meet these criteria. “A” is a snap. “B” is also a snap considering we have two local student chapters. Our annual involvement in the West District Science Fair could be considered a step towards fulfilling “C”. For “D”, we would appreciate suggestions from members that have a connection with a charity project. Please email me at gloria.calhoun@wpafb.af.mil.

New Chapter Member—Welcome!!

Mike Petkosek has a BA in Psychology from the University of Dayton and is now completing a Masters there. He also works as a researcher for the Air Force Research Laboratory under the Consortium Research Fellows Program. Mike is interested in human performance modeling, data presentation/graphics, and human-system integration. He can be reached at MPetkosek@gmail.com.

New Update on Chapter Web Site

Links to Chapter web pages are available at <http://hfes.org/>. After a quick browse, it will be obvious that our website is one of the few with a fairly updated web page! Many thanks to Jesse Walker, our Webmaster for his efforts! To make it even better, we'd like to add pictures illustrating "human factors work". Pictures (cleared with your employer) and captions should be sent to scott.galster@wpafb.af.mil.

On our Chapter website, links to a variety of job openings are also listed: academic, R&D, and commercial! If you hear of opportunities, or have other ideas for the web site, email walkerjl@notes.udayton.edu.

New Chapter Directory & 2005 Dues Notice

The 2004 Directory should be in your email box before the next meeting!! Be sure to double check your listing, especially the indication of your membership status for both National and Chapter Levels. Our Chapter By-laws state to be a full Member of the Chapter, one has to be a Member at the National level. For some folks, we downgraded the Chapter level from 'Member' to 'Associate', because the information from the HFES web site indicated they were not Members at National. If your HFES membership status has changed this year, be sure to let us know, as well as any other change in contact information!

Why not pay your 2005 annual dues (\$5 for students, \$10 others) at the meeting? A Directory form appears at the end of this newsletter and is also available on the website. Mailing to our postal address or giving to any Chapter officer will work too!

2004 Annual Business Meeting

If indeed, "a picture is worth a 1000 words", perhaps the scenes from our November Annual Business Meeting to be posted soon on the Chapter web site is the best vehicle to report this meeting. But the pictures can't duplicate the yummy taste of the Milano subs, the grateful recognition of Glenn Wilson's service with an engraved gavel, and the honored opportunity to host the current President of HFES, Wendy Campbell! Moreover, if you couldn't attend the meeting, you missed a glimpse into the future, as Wendy described research underway at the Georgia Institute of Technology to develop the "Aware Home" – a home with technological advances and human factor designs to enable older adults to maintain their functional independence and to "age-in-place." (**old** me, I could use some of their support aids *now!*) More details are available at www.awarehome.gatech.edu.

Upcoming Events Outside of SOH

Jan 23-25, 2005

Feb 9-11, 2005

Mar 18-20, 2005

SIMCHI'05, New Orleans, LA, <http://www.scs.org/confernc/westernsim/westernsim05/cfp/ichciams05.htm>

3rd UK Ubinet Workshop (ubiquitous computing systems), Bath, UK,
<http://www.bath.ac.uk/comp-sci/hci/uk-ubinet.html>

IEEE VR 2005 Conference, Pisa, Italy, <http://www.vr2005.org/view.php?nid=0>

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| Mar 28-Apr 1, 2005 | SPIE , Orlando, FL, http://myspie.org |
| Mar 29-Apr 1, 2005 | Web3D 2005 Symposium , Bangor, UK, http://www.hpv.informatics.bangor.ac.uk/s2005/ |
| Apr 2-7, 2005 | CHI Computer Human Interaction 2005 , Portland, OR, http://chi2005.org/ |
| Apr 5-7, 2005 | Ergonomics Society Annual Conference , Hertfordshire, UK, http://www.ergonomics.org.uk/events/AC2005call.htm |
| Apr 10-15, 2005 | Inter Society for Performance-Improvement Conf , Vancouver, Canada, http://www.ispi.org/ |
| Apr 11-15, 2005 | World Aviation Congress , Detroit, MI, http://www.sae.org/calendar/wac/ |
| Apr 18-21, 2005 | International Society of Aviation Psychology , Oklahoma City, OK, http://www.cami.jccbi.gov/aam-500/ISAP_Page.html |
| May 16-19, 2005 | 14th Conf on Behavior Rep in Modeling & Sim , Universal, CA, http://www.soisostds.org/cqf-br/05BRIMS/index.htm |
| May 24-28, 2005 | Int Conf on Enterprise Information Systems , Miami, FL , Orlando, FL, http://www.iceis.org |
| Jun 2-3, 2005 | Human-Computer Interaction Lab Symp , College Park, MD, http://www.cs.umd.edu/hcil/soh/ |
| Jun 15-17, 2005 | Naturalistic Decision Making , Amsterdam, Netherlands, www.ndm7.org |
| Jun 20-22, 2005 | Human Systems Integration Symp , Arlington, VA, http://cedm.hfes.org/HSISCall4Papers.pdf |
| Jun 28-30, 2005 | AUVSI's Unmanned Systems 2005 , Anaheim, CA, http://auvsi.org/ |
| Jul 21-25, 2005 | 27th Annual Meeting of the Cognitive Science Society (CogSci) , Stresa, Italy, http://www.cognitivesciencesociety.org/cogsci.html |
| Jul 22-27, 2005 | 1st Augmented Cognition International/HCI International , Las Vegas, NV, www.augmentedcognition.org , http://www.hci-international.org/ |
| Jul 31-4 Aug, 2005 | ACM Siggraph 2005 , Los Angeles, CA, http://www.siggraph.org/s2004/ |
| Aug 15-18, 2005 | American Institute of Aeronautics & Astronautics (AIAA) Modeling and Simulation Technologies Conf & Exhibit , San Francisco, CA, http://www.aiaa.org/calendar/index.htm |
| Aug 22-26, 2005 | 23rd International System Safety Conference , Providence, RI, www.system-safety.org |
| Sept 12-16, 2005 | Interac, Int Conf on Human-Computer Interaction , Roma, Italy, http://www.interact2005.org/ |
| Sept 14-17, 2005 | ICINCO 2005, Int Conf on Informatics in Control, Automation, and Robotics , Barcelona, Spain, http://www.icinco.org/ |
| Sept 20-22, 2005 | Safety Across High-Consequence Industries (aviation & health care) , St Louis, MO, http://parks.slu.edu/msasm/conf_home.htm , Proposals due 14 Feb!!! |
| Sept 26-30, 2005 | 49th Annual Meeting of the HFES , Orlando, FL, http://hfes.org/ Proposals due 8 Feb!!! |
| Oct 24-26, 2005 | 43rd Annual SAFE Symp , Salt Lake City, UT, http://www.safeassociation.org/symposium.htm |
| Nov 14-16, 2005 | IASTED Conf on HCI , Phoenix, AZ, http://www.iasted.org/conferences/2005/phoenix/hci.htm |
| Nov 28-Dec 1, 2005 | Interservice & Industry Training, Sim & Education Conf , Orlando, FL, http://www.iitsec.org/ |
| Nov 30-Dec 2, 2005 | Driving Simulation Conference , Orlando, FL, http://www.catss.ucf.edu/pages/drivsimcftp.asp |
| Dec 12-15, 2005 | MODSIM05 – International Congress on Advances & Applications in Modeling & Simulation , Melbourne, Australia, http://www.mssanz.org.au/ |

SOH CHAPTER INFO

SNAIL MAIL: Southern Ohio Chapter HFES, P.O. Box 31052, Dayton, OH 45437-0052

WEB SITE: <http://www.cs.wright.edu/sochfes/> — Includes Membership Application!!!

Executive Council

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Southern Ohio Chapter (SOC)
Human Factors and Ergonomics
Society (HFES)
 P.O. Box 31052
 Dayton, OH 45437-0052

Membership Form: Application, Renewal, and Update

DIRECTIONS:

- To apply for new membership, fill all blocks, including those on the back of this form.
- To renew membership, fill first block only.
- To update directory information, fill first block and indicate changes in other blocks as appropriate.

PLEASE TYPE OR PRINT CLEARLY!!
 Send completed form and payment to address on the left.

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| Name: | | YEAR |
| | First name or initial, middle name or initial, last name. | 200__ |

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| Employer Address: | Company | |
| | Street | |
| | City | |
| | State/Zip | OH |
| | Phone | |

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| Home Address: | Street | |
| | City | |
| | State/Zip | OH |
| | Phone | |

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| Email Address: | Work: |
| Optional: Home email: | |
| Personal Website: | |
| Work/Company/Organization Website: | |
| Personal (resume) Website: | |

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| Preferred Mailing Address: | <input type="checkbox"/> Work | <input type="checkbox"/> Home |
| Preferred Phone: | <input type="checkbox"/> Work | <input type="checkbox"/> Home |
| Preferred Email: | <input type="checkbox"/> Work | <input type="checkbox"/> Home |
| Send Email Meeting Reminders: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

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|---|-------------|-----------------------------------|---------------------------------------|------------------------------------|
| Membership Status: | HFES | <input type="checkbox"/> Member | <input type="checkbox"/> Associate | <input type="checkbox"/> Affiliate |
| | | <input type="checkbox"/> Fellow | <input type="checkbox"/> Not a member | <input type="checkbox"/> Student |
| | SOC | <input type="checkbox"/> Member | | <input type="checkbox"/> Student |
| (Membership categories on back.) | | <input type="checkbox"/> Honorary | <input type="checkbox"/> New | |

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| Willing to Consult? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
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| Degree(s) , Major, College, Year: |
| (maximum of two) |

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| Work Specialties/Interests: |
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| <i>Office Use</i> | Date paid: ___/___/___ | Amount paid \$ _____ | Check # _____ | Dues for 200__ |
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