



AAR-100

Human Factors Newsletter # 01-23

(November 10, 2001 – November 30, 2001)

STARS: Human factors researchers at the William J. Hughes Technical Center (ACT-530) supported five successful simulation runs using Philadelphia (PHL) airspace and the STARS FS-2+ software. Controllers examined Full Service (FS-2+) functions and validated that the CHI met their expectations. The activity identified only a handful of minor issues, so things look good from a CHI standpoint. FS-2+ will soon move into the formal testing phase. (E.Stein, WJHTC)

ICAO Meeting: A human factors representative participated in the 11th ICAO Human Factors Study Group held the week of November 19th in Montreal, Canada. The group consisted of representatives from the US, Canada, Japan, Brussels, Great Britain, and Finland. The purpose of the meeting was to discuss human factors recommendations to: (1) ICAO Annex 6 addressing air carrier document systems, (2) human factors in air carrier cabin safety, (3) human factors in air carrier security training, and (4) pilot licensing. Follow-up activities will be scheduled in the coming months. (E. Edens, AFS-230)

Head-Up Displays (HUD):

- At the Digital Avionics Systems Conference in Daytona Beach, FL, a researcher from Volpe NTSC gave a presentation related to his work on developing certification guidelines for civil aircraft head-up displays. His presentation, titled "Issues and Research Needs Concerning the Use of Head-Up Displays in Air Transports," reviewed research on four recurring issues in HUD design, namely, clutter, unusual attitude recognition and recovery, coding external consistencies, and head motion. (M. Zuschlag, VNTSC)
- A human factors researcher from Volpe NTSC teamed with pilots and engineers at the William J. Hughes Technical Center to complete data collection applicable to certification guidelines for the performance of head-up displays. The researcher collected data on eight flights in one of the Technical Center's Convair CV-580s in order to determine the range of head motion exhibited by pilots while flying an aircraft. The results were reported in the technical memorandum "Recommended Minimal Cockpit Head Motion Box Dimensions," which was delivered to the FAA earlier this year. (M. Zuschlag, VNTSC)

Air Traffic Management (ATM): Four human factors design specialists from Boeing's ATM Unit visited the William J. Hughes Technical Center's Research & Development Human Factors Laboratory on November 27th and 28th. Engineering research psychologists from the laboratory presented information on their research concerning air traffic and airway facilities concepts and acquisitions. They also demonstrated simulation and prototyping capabilities to the visitors. Discussions took place regarding human factors research experiences in getting ideas from the drawing board to the field. Included was a discussion of the theoretical approach to constructing a behavioral model of air traffic controller performance. The visitors also learned about the capabilities of the Target Generation Facility and the Free Flight Technology Integration Laboratory. This initial information exchange set the stage for potential future collaboration between the Technical Center and Boeing ATM. (T. Truitt, WJHTC)

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

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FAA (AAR-100)



December 3-5, 2001 – Maintenance, Repair and Overhaul Asia 2001, Regal Hotel, Hong Kong
<http://www.aviationnow.com/conferences>

December 3-5, 2001 – Eye for Transport Miami 2001, the Hyatt Regency, Miami, FL
<http://www.eyefortransport.com/Miami2001>

December 3-7, 2001 – FAA/EUROCONTROL Air Traffic Management R&D Seminar, Santa Fe, New Mexico
<http://atm2001.eurocontrol.fr>

December 10-11, 2001 – FAA/EUROCONTROL R&D Committee Meeting, Santa Fe, New Mexico
<http://atm2001.eurocontrol.fr>

January 13-17, 2002 – Transportation Research Board Meeting, Washington, DC
<http://www.trb.org/trb/meeting>

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

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 – Air Freight Expo 2002, <http://www.airfreightexpo.com/>

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

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

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/>

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 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 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/>

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?
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