



ATOP-R&D

Human Factors Newsletter # 05-11

June 11, 2005 – June 24, 2005

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Technical Information: The Civil Aerospace Medical Institute's Biodynamics Research Team evaluates the impact protection potential of new materials and structures for aircraft, and provides equipment and crash expertise for protection and survival research programs. This team performs specialized data collection and analysis functions necessary for aircraft impact safety research. Don't miss the [dynamic video](#) of the FAA Office of Aerospace Medicine Report "The Performance of Child Restraint Devices in Transport Airplane Passenger Seats". Also a must see is "[Child Restraints and Airplane Passenger Seats](#)". For more information, point to: <http://www.cami.jccbi.gov/AAM-600/Biodynamics/600Biody.html> .

Point of Contact: T. McCloy, ATO-P R&D

New Website: The Human Factors Research and Engineering Division recently launched a new aviation maintenance human factors website. The URL is: <http://www.hf.faa.gov/hfmaint/Default.aspx?tabid=275>. The left margin contains three main links: (1) Maintenance Tools and Aids, (2) Projects, and (3) Publications. There is a wealth of information that should be useful to most people. For example, under the Publications link, the Other Maintenance Reports link (<http://www.hf.faa.gov/hfmaint/Default.aspx?tabid=255>) will allow you to search ASRS maintenance incidents, NTSB maintenance accidents, and NTSB recommendation letters. *This research activity supports the Administrator's Flight Plan Goal for Organizational Excellence, Objectives 2 & 3: Control costs while delivering quality customer service; Make decisions based on reliable data to improve our overall performance and customer satisfaction.* (W. Krebs, ATO-P R&D)

FAA Human Factors Job Announcement: The Federal Aviation Administration is seeking applicants for a Scientific and Technical Advisor for Human Factors position at FAA Washington Headquarters Region, Air Traffic Organization, Operations Planning Service Unit, ATO-P. This position is located in the Director of Research & Development, Human Factors Research and Engineering office. The closing date for this announcement is July 1, 2005. Salary range is \$62,745 to \$118,648. The incumbent provides advice, expertise, and technical support on the planning, design, development, and conduct of a variety of human factors projects in support of the research, acquisition, and operation of air traffic control systems. The incumbent will be required to identify and assess existing or potential issues, risks, and solutions involving the human factors engineering aspects of air traffic control, plan evaluations and conduct analyses, collect and evaluate data, identify trends, and identify current or potential risks. The incumbent will also be required to identify alternative solutions and coordinate proposals with supervisors, managers, contractors, operating officials, and acquisition teams to resolve or mitigate human performance issues. A copy of the job announcement can be found at the FAA Jobs Database: http://jobs.faa.gov/announcement_detail.asp?vac_id=78812 . *This activity supports the Administrator's Flight Plan Goal for Increased Safety, Objective 7: Enhance the safety of FAA's air traffic systems. This activity also supports the Administrator's Flight Plan Goal for Organizational Excellence, Objective 1: Make the organization more effective with stronger leadership, increased commitment of individual workers to fulfill organization-wide goals, and a better prepared, better trained, safer, diverse workforce* (G. Hewitt, ATO-P R&D)

Weather Study: Roni Prinzo traveled to the Seattle Automated Flight Service Station (AFSS) for the purpose of delivering blank digital audio tapes (DATs) and obtaining dubbed copies of facility tapes for analysis. The purpose of the tape analysis will be to document the types of weather information that is requested by pilots and how they might use that information. In particular, preflight standard, abbreviated, and outlook weather briefings representing a good, typical, and bad weather day occurring around the area serviced by a representative AFSS in the Midwest Mountain Region, Southwest Region, and New England Region will be reviewed. To achieve this goal, DATs of communications were requested and obtained from the Seattle AFSS. Similar requests were made to representatives at the Bridgeport and Fort Worth AFSSs. While listening to the tapes, pilot Subject Matter Experts will use a coding form to record the type of weather information requested by pilots. In this manner, the frequency with which that type of information is requested can be noted as well as possible outcomes such as "Okay, I'll get an update in a couple hours" posted in the comments area. Once all the tapes have been coded, a better understanding can be obtained of the types of information pilots request when weather conditions range from excellent to potentially dangerous. The results will be incorporated into a draft report of a weather information manual being prepared by William Knecht as the request of Flight Standards. *This activity supports the Administrator's Flight Plan Goal for Increased Safety, Objectives 1 and 2: Reduce the commercial fatal accident rate; reduce the number of fatal accidents in general aviation* (V. Prinzo, CAMI)

eJANUS: NATCA agreed with ATO-S management to test eJANUS, the web-based version of JANUS, at the Indianapolis Center in June, 2005. The first live test of eJANUS began Tuesday, June, 14th. The JANUS technique is designed to assist personnel in identifying causal factors, including relevant human factors, leading to operational errors. Facility personnel will also be providing the JANUS Workgroup with feedback, and in July 2005 the Workgroup will meet to

consider whether any adjustments to the technique are needed based on the Indianapolis field test. We anticipate a successful test and continued participation by facility personnel in the months to come. *This research activity supports the Administrator's Flight Plan Goal for Increased Safety, Objectives 4 and 7: Reduce the risk of runway incursions; Enhance the safety of FAA's air traffic systems;* (J. Pounds, CAMI)

UAV: Dennis Beringer and Kevin Williams attended the Second Annual Workshop on Human Factors of Unmanned Aircraft (UAV), held in Mesa, AZ on May 25-26. The workshop brings together people from industry, government, academia, and the military to focus on human factors issues related to unmanned aircraft. Discussions included the important task of integrating these aircraft into the National Airspace System, while maintaining a level of safety that is equivalent to that of manned aircraft. Human factors should play a major role in the successful integration of these aircraft. *This research activity supports the Administrator's Flight Plan Goal for Increased Safety, Objective 2: Reduce the number of fatal accidents in general aviation.* (K. Williams, CAMI)

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

Paul Krois
FAA (ATO-P R&D Human Factors)



June 26-30, 2005 - 30th Inter-American Congress of Psychology, Buenos Aires, Argentina
<http://www.sip2005.org/ar>

June 27-30, 2005 – TRB 3rd International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, Rockport, Maine

June 28-30, 2005 – AAMI Human Factors, Ergonomics, and Patient Safety for Medical Devices, Capital Hilton, Washington, DC <http://www.aami.org/meetings/hf/>

June 28-30, 2005 – Airport 2025 Conference, Washington, DC www.sskies.org

July 3-8, 2005 – 9th European Congress of Psychology Conference, Granada, Spain
www.ecp2005.com

July 6-8, 2005 – 3rd Annual Workshop on Cognitive Systems, Santa Fe, NM
http://www.sandia.gov/cog.systems/cognitive_workshop/index.htm

July 19-21, 2005 – Aviation Safety Management Systems Symposium, Ritz-Carlton Tyson's Corner, McLean, VA <http://www.mitrecaasd.org/safety/>

July 22-28, 2005 – HCI International 2005, 11th International Conference on Human-Computer Interaction, Caesars Palace, Las Vegas, NV hci2005@ecn.purdue.edu

July 25-31, 2005 – EAA AirVenture Oshkosh 2005, Oshkosh, WI <http://www.airventure.org>

August 15-18, 2005 - 43rd AIAA Aerospace Sciences Meeting and Exhibit, Hyatt Regency San Francisco at Embarcadero Center, San Francisco, CA <http://www.aiaa.org/>

August 18-21, 2005 - 113th Convention of the American Psychological Association, Wash, DC <http://www.apa.org/convention>

August 22-26, 2005 – SAE G-10 (Behavioral Engineering Technology Committee Meeting, Washington, DC http://forums.sae.org/access/dispatch.cgi/TEAG10_pf

September 11-15, 2005 – *International Conference on Fatigue Management in Transportation Operations, Seattle, WA* <http://scitech.dot.gov/research/human/>

September 12-16, 2005 – Interact 2005, Tenth IFIP TC13 International Conference on Human-Computer Interaction, Rome, Italy <http://www.interact2005.org/>

September 13-14, 2005 – *Third ICAO-IATA LOSA TEM Conference, Kuala Lumpur, Malaysia* DMaurino@icao.int

September 15-18, 2005 - Conjoint Meeting of the Australasian Society of Aerospace Medicine and the Asia Pacific Federation of Aerospace Medical Association, Gold Coast, Queensland, Australia. www.asam.org.au.

September 19-23, 2005 – ANA 2005 Aviation Conference and Exhibition, Connecticut Convention Center, Hartford. CN <http://www.aerospace-na.com/ace2005.asp>

September 20-21, 2005 - R,E&D Advisory Committee Meeting (joint meeting with NASA's Aerospace Research Advisory Committee), Bessie Coleman Auditorium, FAA Headquarters, Wash., DC Gloria.dunderman@faa.gov

September 20-22, 2005 – Second Safety Across High-Consequence Industries Conference, Saint Louis University, St. Louis, MO http://parks.slu.edu/msasm_conference/index.html.

September 20-24, 2005 - 1st Congress of the International Society for Cultural and Activity Research (ISCAR), Seville, Spain iscar2005@iscar.org

September 21-23, 2005 - Cargo Facts 2005- 11th Annual Aircraft Symposium, Sheraton Hotel & Towers, Seattle, Washington ashoemaker@cargofacts.com

September 25-28, 2005 - 11th Ka and Broadband Communications Conference and 23rd AIAA International Communications Satellite Systems Conference 2005 (organized by IIC), Aurelia Convention Center, Rome, Italy <http://www.aiaa.org/>

September 26-28, 2005 - AIAA 5th Aviation, Technology, Integration, and Operations Forum (ATIO), Hyatt Regency Crystal City, Arlington, VA <http://www.aiaa.org/>

September 26-28, 2005 - AIAA 2nd Intelligent Systems Conference (IS), Hyatt Regency Crystal City, Arlington, VA <http://www.aiaa.org/>

September 26-30, 2005 – Human Factors and Ergonomics Society 49th Annual Meeting, Royal Pacific Resort at Universal Orlando, Orlando, FL <http://hfes.org/meetings/menu.html>

October 3-6, 2005 – SAE 2005 AeroTech Congress and Exhibition, Gaylord Texan Resort and Convention Center, Dallas/Fort Worth Airport Area, Texas
<http://www.sae.org/events/conferences/aerospace/>

October 6-9, 2005 – Aviation North Expo Conference, Fairbanks Princess Riverside Lodge, Fairbanks, AK www.AviationNorth.org

October 24-25, 2005 – National Academies Institute of Medicine Annual Meeting, National Academy of Sciences, Washington, DC <http://wwwsearch.nationalacademies.org/>

October 24-26, 2005 – 43rd SAFE Symposium, Grand America Hotel, Salt Lake City, UT
<http://www.safeassociation.org/symposium.htm>

October 26-28, 2005 – Air Cargo Americas, Radisson Centre, Miami, FL
www.aircargoamericas.com

October 30-November 7, 2005 – ATCA 50th Annual Conference and Exposition, Dallas, TX
http://www.atca.org/event_items.asp.

October 30—November 3, 2005 – 24th Digital Avionics Systems Conference, Hyatt Regency Crystal City, Wash., DC <http://www.dasconline.org>

November, 2005 – DoD TAG (Human Factors Engineering Technical Advisory Group) Meeting, Baltimore, MD <http://hfetag.dtic.mil/meetschl.html>

November 3-5, 2005 - AOPA Expo, Tampa, Florida www.aopa.org

November 6-9, 2005 - ACI World / Pacific Conference and Exhibition, Auckland, New Zealand.
www.auckland-airport.co.nz

November 7-9, 2005 – DoD TAG, Baltimore, MD <http://hfetag.dtic.mil/meetschl.html>

November 7-10, 2005 – Flight Safety Foundation 58th Annual International Air Safety Seminar, Moscow, Russia http://www.flightsafety.org/iass05_cfp.html

November 7-10, 2005 - Ergonomics and Human Factors: Applications in Occupational Safety and Health, Harvard School of Public Health, Cambridge, MA
<http://www.hsph.harvard.edu/ccpe/programs/EHF.shtml>

November 8-10, 2005 – Aerospace Testing Expo, North America: Scientific Conference and Technology Forum, Long Beach Convention Center, Long Beach, CA
<http://www.aerospacetesting-expo.com/northamerica/conf+forum.html>

November 8-10, 2005 – Maintenance, Repair & Overhaul Exhibition Asia, Suntec Convention Center, Singapore <http://www.aviationnow.com/conferences/masmain.htm>

November 10, 2005 - 34th Annual Meeting of the Society for Computers in Psychology, Toronto, Ontario, Canada <http://www.scip.ws>

November 10 - 13, 2005 - 46th Psychonomic Society Annual Meeting, Toronto, Ontario, Canada <http://www.psychonomic.org/meet.htm>

November 15-17, 2005 - National Business Aviation Association's 58th Annual Meeting & Convention, New Orleans, LA www.nbaa.org

November 16-17, 2005 – IEE Human Factors Engineering Professional Network/MoD Human Factors Integration Defense Technology Center “People and Systems Symposium: Who Are We Designing For?”, Grange City Hotel London, UK <http://conferences.iee.org/pas2005>

January 9-12, 2006 - 44th AIAA Aerospace Sciences Meeting and Exhibit, Reno Hilton, Reno, NV <http://www.aiaa.org/>

January 22-26, 2006 – TRB 85th Annual Meeting, Washington, DC <http://trb.org/calendar/>

March 13-15, 2006 – Flight Safety Foundation 18th Annual European Aviation Safety Seminar, Athens, Greece <http://www.flightsafety.org/seminars.html#eass>

March 20-23, 2006 – 16th Annual AAMI/FDA International Conference on Medical Device Standards and Regulation, Hyatt Regency, Reston, VA
<http://www.aami.org/meetings/isc/index.html>

March 22 - 25, 2006 - Society for Behavioral Medicine Annual Meeting and Scientific Sessions, San Francisco, CA www.sbm.org/annualmeeting/index.html

March 23-25, 2006 - 17th Annual International Women in Aviation Conference, Opryland Hotel Nashville, TN <http://www.wai.org/>

April 4-10, 2006 – Sun ‘n Fun, Lakeland, FL <http://www.sun-n-fun.org/content/>

April 25-27, 2006 – Maintenance, Repair & Overhaul (MRO) Conference & Exhibition, Phoenix Civic Plaza, Phoenix, AZ <http://www.aviationnow.com/conferences/mromain.htm>

May 1-4, 2006 - 47th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference; 14th AIAA/ASME/AHS Adaptive Structures Conference; 7th AIAA Gossamer Spacecraft Forum; 2nd AIAA Multidisciplinary Design Optimization Specialist Conference; 1st AIAA Non-Deterministic Approaches Conference, Hyatt Regency Newport, Newport, RI <http://www.aiaa.org/>

May 9-11, 2006 – Flight Safety Foundation 51st Annual Corporate Aviation Safety Seminar, Phoenix, AZ <http://www.flightsafety.org/seminars.html#eass>

May 14-18, 2006 - 77th Annual Scientific Meeting of the Aerospace Medical Association, Caribe Royale Hotel, Orlando, FL <http://www.asma.org/>

May 25-28, 2006 – American Psychological Society 18th Annual Convention, New York Marriott Marquis, New York City, NY <http://www.psychologicalscience.org/convention/>

June 11-14, 2006 – The American Society of Safety Engineers Safety 2006 Conference, Washington State Convention and Trade Center, Seattle, WA <http://www.asse.org/2006pdcallforpapers.pdf>

June 24-26, 2006 – AAMI Conference & Exposition, Wash, DC <http://www.aami.org/proposals/index.html>

July, 2006 - 26th International Congress of Applied Psychology, Athens, Greece dgeorgas@dp.uoa.gr , http://www.erasmus.gr/dynamic/conventions.asp?conv_id=21r/dynamic/conventions.asp?conv_id=21

July 24-30, 2006 – EAA AirVenture, Oshkosh, WI <http://www.airventure.org/>

August 10-13, 2006 – American Psychological Association Annual Meeting, New Orleans, LA <http://www.apa.org/convention05/future.html>

September 10-14, 2006 - 54th International Congress of Aviation and Space Medicine, Bangalore, India. A preliminary registration form may be found at <http://www.isam-india.org/conference44/newreg.php>.

October 23-25, 2006 – 44th Annual SAFE Symposium, Reno Hilton Hotel, Reno, NV <http://www.safeassociation.org/symposium.htm>

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



Comments or questions regarding this newsletter?
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