

## **Publication Citations**

### **Analysis of Cockpit Management System in Multiple Carrier Environments FAA Award Number: 94-G-034**

#### **Book**

Holt, R. W. *Scientific Information Systems* (2001). Ashgate Publishing, Aldershot, UK.

#### **Book Chapters (submitted/published)**

Boehm-Davis, D. A., Holt, R. W., & Seamster, T. L. (2001). Airline resource management programs. In E. Salas, C. Bowers, & E. Edens (Eds.), *Improving teamwork in organizations: Applications of resource management training*. Mahwah, NJ: Lawrence Erlbaum Associates.

Holt, R.W., Boehm-Davis, D. A., & Beaubien, J. M. (2001). Evaluating resource management training. In E. Salas, C. Bowers, & E. Edens (Eds.), *Improving teamwork in organizations: Applications of resource management training*. Mahwah, NJ: Lawrence Erlbaum Associates.

#### **Journal Articles (submitted/published)**

Holt, R. W., Hansberger, J. T., & Boehm-Davis, D. A. *Improving Rater Calibration in Aviation: A Case Study*. To appear in: International Journal of Aviation Psychology.

#### **Technical Reports/Papers**

Beaubien, J. M., Holt, R. W., & Hamman, W. R. (1999). *An evaluation of the rating process used by instructor/evaluators in a line-oriented simulator: Preliminary evidence of internal structure validity*. (Tech. Rep. No. 98-002). Fairfax, VA: George Mason University, FAA Grant Team.

Beaubien, J. M., & Sherman, L. R. (1999). *The application of hierarchical linear modeling techniques to aviation research: The case for guarded optimism*. (Tech. Rep. No. 99-001). Fairfax, VA: George Mason University, FAA Grant Team.

Cortina, J. M., Beaubien, J. M., & Holt, R. W. (1998). *The use of relational databases in large scale, multi-site research projects: Mitigating the impact of data errors*. (Tech. Rep. No. 98-001). Fairfax, VA: George Mason University, FAA Grant Team.

## Conference Papers

Beaubien, J.M., Holt, R .W., & Hamman, W.R. (1999). Evaluating LOE quality from performance database information. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Beaubien, J. M., Hamman, W. R., Holt, R. W., & Boehm-Davis, D. A. (2001). The application of hierachal linear modeling (HLM) techniques to commercial aviation research. In *Proceedings of the Eleventh International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Beaubien, J. M., Hamman, W. R., Holt, R. W., & Boehm-Davis, D. A. (2001). The effect of evaluation purpose on crew performance ratings across comparable training events. In *Proceedings of the Eleventh International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Boehm-Davis, D. A., Holt, R. W., Hansberger, J. T., & Seamster, T. L. (1999). Overview of lessons learned developing ACRM for a regional carrier. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Boehm-Davis, D. A., Holt, R. W., Hansberger, J., Diez, M., and Schoppek, W. (2000). Modeling aviation crew interactions with automation using cognitive task analysis (Abstract). *Proceedings of the Human Performance, Situation Awareness and Automation: User-Centered Design for the New Millenium Conference*.

Boehm-Davis, D. A., Schoppek, W., Diez, M., Hansberger, J. T., Holt, R. W., & Ikomi, P. A. (2000). Cognitive modeling of airline crew automation errors. In *Proceedings of the IEA 2000/HFES 2000 congress*.

Boehm-Davis, D. A., Holt, R.W., & Hansberger, J.T. (1997). Pilot Abilities and Performance *Proceedings of the International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Diez, M., Boehm-Davis, D. A., Holt, R. W., Pinney, M. E., Hansberger, J. T., & Schoppek, W. (2001). Tracking pilots interactions with flight management systems through eye movements. In *Proceedings of the Eleventh International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Hamman, W. R., Beaubien, J. M., & Holt, R. W. (1999). Evaluation instructor/evaluator inter rater reliability from performance database information. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Hansberger, J. T. & Holt, R. W. (1999). Comparing evaluator expectations and policy capturing results. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Hansberger, J.T., Holt, R.W., Boehm-Davis, D.A. (1998). Proceduralizing aspects of teamwork in an aviation domain. In *Proceedings of the 1998 Virginia Academy of Science*.

Hansberger, J. T., Holt, R. W., & Boehm-Davis, D. A. (1999). Instructor/evaluator evaluations of ACRM effectiveness. . In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Holt, R. W., Boehm-Davis, D. A., & Hansberger, J. T. (1999). Evaluating effectiveness of ACRM using LOE and line-check data. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Holt, R.W. (1997). Data Warehousing for AQP Databases. *Proceedings of the International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Holt, R.W., Johnson, P.J., & Goldsmith, T.E. (1997). Application of Psychometrics to the Calibration of Air Carrier Evaluators *Proceedings of the Human Factors and Ergonomics Society (HFES) 41<sup>st</sup> Annual Meeting Proceedings*.

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Ikomi, P. A., Holt, R. W., Boehm-Davis, D. A., & Incalcaterra, K. A. (1999). Jump seat observations of advanced crew resource management (ACRM) effectiveness. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Incalcaterra, K. A. & Holt, R. W. (1999). Pilot Evaluations of ACRM programs. In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Schoppek, W., Boehm-Davis, D. A., Holt, R.W., Diez, M., and Hansberger, J. (2000). A cognitive modeling approach to the abatement of automation errors (Abstract).

*Proceedings of the Human Performance, Situation Awareness and Automation: User-Centered Design for the New Millennium Conference.*

Schoppek, W. (2000). Learning and performance of sequential action under different workload conditions: an ACT-R model. In *Proceedings of the Third International Conference on Cognitive Modeling*, Fairfax, VA: George Mason University ARCH Lab.

Seamster, T. L., Boehm-Davis, D. A., Holt, R. W. Edens, E. S. (1999). Design of advanced crew resource management (ACRM). . In *Proceedings of the Tenth International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

Williams, D.M., Holt, R.W., & Boehm-Davis, D.A. (1997). Training for Inter-Rater Reliability: Baselines and Benchmarks. *Proceedings of the International Symposium on Aviation Psychology*. Columbus OH: OSU Dept. of Aerospace Engineering, Applied Mechanics and Aviation.

## Conference Posters

Hansberger, J.T., Holt, R.W., & Boehm-Davis, D. A. (1997). Is Less Experience BETTER among Pilot Evaluators? Poster at Human Factors & Ergonomics Conference. Albuquerque, NM.

Holt, R.W., Boehm-Davis, D.A., Meiman, E.P., Seamster, T.L., and Edens, E.S. (1996) Assessment of Aviation Crew Performance. Poster presented at the American Psychological Association's 104th Annual Convention in Toronto, Canada.

Incalcaterra, Kara (1998). Promoting accurate evaluation of pilot performance: Inter-rater reliability training. Poster presented at the 2<sup>nd</sup> Annual George Mason-George Washington-University of Maryland Graduate Students' Conference, College Park, MD.

Schoppek, W. (2000). Memory for continually changing information: A task analysis and model of the keeping track task. Cognitive Science annual meeting.

## Workshops

Holt, R.W. & Boehm-Davis, D.A., Hamman, W.R., Williams, D.M., Hansberger, J.T., Seamster, T., Schultz, K. Improving crew assessment. Workshop funded by AAR-100 and sponsored by AFS 230 and held at George Mason University on December 9-10, 1996.

## Airline Reference Documents

Boehm-Davis, D. A., Holt, R. W., Ikomi, P., Hansberger, J. T., Beaubien, J., Incalcaterra, K., Seamster, T. L., Hamman, W., & Schultz, K. (1998).CRM procedures and crew performance: Executive summary of advanced crew resource management (ACRM). Washington, D.C.: FAA AAR-100.

Seamster, T.L., Boehm-Davis, D. A., Holt, R. W., & Schultz, K. (1998).Developing Advance Crew Resource Management (ACRM) Training: A training Manual . Washington, D.C.: FAA AAR-100.