

# Information Sciences Department Newsletter

Volume 3, Issue 4, October - December 2008

Sponsor: Dan Boger  
Editor: Mark Nissen

## Publications

### *Books*

None this quarter

### *Articles in Refereed Journals*

Denning, P. J., C. Gunderson, F. **Hayes-Roth**. (2008). "Evolutionary System Development." *Communications of the ACM* **51**(12): 29-31.

Kevin Desouza, Carsten Sørensen and **Nissen**, M.E., "Editorial – Managing Knowledge Transfer in Distributed Contexts," Introduction to Special Issue of *Information Systems Journal* 18:6 (2008), pp. 559-566.

### *Chapters in Books*

None this quarter

### *Articles in Conference Proceedings*

Jones, K.D., Dobrokhodov, V., Kaminer, I., Lee, D.J., **Bourakov**, E., and **Clement**, M.R., "Development, System Integration and Flight Testing of a High-Resolution Imaging System for Small UAS," 47th AIAA Aerospace Sciences Meeting; 5-8 Jan 2009, Orlando, Florida.

### *Articles in Non-Refereed Publications*

None this quarter

### *Other Publications*

**Irvine**, N. J. and **Roeting**, W. H. and **Jensen**, J. J., "Biometrics Collections in Empire Challenge 08," 01 October 2008

**Irvine**, N. J. and **Roeting**, W. H. and **Jensen**, J. J., "JBAIIC Empire Challenge 08 Analysis Report," 22 October 2008

**Jensen**, J.J., **Gallup**, S.P. and **Wood**, B.P., "Joint Multi-Mission Electro-Optic System (JMMES) Joint Capability Technology Demonstration (JCTD) Initial Assessment Plan (IAP)." NAVAIR PMA 264, (September 2008).

**MacKinnon**, D.J., **Hutchins**, S.G., **Schacher**, G.E. and Freeman, J., "Maritime Domain Awareness FY08 Assessment Report," Naval Postgraduate School, *Technical Report*, NPS-IS-08-004, (2008).

**Roeting**, W. H. and Catanzaro, J. M., "Empire Challenge 2008 Summary Report - TPED Management Findings and Lessons Learned," 17 Oct 2008.

## **Presentations** (not included in conference proceedings above)

**MacKinnon**, D.J., "How Individual Skill Growth and Decay Affect the Performance of Project Organizations: A PhD level Experience at Stanford University," invited presentation at Stanford University to the Research Seminar course at the request of Professor Ray Levitt, 06 November 2008.

**MacKinnon**, D.J., "MDA Research and the Way Ahead: A DISE (Distributed Information Systems Experimentation) Group Perspective," invited presentation to RADM Nimmich, Commander, Joint Interagency Task Force (South) for the Department of Homeland Security at the Naval Postgraduate School, Monterey, CA, 28 August 2008.

**MacKinnon**, D.J., "MDA Research and the Way Ahead: A DISE (Distributed Information Systems Experimentation) Group Perspective," invited presentation to RADM Blore, Assistant Commandant for Acquisition (CG-9), for the Department of Homeland Security at the Naval Postgraduate School, Monterey, CA, 27 August 2008.

**MacKinnon**, D.J., "Technical Risk Reduction Limited Objective Experiment (TRRLOE) Findings," invited presentation to MDA Spiral-1 and 2, Planning Conference at Booz, Allen, and Hamilton, San Diego, CA, 10 June 2008.

**Maule**, R., **Gallup**, S., and **Jensen**, J. "Knowledge Engineering Experimentation Management System for Collaboration." Paper presented at the International Joint Conference on Computer, Information, Systems Sciences and Engineering (CISSE 08), 5-13 December 2008, Bridgeport, CT.

**Maule**, R., and **Gallup**, S. "Enterprise 2.0 Collaboration for Collective Knowledge and Intelligence Applications." Paper presented at the International Conference on Systems, Computing Sciences and Software Engineering (SCSS 08), 5-13 December 2008, Bridgeport, CT.

**Wood**, B.P. "Joint Multi-Mission Electro-Optic System (JMMES) Operational Test Agent" brief to NAVAIR/PMA-264, NAS Patuxent River, MD, 09 December 2008.

**Wood**, B.P., **Gallup**, S.P. and **Schacher**, G., "Joint Multi-Mission Electro-Optic System (JMMES) Joint Capability Technology Demonstration (JCTD) Master Demonstration Execution Document (MDED)." (31 December 2008).

## **Grants and Funding**

**Bates**, E.A., "Technical Expertise to the office of the Chief of Naval Operations, Integration, Interoperability, and Transformation (OPNAV N6F4)," COMSPAWARSCOM. \$260,000.

**Gallup**, S.P. and **MacKinnon**, D.J., "Defense Common Ground System (DCGS)-Tasking, Processing, Exploitation and Dissemination (TPED)," US Joint Forces Command (USJFCOM)/Joint Transformation Command-Intelligence. \$100,000.

**Gallup**, S.P., "Support to NAVNETWARCOM Innovation and Experimentation Program, Trident Warrior and Limited Objective Experiments (FY 09)," Naval Network Warfare Command (NAVNETWARCOM). \$1,060,000.

**Gallup**, S.P., "FORCEnet Experimentation and Analysis; Innovation and Experimentation Program, Trident Warrior," COMSPAWARSCOM. \$880,000.

**Gallup**, S.P., **Roeting**, W.R., **Wood**, B.P., "U.S. Joint Forces Command (J2) Joint Battlespace Awareness ISR Integration Capability (JBALIC) Research, Experimentation, Analysis and Reporting," US Joint Forces Command (USJFCOM)/Joint Transformation Command-Intelligence. \$1,800,000.

**Gallup**, S.P., **Wood**, B.P., "Joint Multi-Mission Electro-Optic System (JMMES) Operational Test Agent (OTA)," NAVAIR, PMA264D. \$800,000.

Rick **Hayes-Roth**, received \$75K to continue to support the Maritime Information Exchange Model and its transition to the NIEM. This is the first of several expected installments. The work also supports the development of a MIEM Document Editor being implemented by MOVES personnel.

**Hutchins**, S. G. "NPS Testbed for Model of Team Collaboration." Office of Naval Research. \$100,000.

**Kemple**, W. G., **Hutchins**, S. G. and **Pfeiffer**, K. P. "Model-Based Experimentation for Adaptive Architectures for Command and Control." Office of Naval Research. \$240,000.

**Kimmel**, R.A., **Osmundson**, J.O., "Joint Systems Baseline Assessment (JSBA) 2008/2009," Defense Intelligence Agency. \$440,000.

**Oros**, C. L., LtCol, USMC, **Buddenberg**, R., **Volpano**, D., Next generation Command & Control (NGC2), Marine Corps Warfighting Laboratory (MCWL), \$150,000.

## Awards

Rick **Hayes-Roth** was part of the Comprehensive Maritime Awareness (CMA) Joint Capability Technology Demonstration (JCTD), under the technical direction of Chris Dwyer at NRL, recognized by the Office of the Secretary of Defense as the best JCTD management team of 2008.

## Significant Professional Activities

**Gallup**, S.P., **Looney**, CDR J.L., **Wood**, B.P. attended Trident Warrior 09 Mid Planning Conference, NAS Norfolk, VA, 9-12 December 2008.

**Roeting**, W.H., **Altbaum**, D.T., **Bordetsky**, A., **Clement**, M., **Irvine**, N.J., **Gallup**, S.P., **Jensen**, J.J., **MacKinnon**, D.J., **Prichard**, S.M., **Schulz**, R.H., **Utschig**, J.M., **Wood**, B.P., participated in Empire Challenge 08, China Lake, CA, 7 July-1 August 2008.

**Roeting**, W.H., **Altbaum**, D.T., **MacKinnon**, D.J., **Utschig**, J.M., **Wood**, B.P., participated in Empire Challenge 09 Initial Planning Conference, Newport News, VA, 07-10 October 2008.

**Roeting**, W. H., **Garza**, V.R., **Irvine**, N.J., **Utschig**, J.M. participated in Empire Challenge 09 Spiral One Event, Camp Roberts, CA, 8-12 December 2008.

**Roeting**, W.H., **MacKinnon**, D.J., **Wood**, B.P., participated in Empire Challenge 09 Site Survey, NAWS China Lake, CA, 16-18 December 2008.

**Schulz**, R.H. participated in EMIO 08-4, New York/New Jersey and Norfolk, VA, 5-12 September 2008. (part of Alex Bordetsky's group)

**Utschig**, J.M. hosted Empire Challenge 08 Architecture Working Group conference in support of Joint-Battlespace Awareness Intelligence, Surveillance, and Reconnaissance (ISR) Integration Capability (JBAIIC) and Tasking, Processing, Exploitation and Dissemination (TPED) Management programs, Naval Postgraduate School, Monterey, CA, 19-20 Aug 2008.

**Wood**, B.P., **Schacher**, G. attended Joint Multi-Mission Electro-Optic System (JMMES) testing, BAE Systems, Honolulu, HI, 28 July-1 August 2008.

**Wood**, B.P., **Schacher**, G. attended NASWE/SURFREM-SHAREM (Non-Acoustic ASW Experiment/Surface-Ship ASW Readiness Effectiveness Measuring) 09-1 Initial Planning Conference (IPC), Surface Warfare Development Group (SWDG), Little Creek, VA 20-21 August 2008.

**Wood**, B.P. attended NASWE/SURFREM-SHAREM (Non-Acoustic ASW Experiment/Surface-Ship ASW Readiness Effectiveness Measuring) 09-1 Mid Planning Conference (MPC), Southern California Offshore Range (SCORE) facility, NAS North Island, San Diego, CA, 28-29 October 2008.

**Wood**, B.P., **Kimmel**, R.A., attended Joint Multi-Mission Electro-Optic System (JMMES) Program Management Review, PMA-264D, NAVAIR, NAS Patuxent River, MD, 09 December 2008.

### **PhD Student Accomplishments**

**Koons**, J. L., "Cyber Warfare and Estonia," invited presentation, Seminar for NATO Defense Attachés on Prospects for Co-operation in Cyber Defense, The Estonian Embassy, Washington, D.C. (November 2008).

**Koons**, J.L., "Warrior-Scholar: Operational Deployments and Postgraduate Education Opportunities of the FA53 Officer," invited presentation, US Army Signal Symposium, US Army Signal Center, Fort Gordon, GA (December 2008).