Chair’s Report
This will be my last report as the Chair of the TG. I would like to take this opportunity to thank all of the members for their support and participation. I have enjoyed serving the TG.

The 2005 Annual Meeting is rapidly approaching. It will be held September 26-30, 2005, in Orlando. Steve Fiore has once again organized four outstanding sessions sponsored by the Training TG. You’ll find a listing of the sessions in the Newsletter.

In our last newsletter, we presented two proposals for an annual best student paper award and a student grant research award. I’m pleased to announce that both awards were approved by the TG membership and the Executive Committee of the Council of Technical Groups. We have formed a review committee to select the best student paper and will announce the winner at our annual Business Meeting in Orlando in September. We have also issued a call for proposals for student grants (see related article in this Newsletter). Proposals must be submitted by midnight, Saturday, September 10th, 2005.

Finally, elections for new TG Officers for the two-year term beginning at our next Business Meeting are underway. A copy of the ballot is included in this Newsletter. You have a variety of methods to choose from to cast your ballot. Teresa Alley, our Webmaster, has developed an on-line ballot form, which can be found on our web site at http://ttg.hfes.org. You can use this ballot form to place your vote. Alternatively, you can use the ballot provided in this Newsletter and mail or email it to me (a copy of the ballot can also be found on our website). For your vote to count, ballots must be submitted by August 31, 2005.

See you in Orlando!

Jim Bushman
James.bushman@ngc.com
Northrop Grumman
7029 Huntley Rd, Suite L
Columbus, OH 43229

Brand New TTG Initiatives Supporting our Student Members

Award for Best Training TG Student Paper
Because our student affiliates are a vital part of our organization, the Training Technical Group is supporting them in their professional development via a best paper award to be presented to student affiliates of the TG. All student work accepted to the Training TG qualifies. Sandro Scielzo of the University of Central Florida will oversee the reviews which will be conducted by peer groups, that is, selected students from the Training TG. In addition to a certificate of recognition, a monetary award of $250 will be provided.

Training TG Student Grant Award
The Training Technical Group has recently established a Student Grant Program to support student research in training theory and training experimentation. Please see the Call for Proposals for the program objectives specific submission requirements (on next page). The award is open to all student members of HFES. Each year the Training TG we will offer one award of $750. The deadline for submitting proposals for the 2005 award is midnight Saturday, September 10th, 2005. The winner of the first Student Grant Award will be presented at the annual Training TG Business to be held during the HFES Annual Meeting, 26-30 September 2005, Orlando, FL. Please forward this information to all eligible students.
Call for Proposals
Training Technical Group
2005 Student Grant Program

The HFES Training Technical Group has created a Student Grant Program to support student research in training theory and training experimentation. The primary purpose of the program is to support the professional development of our student affiliates. Towards this end, the program is designed to foster the growth of a set of targeted competencies required by the professional scientist interested in training. By allowing student affiliates to oversee the management of this effort, affiliates can gain, not only experience in the grant-writing process, but also experience in reviewing research grants. A secondary goal of the program serves the long-term interests of the Training TG by providing another opportunity for our student affiliates to gain recognition of their work while in graduate school. The goal is to return something to our affiliates and foster goodwill towards the Society. In sum, this program provides an important opportunity for our affiliates to gain recognition for their efforts, thus strengthening the long-term viability of the field.

The program is open to all HFES student members. We offer financial support for research expenses including, but not limited to, purchase of research materials; paying subjects; partial payment for equipment, etc. Each year we would offer one award of $750. Each proposal would be evaluated on the following criteria:

1. Clarity in presentation of ideas
2. Clarity of research methods and methodology appropriateness
3. Likelihood of the project to explain some psychological phenomenon
4. Ability of the project to advance research in a specified area
5. Budget match for scope and requirements of the research

To be eligible for consideration, proposals must be submitted by midnight Saturday, September 10th, 2005. For more information please contact Dr. Steve Fiore at sfiore@ist.ucf.edu.

Submission Process
To have the grant proposal considered for the TTG-SGP, the following information would need to be submitted:

Cover Letter
Include the following information:
- Name and Current mailing address
- Telephone number and e-mail address
- Area of research
- University Affiliation
- Full name(s) of other(s) involved in the project

Letter from Faculty Sponsor
This letter should describe the amount of faculty involvement in the project, an assessment of the student’s capabilities in completing the project, and the degree of independence exhibited by the student in developing the research idea.

Proposal Narrative
Complete a typewritten (single-spaced, no more than 4 pages) project description summarizing the purpose and methodology of the proposed project. This summary should include the research project's title (without author's name) at the top of each page and must include text on the following:
1. A synopsis of previous related research
2. A short description of the theoretical implications of the research
3. A short description of the practical implications of the research
4. Specific objectives of the current project
5. Clearly stated hypothesis or set of hypotheses (if relevant)
6. Proposed methodology
7. Budget
8. Budget justification explaining costs and why the proposed expenditures are necessary

Institutional Review Board Approval
Send verification that the research has been approved by your University's Human Subjects Review Board.

Send the above materials to Dr. Stephen M. Fiore at sfiore@ist.ucf.edu or via FAX at 407-882-0306. All materials must be received by midnight Saturday, September 10th, 2005, in order to be considered for this year's Student Grant Program. Any questions regarding the program or awards can be directed Dr. Stephen M. Fiore at sfiore@ist.ucf.edu.
Vote for your new Officers!
Ballots due by August 31, 2005!
Please follow these instructions

Please vote only once. You can vote using a variety of methods. You may vote electronically using the on-line ballot on our website (http://ttg.hfes.org). Or you may use this page as your ballot or you may download a ballot from our website. If you choose to use this ballot or to download the ballot from the website, please submit your ballot to Jim Bushman by snail mail, fax or email. Jim’s contact information is below. If you choose to snail mail your vote, please print your name on the back of the envelope and sign across the seal. If you fax the ballot, please include a cover sheet indicating your name and contact information. If you wish to email your selection, please download the ballot, complete it, and attach it to your email. If you have any questions, please do not hesitate to contact Jim.

Official Ballot for HFES TTG Chair

Dee H. Andrews, Air Force Research Lab, Mesa, AZ
Write In Candidate: __________________________

Official Ballot for HFES TTG Secretary

Stephen M. Fiore, University of Central Florida, Orlando
Write In Candidate: __________________________

Mail ballot to:
James B. Bushman, Ph. D.
Ohio MARCS
Northrop Grumman
7029 Huntley Rd, Suite L
Columbus, OH 43229

Or fax to:
ATTN: Jim Bushman
(614) 985-6666

Or e-mail to:
James.bushman@ngc.com

Meet your Candidate for TTG Chair

DEE H. ANDREWS is currently a Senior Scientist for Training Psychology with the Warfighter Readiness Research Division of the U.S. Air Force Research Laboratory at Mesa, Arizona. Previously he held the position of Division Technical Advisor for the Warfighter Training Research Division. He worked as a senior research psychologist for the U.S. Army Research Institute for the Behavioral and Social Sciences in Orlando, Florida. Prior to his work with the Army he was a Research Psychologist and training analyst with the U.S. Naval Air Warfare Center - TSD in Orlando, Florida. He received his: Ph.D. in Instructional Systems from Florida State University in 1980, M.S. in Instructional Design and Development from Florida State University in 1977, and B.S. in Psychology from Brigham Young University in 1976. He is a Fellow of the Human Factors and Ergonomics Society, the American Psychological Association and the Royal Aeronautical Society. He has been certified as a Performance Technologist by the International Society for Performance and Improvement. Within HFES he has been a Program Chair for the Training Technical Group, a member of the HFES Membership and Retention Committee, and is a member of the Education and Training Committee. He has over 50 professional publications, including the only book specifically devoted to aircrew training and assessment. He has given over 40 professional presentations. He is on the editorial board or is a consulting editor for six professional journals. He is an adjunct professor at; Embry-Riddle Aeronautical University, Arizona State University, St. Francis University and Rollins College. He teaches graduate and undergraduate courses in; Effective Team Building, Human Factors of Flight, Modeling and Simulation, Management Information Systems, and Production Management. His research interests include; simulator design, flight training, cognitive psychology, advanced distributed learning, and distributed mission training.

Meet your Candidate for TTG Secretary

STEPHEN M. FIORE is Director of the Consortium for Research in Adaptive Distributed Learning Environments at the University of Central Florida, Institute for Simulation and Training and Team Performance Laboratory. He earned his Ph.D. degree (2000) in Cognitive Psychology from the University of Pittsburgh, Learning Research and Development Center. He maintains a multidisciplinary research interest that incorporates aspects of cognitive, social, and organizational psychology in the investigation of training and performance in individuals and teams. He is co-Editor of a recent volume on Team Cognition as well as currently co-Editing a volume on Distributed Training. Dr. Fiore has published in the area of learning, memory, and problem solving at the individual and the group level and he was recently appointed to the Editorial Boards for the journal Human Factors and the journal Cognitive Technology. He has served as the Training Technical Group Program Chair since 2003 and also recently created two new initiatives focused on supporting our Graduate Student Members in the Training Technical Group (a Best Paper Award, and a Small Research Grant). Last, he recently took over the role of Newsletter Editor for the TTG. As Secretary he plans to continue efforts that support the long-term viability of the TTG through innovative programs serving our student and professional members. This includes developing programs to encourage student involvement as well as facilitating multi-disciplinary approaches to answer critical questions concerning training research.
HFES2005
Training Technical Group Program

T1 - Methods for Assessing and Debriefing Team and Multiteam Performance in Distributed Simulation-Based Training
Chair: Joan Johnston (NAVAIR Orlando TSD)
Tuesday, September 27 1:30PM-3:00PM
Symposium

A Human Systems Integration Method for Validating Team Performance Assessment within a Simulation-based Training System
Joan Johnston (NAVAIR Orlando TSD)
Dennis A. Vincenzi (Jardon and Howard Technologies)
Paul Herman Radtke (NAVAIR Orlando TSD)
William Salter (Aptima, Inc.)
Jared Freeman (Aptima, Inc.)

Applying the Narrative Form and XML Metadata to Debriefing Simulation-based Exercises
Stephen M. Fiore (U. of Central Florida)
Joan Johnston (NAVAIR Orlando TSD)
Rudy McDaniel (U. of Central Florida)

Automated Individual, Team, and Multiteam Performance Assessment to Support Debriefing Distributed Simulation-Based Exercises (DDSBE)
Thomas Carolan (Micro Analysis & Design)
Peter Bilazar (Lockheed Martin)
Long Nguyen (NAVAIR Orlando TSD)

Human Factors Challenges in After-Action Reviews in Distributed Simulation-Based Training
William Salter (Aptima, Inc.)
Susannah Hoch (Aptima, Inc.)
Jared Freeman (Aptima, Inc.)

Constraint-Based Performance Assessment
Jennifer Fowlkes (Chi Systems, Inc.)
Jerry Owens (Chi Systems, Inc.)
Corbin Hughes (BGI, LLC)
Joan Johnston (NAVAIR Orlando TSD)
Michael Stiso (Chi Systems, Inc.)
Amanda Hafich (Chi Systems, Inc.)
Kevin Bracken (Chi Systems, Inc.)

T2 - Training Process and Performance in Teams and Human-Agent Teams
Chair: A. William Evans
Wednesday, September 28 8:30AM-10:00AM
Lecture

Developing an Interdisciplinary Language for Human-Agent Teams Training Research
Stephen M. Fiore (U. of Central Florida)
Michael Rosen (U. of Central Florida)
Keith Garfield (U. of Central Florida)
Neal Finkelstein (Simulation & Training Technology Ctr.)

T3 - Cognition and Training: Advancing Training Technology to Support Cognitive Processes
Chair: Michelle Harper
Thursday, September 29 3:30PM-5:00PM
Lecture

Evaluation of a Game-Based Trainer for Infantry Platoon Leader Decision Making
Richard E. Christ (U.S. Army Research Inst.)
Scott A. Beal (U.S. Army Research Inst.)

Augmented Reality as a Training Medium for Aviation/Aerospace Application
Nickolas Daniel Macchiarella (Embry-Riddle Aeronautical U.)
Dahai Liu (Embry-Riddle Aeronautical U.)
Sathya N. Gangadharan (Embry-Riddle Aeronautical U.)
Dennis A. Vincenzi (Jardon and Howard Technologies)
Anthony E. Majoros (Boeing Co.)

Simulation-Based Training for the Future Force Warrior
Walter Warwick (Micro Analysis & Design)
Rick Archer (Micro Analysis & Design)
Alan Brockett (Micro Analysis & Design)
Patty McDermott (Micro Analysis & Design)

Optimizing Training for Visual Discrimination Across Stimulus Categories
Randy Brou (Mississippi State U.)
Ginger W. Cross (Mississippi State U.)
Stephanie M. Doane (Mississippi State U.)
Teena Garrison (Mississippi State U.)
**T4 - Conceptual and Technological Innovations in Training**
Chair: Sandro Scielzo
Friday, September 30 10:30AM-12:00PM
Lecture

The Investigation of Suitability of Aeronautical Decision-Making Mnemonics in Tactical Environments
Wen-Chin Li (Cranfield U.)
Don Harris (Cranfield U.)
Chung-San Yu (U.S. Air Force Academy)

Crew Resource Management and Young Driver Safety
Michael Regan (Monash U.)
Paul Salmon (Monash U.)
Eve Mitsopoulos (Monash U.)
Janet Anderson (Monash U.)
Jessica Edquist (Monash U.)

Increasing Training Efficiency Using Embedded Pedagogical Tools in a Combat Flight Simulator
Staffan Nahlinder (FOI)
Peter Berggren (FOI)
Bjorn Persson (Swedish AF Flying Training School)

Training Effectiveness: How Does Driving Simulator Fidelity Influence Driver Performance?
George D. Park (Systems Technology, Inc.)
R. Wade Allen (Systems Technology, Inc.)
Theodore J. Rosenthal (Systems Technology, Inc.)
Dary Fiorentino (Southern California Research Inst.)

**POS2 - Posters**
Chair: Enid Headen
Cochair: Amol Surve
Wednesday, September 28 8:30AM-12:00PM
Poster Session

Training Keyboarding Skills on a Simulator: Student Trainees in Grades Three Through Six Sigma
Theresa June Lancey (Laguna Niguel, CA)

Collaborative Virtual Environment to Simulate On-the-Job Aircraft Inspection Training Aided by Hand Pointing
Sajay Sadasivan (Clemson U.)
Rachana Rele (Clemson U.)
Joel S Greenstein (Clemson U.)
Anand K Gramopadhye (Clemson U.)
Jacob Masters (Clemson U.)
Andrew T Duchowski (Clemson U.)

Cognitive Interference Effects on Performance Under Variable Training Priorities
Phillip M. Mangos (NAVAIR Orlando TSD)
Debra Steele-Johnson (Wright State U.)
Edward D. White (U.S. Air Force Inst. of Technology)

**PO1 - Posters**
Chair: Zhonghai Li
Cochair: Ruiqi Ma
Tuesday, September 27 1:30PM- 5:00PM
Poster Session

Training Effects in a Sickness-Inducing Environment
Mustapha Mouloua (U. of Central Florida)
Janan Al-Awar Smither (U. of Central Florida)
Robert C. Kennedy (U. of Central Florida)
Robert S. Kennedy (RSK Assessments, Inc.)
Daniel E. Compton (RSK Assessments, Inc.)
Julie M. Drexler (RSK Assessments, Inc.)

**TTG Newsletter**

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