



AAR-100

Human Factors Newsletter # 01-25

(December 15, 2001 – December 28, 2001)

Fatigue Management: The DOT Operator Fatigue Management Team meeting scheduled for November 9, 2001 was canceled. A teleconference was held instead. Project status reports for contract activities were made by the DOT representatives overseeing the work. Tom Raslear (FRA) discussed the Fatigue Avoidance Scheduling Tool (FAST) and performance modeling efforts by SAIC, Inc. Steve Popkin (RSPA/Volpe) discussed the scheduling tool efforts by XIMES, Inc. Carlos Comperatore (USCG) discussed the Fatigue Management Reference Handbook in development by Battelle Memorial Institute. Mike Coplen (FRA) discussed the cancellation of the ORC MACRO contract and initial plans for replacing that contractor with another for the Framework for Multi-Mode Synthesis and Cost Benefit Analyses effort. (T. Nesthus, CAMI)

Aerospace Medical Association: Several CAMI AAM-500 researchers attended the midyear meetings of the Aerospace Medical Association. Meeting groups included: Aerospace Human Factors Association; Aerospace Human Factors Standing Committee; AsMA Council; and the Scientific Program Committee. Coordination, sponsorship and scheduling efforts for three human factors panels were made for the 2002 Scientific Meeting in to be held in May, 2002 including: “Results of Program Research Concerning Shiftwork and Fatigue of Air Traffic Control Specialists in the U.S.”; “General Aviation Research: Implications for Safety and Training”; and “Modeling and Simulation of Human Response to Sustained Acceleration.” (T. Nesthus, CAMI)

Aviation Security

- **ARGUS Human Factors System Qualification Test and Evaluation Plan:** In October 2001, the Aviation Security Human Factors Program published the document, “ARGUS EDS Human Factors System Qualification Test and Evaluation Plan”(DOT/FAA/AR-01/115). This report was submitted to and approved by the Civil Aviation Security Policy and Planning Division (ACP-400) in fulfillment of one task on the AAR-510 Developmental Implementation Plan for fiscal year 2001. (M. Dixon, AAR-510)
- **ARGUS Human Factors Testing Trial Run:** On November 19, 2001 a support contractor for the Aviation Security Human Factors Program completed a trial run of the testing procedures that will be used for the ARGUS Explosives Detection System (EDS) Human Factors System Qualification Testing (SQT). The Human Factors SQT will

evaluate how well each ARGUS system meets the grant requirements related to operability and usability. AAR-510 will conduct SQT after each ARGUS system has achieved FAA explosives detection certification but prior to operational testing in the field. (M. Dixon, AAR-510)

Safety: A paper entitled "Pilot and Controller Error in Surface Operations" was presented at the FAA-EUROCONTROL ATM 2001 R&D symposium in Santa Fe, NM by Kim Cardosi. The paper reported on the results from a study of operational errors, pilot deviations and reports submitted to the Aviation Safety Reporting System (ASRS). The presentation was voted "best paper" in the safety track of the symposium. (K.Cardosi, Volpe NTSC).

AF Job Task Analysis: Dana Broach (CAMI) traveled to FAA Headquarters Dec 3-7 to oversee completion of Phase 1 of the Airway Facilities baseline job/task analysis (AF/JTA-2001 project). Facilitators from North American Business and Management Company (prime contractor) and the American Institutes for Research (AIR; sub-contractor) conducted a final review by field supervisors of the job task/duty and knowledge, skill, and ability (KSA) lists for the JTA. Dr. Broach briefed Steve Rothschild (AFZ-1), Elizabeth Rand (AFZ-2), and Alan Moore (AAF-1) on the status of the AF/JTA-2001 project later that week. In Phase 2, the task/duty and KSA lists will be turned into a JTA survey to be distributed, after required coordination with PASS, to all incumbent systems specialists in the AF field maintenance workforce (n=5,800). While at Headquarters, Dr. Broach also met with representatives of the AF Staffing & Compensation Policy Division with regard to (a) revision of the AF application form and automated scoring system (AF Computerized Application Processing System - AFCAPS), (b) a workload analysis to be conducted in mid- to late-January for first-level supervisors in the AF field maintenance workforce, and (c) analyses to support ATS workforce planning. (D. Broach, CAMI)

ATS Model Work Environment: Drs. Carla Hackworth/CAMI and Dana Broach/CAMI presented an overview of ATS demographics and organizational assessments to the ATS Model Work Environment Coordinators' annual conference in New Orleans on November 27, 2001. The overview included examples of objective and subjective measures that might be used in assessing an organization. In addition, they presented an example of how measures such as perceptions of how performance is managed at the facility level (subjective measure) and the employee-to-supervisor ratio (objective measure) could be used to explain organizational outcomes (such as safety-based) in a paper to be presented by Dr. Broach at the Aerospace Medical Association's annual scientific meeting in May, 2002. At the request of Shirley Jones (ATS-9), Dr. Broach participated in several break-out groups with the ATS MWE coordinators, focusing on measurement-related issues. (D. Broach, C. Hackworth, CAMI)

Multi-function Displays (MFD) / Controls: Contractors from Monterey Technologies, Inc., met with the COTR (Dr. Beringer) at CAMI to discuss procedures and prepare for the usability pretest session in Wichita, KS at the ACO. The group, including two contractors and two CAMI personnel (D. Beringer and J. Ball), conducted and videotaped the usability testing sessions (2) at the ACO. The data will be used to modify the pocket guide for MFD certification to be used in the validation trials in January, 2002. (D. Beringer, CAMI)

*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)



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

January 14-18, 2002 – SAE Committee G-10, Aerospace Behavioral Engineering Technology and Subcommittees, Radisson Suite Hotel Oceanfront, Melbourne, FL
<http://shop.sae.org/technicalcommittees/regforms/g-10.shtml>

February 14-16, 2002 - Helicopter Association International Heli-Expo, Orange County Convention Center, Orlando, FL <http://www.heliexpo.com/preliminary.htm>

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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