



AAR-100

Human Factors Newsletter # 02-03

February 2, 2002 – February 15, 2002

Technical Interchange Meeting: As part of the FAA/NASA Interagency ATM Integrated Product Team (IAIPT), the Human Factors Joint Research Product Description Number 12 (J12) sponsored the sixth human factors technical interchange meeting (TIM) on February 5-6, 2002 at FAA headquarters. The TIM's theme addressed acquisition human factors involving the interaction of practice and research. An introductory welcome was presented by Mr. Jeff Hmara from the Free Flight Phase 2 program office and the FAA co-lead of the IAIPT. Twenty-five presentations were organized in sessions consisting of measures of human performance in the NAS; human factors techniques in system acquisitions; human error measurement; human performance modeling; and user-centered automation. Presenters represented offices from FAA Headquarters (AAR, ASD, ARI, AND), ACT-530 from the William J. Hughes Technical Center, the Civil Aerospace Medical Institute, NASA Ames and Langley, MITRE CAASD, the Catholic University of America, and San Jose State University. Over 60 human factors researchers, practitioners, academic scientists, and others participated in the TIM. Presentations can be accessed at <http://kms.faa.gov/iaipt-hf/> (P. Krois, AAR-100).

Electronic Flight Bag (EFB): On January 30, 2002, a researcher from Volpe Center presented an update on its EFB-related human factors activities to a meeting of the Air Transport Association Digital Data Working Group in Washington, D.C. Volpe is planning to close out comments on its EFB human factors document later this year and begin new activities related to EFB evaluation methodologies. The Volpe document is cited as a reference document in the draft Advisory Circular on EFBs. Additional EFB related activities funded by the SafeFlight 21 program were also presented to the group. (D. Chandra, VNTSC, T. McCloy, AAR-100)

Smithsonian Exhibit: The FAA recently updated its "Today's Air Traffic Control System" exhibit at the Air and Space Museum across the street from FAA headquarters. Among the programs represented is Safe Flight 21 Alaska Capstone, which features a short summary on ADS-B implementation efforts in western Alaska along with three photos of a cockpit display with graphical traffic and terrain information. It's worth a visit to see the entire exhibit, which provides interesting information on how air traffic control has evolved over the years. (P. Gervasi, Acting ARA-3)

Technology Transfer Awards: Nominations are being accepted for the FAA's Technology Transfer Awards and will close February 28, 2002. These awards are designed to recognize FAA's scientific, engineering, and technical employees responsible for inventions, innovations,

or other outstanding scientific or technological achievements that contribute to the mission of the FAA or the Federal Government and individuals and organizations that promote the transfer of science and technology. Only FAA employees are eligible to be nominated and to receive awards. Nominations can be made by anyone. For a nomination package or for more information on the awards program contact Maryann Heide at (609) 485-4434 (Maryann.CTR.Heide@tc.faa.gov) or visit the Web site at: www.its.tc.faa.gov/technologytransfer/techtransawards.htm

SAE-G10 Meeting: A CAMI researcher traveled to Melbourne, FL to attend the semi-annual SAE-G10 Committee Aerospace Behavioral Engineering Technology meeting and to act as co-chair of the Perspective Flight Guidance Displays subcommittee. The subcommittee completed an initial outline for an Aviation Research Proposal (ARP) on perspective flight guidance displays and assigned writing tasks for each section of the outline. A first draft of the ARP is expected to be completed by June of this year. (K. Williams, CAMI)

Aviation Security Human Factors:

- **Defense Advance Research Projects Agency (DARPA) Workshop on Human Activity Inference.** Rick Lazarick, Diane Wilson, and Varrick Smith, all of AAR-510, attended a 2-day DARPA sponsored workshop on Human Activity Inference at the new Institute for Defense Analyses (IDA) building, located in Alexandria, Virginia. The workshop was designed to gather information for a new program at DARPA in the area of interpreting video for indications of behavior patterns. Mr. Lazarick presented the security problems of airport ramp area intrusion as a challenge problem for the group, which consisted of more than 20 academics from the world of vision. The FAA problem was referred to in some detail throughout the workshop and ideas were generated as to what could be achieved in the short- and long-term to contribute to solve this problem. (C. George, AAR-1)
- **Human Factors Checkpoint Baseline Study with Continental Airlines:** The AAR-510 Human Factors Program has a cooperative research and development grant with Continental Airlines at Newark International Airport. An initial checkpoint baseline study was performed at two of Continental's checkpoints during the week of January 14th. This initial study will provide the human factors program and Continental Airlines with an idea of how the checkpoint operates before any new equipment or training curriculum is implemented. These baseline studies are performed every 6 months. (C. George, AAR-1)
- **ARGUS Explosives Detection System (EDS):** On January 16th, PerkinElmer Instruments delivered their ARGUS EDS to the Aviation Security Laboratory for FAA explosives pre-certification and certification testing. If the PerkinElmer ARGUS EDS achieves FAA explosives certification, then it will be submitted to the Aviation Security Human Factors Program (AAR-510) for further System Qualification Testing (SQT), in partial fulfillment of the requirements specified under the ARGUS Grant Program. During the Human Factors SQT, 10 individuals will be trained by PerkinElmer and will undergo extensive testing. Depending on its success during the Human Factors SQT, the

PerkinElmer ARGUS EDS may then undergo operational testing at an airport with the Security Equipment Integrated Product Team. (C. George, AAR-1)

More information on human factors research can be found at the FAA Human Factors (AAR-100) web site: <http://www.hf.faa.gov>

Mark D. Rodgers
FAA (AAR-100)



February 26-March 3, 2002 – Air Freight Expo 2002, Shangri-La Hotel, Singapore
<http://www.eyefortransport.com/asia2001>

February 26-March 3, 2002 – Asian Aerospace 2002, Singapore
<http://www.asianaerospace.com/>

February 28-March 1, 2002 – Aviation Safety Symposium, Buena Park, CA
<http://www.faa.gov/>

March 2002 – European Transportation Leaders Conference, Landmark Hotel, London
<http://www.aviationnow.com/conferences>

March 7-8, 2002 – Potomac Chapter Human Factors and Ergonomics Society Mid-Year Symposium, Ft. Belvoir Officer's Club, Virginia <mailto:jerrykrueg@aol.com>

March 10-12, 2002 – 2002 Air Freight Management Conference & Exposition, The Westin Diplomat Resort Country Club and Spa, Hollywood, FL <http://www.aemca.org/>

March 11-15, 2002 – Global Cargo Week & Dangerous Goods by Air Conference & Exhibition, Sofitel Forum Rive Gauche, Paris, France <http://www.iataonline.com/>

March 12-13, 2002 – FAA Aviation Forecast Conference, Wash, DC
<http://api.hq.faa.gov/Conference/welcome.htm>

March 13-15, 2002 – 13th Annual International Women in Aviation Conference, Nashville, TN
<http://www.wiai.org/>

March 26-28, 2002 – Aviation Suppliers & Services Super Show, Indianapolis, IN
<http://www.as3.com/>

April 2-4, 2002 – 16th Symposium on Human Factors in Aviation Maintenance, San Francisco, CA <http://www.galaxyscientific.com/2002hfams/index.html>

April 8-11, 2002 – Aircraft Interiors Expo 2002, Hamburg, Germany
<http://www.ukintpress.com/airexpo>

April 9-11, 2002 – Maintenance, Repair and Overhaul Conference & Exhibition, Phoenix Convention Center, Phoenix, AZ <http://www.aviationnow.com/conferences>

April 14-15, 2002 – FAA General Aviation Forecast Conference, Wichita, KS
<http://api.hq.faa.gov/Conference/welcome.htm>

April 14-15, 2002 – FREE Flight Safety Boeing Maintenance Human Factors Awareness Training for Managers, Seattle, WA <http://www.fsbti.com>

April 23-25, 2002 – NBAA Leadership Conference, Nashville, TN <http://www.nbaa.org/>

April 29-May 2, 2002 – DoD HFE TAG, Clarion Hotel Bayview, San Diego, CA
<http://dtica.dtic.mil/hftag>

April 30-May 1, 2002 – *First Threat and Error Management (TREM) Training Workshop, San Salvador, El Salvador* <mailto:dmaurino@icao.int>

May 5-9, 2002 – 73rd Annual Scientific Meeting of the Aerospace Medical Association, Queen Elizabeth's Hotel, Montreal, Canada <http://www.asma.org/>

May 6-12, 2002 – International Aerospace Exhibition and Conference, Berlin Brandenburg International Airport, Berlin, Germany <http://www.ila-berlin.com/>

May 20-22, 2002 – 11th Annual Phoenix International Aviation Symposium, The Phoenician Resort, Phoenix, AZ <http://www.phxskyharbor.com/>

May 28-30, 2002 – EBACE2002, Geneva, Switzerland <http://www.ebace.com/>

June 13-14, 2002 – Aviation Conference and Exposition, Oklahoma City, OK
<mailto:skymarket@aol.com>

August 27-30, 2002 – Measuring Behavior 2002, 4th International Conference on Methods and Techniques in Behavioral Research, University of Amsterdam, Amsterdam, The Netherlands
<http://www.noldus.com/events/mb2002/index.html>

September 16-18, 2002 – Conference on Aerospace Materials, Processes and Environmental Technology, Huntsville, AL <http://ampet.msfc.nasa.gov/>

September 17-20, 2002 – International Air Cargo Forum, Hong Kong <http://tiaca.org/>

September 23-27, 2002 – Human Factors and Ergonomics Society 46th Annual Meeting, Pittsburgh Hilton and Towers, Pittsburgh, PA <http://www.hfes.org/>

October 14-16, 2002 – *Third LOSA Week, Dubai, United Arab Emirates*
<mailto:dmaurino@icao.int>

October 23-25, 2002 – International Conference on Human-Computer Interaction in Aeronautics, Massachusetts Institute of Technology, Cambridge, MA <http://www-urisico.oncert.fr/events/hci-aero2002.html/>

October 27-31, 2002 – 21st Digital Avionics Systems Conference, Hyatt Regency Hotel, Irvine, CA <http://www.dasconline.org/>

April 7-27, 2003 – Aviation World's Fair, Newport News/Williamsburg, VA
<http://www.worlds-fair.com/> or <http://aviation-worlds-fair.com/>

May 4-9, 2003 – 74th Annual Scientific Meeting of the Aerospace Medical Association, Convention Center, San Antonio, TX <http://www.asma.org/>

October 13-17, 2003 – Human Factors and Ergonomics Society 47th Annual Meeting, Adams Mark Denver Hotel, Denver, CO <http://www.hfes.org/>

May 2-7, 2004 – 75th Annual Scientific Meeting of the Aerospace Medical Association, Egan Convention Center, Anchorage, AK <http://www.asma.org/>

September 20-24, 2004 – Human Factors and Ergonomics Society 48th Annual Meeting, Sheraton New Orleans Hotel, New Orleans, LA <http://www.hfes.org/>

Note: Calendar events in Italics are new since the last Newsletter



Comments or questions regarding this newsletter?
Please contact Bill Berger at (334) 271-2928
or via e-mail at bill.ctr.berger@faa.gov