



CYNTHIA L. BLACKWELL

PROGRAM DIRECTOR

NATICK SOLDIER RESEARCH, DEVELOPMENT AND ENGINEERING CENTER

Ms. Blackwell began her 21 year career in 1987 as a member of Natick's Manpower and Personnel Integration (MANPRINT) Technical Coordination Office. During her early years, she worked as Human Factors expert and IPT member for the Integrated Protection Directorate working on a variety of programs including Self Contained Toxicological Environment Protective Outfit (STEPO), Multi-purpose Overboot, headgear and eyewear programs. She conducted research and evaluations for same. She also worked as Human Factors lead for various tent and shelter programs including the Soldier Integrated Command Post System (SICPS) – Tent, SICPS – Rigid Walled Shelter and Chemically and Biologically Protective Shelters (CBPS). She served as the lead for MANPRINT/ Human Factors for the Soldier Integrated Protective Ensemble (SIPE) program and follow-on 21st Century Land Warrior/Generation II Soldier Advanced Technology Demonstration program. Ms. Blackwell also served as Natick human factors lead for the early Land Warrior program.

Ms. Blackwell was the Human Factors lead for the Military Operations in Urban Terrain Advanced Concept Technology Demonstration program. She then executed a three phased, multi-million dollar research program on development of a viable automatic speech recognition system commonly termed System Voice Control (SVC) for the dismounted infantryman as part of the Warrior System Integration Team. This work fed the development of the Future Force Warrior SVC system. Ms. Blackwell served as the leader for Human Factors as well as User Needs Analysis and Systems Assessment for the Scorpion program.

Ms. Blackwell served on the initial planning team for the Objective Force Warrior Advanced Technology Demonstration (ATD) program. She then led the Human Performance and Training Technology Functional Areas and was MANPRINT IPT lead for Future Force Warrior (FFW) Advanced Technology Demonstration program. She led a multidisciplinary team in establishing technology thrusts and requirements for the MANPRINT, human performance and training technology areas. Ms. Blackwell served in that capacity for several years and then was promoted Deputy Project Leader for the FFW ATD until the end of the program. Ms. Blackwell most recently served as Chief of Business Management for the Technology, Systems and Program Integration Directorate. She currently serves the Program Director of the Joint Service Anthropometric Survey Program Office out of which the Army Anthropometric Survey II project and US Marine Corps Anthropometric Survey projects are executed.

EDUCATION:

- BS, Biomedical Engineering, Wright State University, 1986
- MS, Ergonomics, Loughborough University of Technology, Loughborough Leicestershire, United Kingdom, 1992
- Diploma, Biblical Studies, Bethel Bible Institute, 2007

MAJOR PUBLICATIONS:

- Blackwell, C.L. (1993) "The Combat Soldier System Integration Toolset - Development of a System Level Human Factors Methodology", Badminton Press
- Blackwell, C.L. & Redden, E.S. (2000) "Methodologies for Determining the Impact of Situation Awareness on Individual and Small Unit Effectiveness of Dismounted Infantryman."
- Redden, E.S. & Blackwell, C.L. (2001a) "Measurement of Situation Awareness and Automation", Conference on Situation Awareness, Savannah, Georgia
- Blackwell, C.L. & Redden, E.S. (2000). "Toward a Methodology for Evaluating the Impact of Situation Awareness on Unit Effectiveness of Dismounted Infantryman," NATO RTO Mtg

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Proceedings 57, Human Factor in Medicine Panel Symposium, Oslo, Norway.

- Redden E.S. & Blackwell, C.L. (2001b) Situational Awareness and Communication Experiment for Military Operations in Urban Terrain; Experiment I. (Tech Report 2583), APG, MD.
- Stallman, L., C.L. Blackwell, "Embedded Training Concept", International Journal of Industrial Engineering, 8th Annual International Conference on Industrial Engineering Theory, Applications and Practice, Human System Interface Concept Development, 2003
- Colburn, K.D., C.L. Blackwell, R.D. Sullivan, G.E. Riccio, O. Deroo, "Methodology for Developing Speech and Noise Databases for Soldier-Borne Automatic Speech Recognition", International Journal of Industrial Engineering, 8th Annual International Conference on Industrial Engineering Theory, Applications and Practice, Human System Interface Concept Development, 2003

AWARDS AND HONORS:

- 2001 US Army Soldier Systems Center/Research, Development and Acquisition Enterprise Team Technical Director's Gold Award
- 2000 Department of the Army Superior Civilian Service Medal
- 1999 Leadership Commendation – Military Operations in Urban Terrain Advanced Concept Technology Demonstration Program
- 1996 Department of the Army MANPRINT Practitioner of the Year - Material Development for Innovation in the Application of MANPRINT to Soldier System development
- 1993 US Army Achievement Medal