

SSC-SD KNOWLEDGE MANAGEMENT AND DECISION SUPPORT PROJECTS BIBLIOGRAPHY

July 2003

Barnett, B. J., Perrin, B. M., & Walrath, L. D. (1993). Bias in Human Decision Making for Tactical Decision Making Under Stress. (Task 1) St. Louis, MO: McDonnell Douglas Corporation.

Barnett, B. J., Perrin, B. M., & Walrath, L. D. (1993). Techniques to Reduce Bias in Human Decision Making for Tactical Decision Making Under Stress. (Tasks 2 & 3) St. Louis, MO: McDonnell Douglas Corporation.

Decision-Making Evaluation Facility for Tactical Teams (DEFTT) Design Analysis Report. (1992). Technical Report, Naval Underwater Systems Center, New London, CT.

Frasier, B. D. (1992). Position Descriptions and Responsibilities in an AEGIS Combat Information Center.

Hair, D. C., Picksly, K., & Chow, S. (1991). Explanation-Based Decision Support in Real Time Simulations. Proceedings of the Eighth IEEE Conference for Artificial Intelligence Applications.

Hair, D. C., & Picksly, K., (1992). Development of Computer Support for Naturalistic Decision-Making. Technical Report 1558, Naval Command, Control and Ocean Surveillance Center, RDT&E Division.

Hair, D. C., & Picksly, K., (1992). Explanation-Based Reasoning in Decision Support Systems. Proceedings of the 9th Annual Conference on Command and Control Decision Aids, Monterey, CA

Hair, D. C., Picksly, K., & Chow, S. (1992). Explanation-Based Decision Support in Real-Time Situations. Proceedings of the 4th International Conference on Tools with Artificial Intelligence, pp. 22-25, Arlington, VA.

Hair, D. C., & Picksly, K. (1992). Explanation-Based Reasoning in Decision Support Systems. Proceedings of the 9th Annual Conference on Command and Control Decision Aids, Monterey, CA.

Hair, D. C., & Picksly, K. (1993). User Interface Issues in Real-Time Decision Support. Proceedings of the 10th Annual Conference on Command and Control Decision Aids. Washington, DC.

Hair, D. C., & Picksly, K. (1993). Development of the Situation Assessment by Explanation-Based Reasoning Tool. Proceedings of the 10th Annual Conference on Command and Control Decision Aids. Washington, DC.

Hair, D. C., & Picksly, K. (1993). Critiquing in Real Time Systems. Proceedings of the AAAI Workshop on Expert Critiquing Systems.

Hair, D. C., & Picksly, K. (1993). Building User Interfaces for Real-Time Decision Support Systems. Paper for AIAA Conference.

Hair, D. C. (1993). Design of a Real Time Interface for Decision Support. Naval Command, Control and Ocean Surveillance Center, RDT&E Division.

Hair, D. C., & Picksly, K. (1993). New Approaches for Real-Time Decision Support Systems. Paper for Technology 2003 (NASA) Conference.

Hutchins, S. G., & Duffy, L. T. (1992). Decision-Making Evaluation Facility for Tactical Teams. Proceedings of the 9th Annual Conference on Command and Control Decision Aids. Monterey, CA.

Hutchins, S. G., & Kowalski, J. T. (1993). Tactical Decision Making Under Stress: Preliminary Results and Lessons Learned. Proceedings of the 10th Annual Conference on Command and Control Decision Aids. Washington, DC.

Hutchins, S. G. (1994). Evaluation of a Decision Support System for Aiding Tactical Decision Making Under Stress. Presentation to the 1994 Symposium on Command and Control Research and Decision Aids, Monterey, CA.

Hutchins, S. G. (1995). Root Causes of Errors in Decision Making. Presentation to the Annual TapRoot Incident/Accident Investigator's Conference, June 1995. Orlando, FL.

Hutchins, S. G. (1995). A Decision Support System for Tactical Decision Making Under Stress. Presentation to the Joint C4I Seminar at the Naval Postgraduate School.

Hutchins, S. G. (1995). Principles for Intelligent Decision Making. Paper presented to Symposium on Human Interaction with Complex Systems.

Hutchins, S. G. (1996). Principles for Intelligent Decision Making. Chapter to be published in Human Interaction with Complex Systems, Kluwer Academic Publishing.

Hutchins, S. G. (1995). Decision Making Errors Demonstrated by Experienced Naval Officers in a Littoral Environment. Presented to the Second International Conference on Naturalistic Decision Making, Dayton, OH.

Hutchins, S. G., & Rummel, B. K. (1995). A Decision Support System for Tactical Decision Making Under Stress. Proceedings of the First International Conference on Command and Control Research and Technology. June 1995, Washington, D. C.

Hutchins, S. G., & Westra, D. P. (1995). Patterns of Errors Shown by Experienced Navy Combat Information Center Teams. Proceedings of the 39th Annual Meeting of the Human Factors and Ergonomics Society, October 1995, San Diego, CA.

Hutchins, S. G. (1996). Decision Making Errors Demonstrated by Experienced Naval Officers in a Littoral Environment. Chapter to be published in Advances in Naturalistic Decision Making: Research and Applications, Zsombok, C. E. & Klein, G. A. (Eds.) Hillsdale, NJ: Erlbaum.

Hutchins, S. G. (1996). Decision-Making Evaluation Facility for Tactical Teams. Naval Command, Control and Ocean Surveillance Center, RDT&E Division Technical Report, San Diego, CA.

Hutchins, S. G. (1996). Principles for Intelligent Decision Aiding. Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, Technical Report 1718, San Diego, CA.

Hutchins, S. G. (1996). Lessons Learned on Improving Decision Making Under High Stress. Presentation to the TapRoot Incident/Accident Investigation Conference, Nashville, TN, July 24-26, 1996.

Hutchins, S. G. & Hutchins, R. G. (1996). Decision Support for Enhancing Tactical Air Situation Awareness. In Proceedings of the First Annual Symposium on Situational Awareness in the Tactical Air Environment. Patuxent River, MD, June 4-5, 1996.

Hutchins, S. G., Morrison, J. G. & Kelly, R. T. (1996). Development of a Decision Support System Based on Analysis of Operational Decisions. Presentation to the Military Operations Research Society, Ft. Leavenworth, KS, June 18-20, 1996.

Hutchins, S. G., Morrison, J. G. & Kelly, R. T. (1996). Principles for Aiding Complex Military Decision Making. In Proceedings of the Second International Symposium on Command and Control Research and Technology. Monterey, CA, June 25-28, 1996.

Hutchins, S. G., Morrison, J. G. & Kelly, R. T. (1996). Decision Support for Tactical Decision Making Under Stress. In Proceedings of the Second International Symposium on Command and Control Research and Technology. Monterey, CA, June 25-28, 1996.

Hutchins, S. G., & Westra, D. P. (1996). Tactical Decision Making Under Stress: Baseline Results. Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, Technical Report, San Diego, CA.

Hutchins, S. G. (1997). Decision-making errors demonstrated by experienced naval officers in a littoral environment. In C. E. Zsombok & G. Klein (Eds.), Naturalistic decision making (pp. 207-215). Mahwah, NJ: Lawrence Erlbaum Associates.

Hutchins, S. G., & Sovereign, M. G. (in preparation). Decision Support for the Command-Level Naval Tactician. Naval War College Review, in preparation.

Kaempf, G. L., Wolf, S., Thordsen, J. L., & Klein, G. (1992). Decision Making in the Aegis Combat Information Center. Fairborn, OH: Klein Associates Inc. Technical Report for the Naval Command, Control and Ocean Surveillance Center, San Diego, CA.

Kaempf, G. L., Wolf, S., & Miller, T. E. (1993). Decision Making Requirements in the Aegis Combat Information Center. Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting. Santa Monica, CA: Human Factors and Ergonomics Society.

Kaempf, G. L., Wolf, S., & Miller, T. E. (1993). Decision Requirements for the Design of Human-Computer Interfaces. Proceedings of the 10th Annual Conference on Command and Control Decision Aids. Washington, DC.

Kelly, R. T., Hutchins, S. G., & Morrison, J. G. (1996). Decision Processes and Team Communications with a Decision Support System. In Proceedings of the Second International Symposium on Command and Control Research and Technology. Monterey, CA, June 25-28, 1996.

Kelly, R. T., Morrison, J. G., & Hutchins, S. G. (1996). Impact of Naturalistic Decision Support on Tactical Situation Awareness. In Proceedings of the 40th Human Factors and Ergonomics Society Annual Meeting, Philadelphia, PA, September 22-26, 1996.

Klein, G. A., & Zsombok, C. (1991). Models of Skilled Decision Making. In Proceedings of the 35th Annual Human Factors and Ergonomics Society Meeting, San Francisco, CA.

Klein, G. A. (1992). Decision-making in Complex Military Environments. Fairborn, OH: Klein Associates Inc. Technical Report for the Naval Command, Control and Ocean Surveillance Center, San Diego, CA.

Klein, G. A. (1992). Summary of Data Collection and Results for TADMUS. Technical Report. Klein Associates, Dayton, OH.

Klein, G. A., (1993). Sources of Errors in Naturalistic Decision Making Tasks. In Proceedings of the 37th Annual Human Factors and Ergonomics Society Meeting.

Kowalski, J. T., & Hutchins, S. G., (1994). Errors Demonstrated by Navy Combat Information Center Teams. Submitted to German Military Psychology Journal.

Kramer, T. (1991). Aegis Lessons Learned. Presentation to TADMUS Technical Advisory Board. Naval Command, Control and Ocean Surveillance Center, RDT&E Division, November 1991, San Diego, CA.

Liebhaber, M. J. Pacific Science & Engineering Group, Inc., and Feher, B. A. SSC San Diego, (2002). Surface Warfare Threat Assessment: Requirements Definition, Technical Report 1887, August 2002.

Leibhaber, M. J., Kobus, D.A. Pacific Science & Engineering Group, Inc., Feher, B. A., SSC San Diego (2002). Studies of U.S. Navy Air Defense Threat Assessment: Cues, Information Order, and Impact of Conflicting Data. SSC San Diego Technical Report 1888, August 2002.

Miller, T. E., Wolf, S. P., Thordsen, M. L., & Klein, G. (1992). A Decision-Centered Approach to Storyboarding Anti-Air Warfare Interfaces. Fairborn, OH: Klein Associates Inc. Technical Report for the Naval Command, Control and Ocean Surveillance Center, San Diego, CA.

Moore, R.A., & Averett, M.G. (1999). Identifying and Addressing User Needs: A Preliminary Report on the Command and Control Requirements for CJTF Staff. In Pocceedings of the Command & Control Research & Technology Symposium, Naval War College, 29 June - 1 July 1999.

Morrison, J. G. (2001). Command 21 K-Web Tools Handout. SSC San Diego, CA, July 2001.

Morrison, J. G. (2001). Global 21 Knowledge Web Handout. SSC San Diego, CA, July 2001.

Morrison, J. G. (2000). Command 21: Decision Support for Operational Command Centers Handout. SSC San Diego, CA, May 31, 2000.

Morrison, J. G. (2000). Global 2000 Knowledge Wall Handout. SSC San Diego, CA, May 31, 2000.

Morrison, J. G. (2002). Decision Support Display for Military Command Centers. SSC San Diego, CA, February 20, 2002.

Morrison, J. G., Kelly, R. T., Moore, R. A. & Hutchins, S. G. (1997). Tactical Decision Making Under Stress (TADMUS) - Decision Support System. 1997 IRIS National Symposium on Sensor and Data Fusion, MIT Lincoln Laboratory, Lexington, MA, April 14-17, 1997.

Morrison, J. G., Marshall, S. P., Kelly, R. T., & Moore, R. A. (1997). Eye Tracking in Tactical Decision Making Environments: Implications for Decision Support Evaluation. In Proceedings of the Third International Symposium on Command and Control Research and Technology. National Defense University, June 17-20, 1997.

Morrison, J. G., Kelly, R. T., Moore, R. A. & Hutchins, S. G. (1997). Implications of Decision-Making Research for Decision Support and Displays. In Cannon-Bowers, J. A. and Salas, E. (Eds) Decision Making Under Stress: Implications for Training and Simulation, in press.

Morrison, J. G. (2000). Command 21: Decision Support for Operational Command Centers Handout. SSC San Diego, CA, May 31, 2000.

Morrison, J. G. (2000). Global 2000 Knowledge Wall Handout. SSC San Diego, CA, May 31, 2000.

Morrison, J. G. (2001). Command 21 K-Web Tools Handout. SSC San Diego, CA, July 2001.

Morrison, J. G. (2001). Global 21 Knowledge Web Handout. SSC San Diego, CA, July 2001.

Morrison, J. G. (2002). Decision Support Display for Military Command Centers. SSC San Diego, CA, February 20, 2002.

Morrison, J. G., SSC San Diego, St. John, M., & Kobus, D. A. Pacific Science & Engineering Group. Complex Cognitive Task Battery - "Warship Commander".

Noble, D. A. (1990). Cognitive Model to Guide Interface Design. Technical Document 1831, Naval Ocean Systems Center, San Diego, CA.

Noble, D., & Haupt, C. (1991). Recognition-Primed Decision Support for Ship Combat Defense. Presentation to the 8th Annual Conference on Command and Control Decision Aids. Washington, DC.

Noble, D., & Flynn, W. (1993). The TADMUS "RPD" Tool: Decision Support for Threat Assessment and Response Selection. Proceedings of the 10th Annual Conference on Command and Control Decision Aids. Washington, DC.

- Noble, D. (1993a). A model to support development of situation assessment aids. In Klein, G. A., Orasanu, J., Calderwood, R., & Zsombok, C. E. (Eds.), Decision Making in Action: Models and methods. Norwood, NJ: Ablex Publishing Corporation.
- Noble, D. (1993b). RPD Tool Concept Document. Vienna, VA: Engineering Research Associates.
- Oonk, H. M., Smallman, H. S., & Moore R. A. Pacific Science & Engineering Group (2001). Usage, Utility, and Usability of the Knowledge Wall During the Global 2000 War Game. Technical Report 1861. SSC San Diego, CA, August 2001.
- Oonk, H. M., Smallman, H. S., & Moore R. A. Pacific Science & Engineering Group (2002). Usage, Utility, and Usability of the Knowledge Wall During the Global 2001 War Game. SSC San Diego Technical Report 1882, March 2002.
- Oonk, H. M., Schermerhorn, J. H., & Glaser, D. Pacific Science & Engineering Group (2002). Multi-Monitor Workstations for the Warfighter: An Evaluation of the Optimum Number of Monitors. Pacific Science & Engineering Group, Inc. Technical Report.
- Oonk, H. M., Schermerhorn, J. H., & Glaser, D. Pacific Science & Engineering Group, Inc. and Morrison, J.G., SSC San Diego (2003). Knowledge Desk Limited Objective Experiment (LOE). SSC San Diego Technical Report 1896, March 2003.
- ORINCON Corporation (1991). TADMUS I Final Report. (OCR 92-U-440). San Diego, CA.
- ORINCON Corporation (1992). TADMUS II Final Report (OCR 92-U-440). San Diego, CA.
- ORINCON Corporation (January 1993). TADMUS III: AAW Short Course for Research Personnel. San Diego, CA.
- Perrin, B. M., Barnett, B. J., & Walrath, L. D. (1993). Decision Making Bias in Complex Task Environments. In Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting (pp. 1107-1111). Santa Monica, CA: Human Factors and Ergonomics Society.
- Riffenburgh, R. H. (1990). On Naval Actions and Reactions in Limited Warfare. Technical Document 1814, Naval Ocean Systems Center, San Diego, CA.
- Riffenburgh, R. H. (1991). Tactical Decision Making Under Stress Program Study: Initial Design. Technical Document 2217, Naval Ocean Systems Center, San Diego, CA.

Riffenburgh, R. H. (1991). A Comprehensive Model of Decision Making. Technical Document, Naval Ocean Systems Center, San Diego, CA.

Rogers, J. H., Oonk, H. M., Moore, R. A., & Averett, M. G., Pacific Science & Engineering Group, Inc. The Design, Implementation and Use of Web-Technologies to Facilitate Knowledge Sharing: A Real-World Application.

Rummel, B. K. (1995). Subjective Evaluation Study of Human-Computer Interface Options for a Tactical Decision Support System. Naval Command, Control and Ocean Surveillance Center, RDT&E Division Technical Report, 1698, San Diego, CA.

Smallman, H. S., Oonk, H. M., & Moore, R. A., Pacific Science & Engineering Group, Inc. & Morrison, J. G., SSC San Diego (2001). The Knowledge Wall for the Global 2000 War Game: Design Solutions to Match JOC User Requirements. SSC San Diego, CA, Technical Report 1860, August 2001.

Smith, D. E., & Grossman J. D. (1993). Understanding and Aiding Decision Making in Time-Constrained and Ambiguous Situations. Naval Command, Control and Ocean Surveillance Center, RDT&E Division.

Smith, D. E., & Marshall, S. P. (1993). Neutral Network Models of Decision-Making Schemas. Naval Personnel Research and Development Center, San Diego, CA.

Smith, D. E., & Marshall, S. (1995). Applying Hybrid Models of Cognition in Decision Aids. In Klein, G. A., & Zsombok, C. E. (Eds.) Advances in Naturalistic Decision Making: Research and Applications, Hillsdale, NJ: Erlbaum.

Smith, D. E., & Marshall, S. (1997). Applying Hybrid Models of Cognition in Decision Aids. In Zsombok, C. E., & Klein, G. A. (Eds.), Naturalistic decision making (pp. 331-341). Mahwah, NJ: Lawrence Erlbaum Associates.

Sonalysts Report. (1994) Decision-Making Evaluation Facility for Tactical Teams (DEFTT) Laboratory Description. Brochure. San Diego, CA.

Sonalysts Report. (1995) Decision-Making Evaluation Facility for Tactical Teams (DEFTT) Scenario Documentation. Brochure. San Diego, CA.

Sonalysts Report. (1995) Decision-Making Evaluation Facility for Tactical Teams (DEFTT) Briefing Materials. Brochure. San Diego, CA.

Sonalysts Report. (1996) Decision-Making Evaluation Facility for Tactical Teams (DEFTT)/Decision Support System (DSS) Development Effort Summary. San Diego, CA.

- Sonalysts Report. (1996) Decision Support System Evaluation. San Diego, CA.
- St. John, M., Manes, D.I., Moore, R.A., & Smith, C.A.P (1999). Development of a Naval Air Warfare Decision Support Interface Using Rapid Prototyping Techniques. In Proceedings of the Command & Control Research & Technology Symposium, Naval War College, 29 June - 1 July 1999.
- Westra, D. P. (1994). Analysis of TADMUS Pre-Experimental Data: Considerations for Experimental Design. Orlando, FL: Technical Report, Enzian Technology, Inc.
- Westra, D. P. (1994). Experimental Design Considerations for TADMUS. Technical Report No. 92. Orlando, FL: Enzian Technology, Inc.
- Westra, D. P. (1995). Decision Support System for TADMUS: An Evaluation Plan. Orlando, FL: Technical Report, Enzian Technology, Inc., October 1995.
- Westra, D. P., & Hutchins, S. G. (1995). An Experimental Plan for Evaluation of a Decision Support System. Proceedings of 39th Annual Meeting of the Human Factors and Ergonomics Society, October 1995, San Diego, CA.
- Zachary, W. W., Zaklad, A. L., Hicinbothom, J. H., Ryder, J. M., Purcell, J. A., & Wherry, R. J. (1991). COGNET Representation of Tactical Decision-Making in Anti-Air Warfare. Springhouse, PA: CHI Systems Technical Report 911015.9009.
- Zachary, W. W., & Zaklad, A. L. (1992). Stress Effects on Tactical Decision Performance in Ship-Based Anti-Air Warfare. Springhouse, PA: CHI Systems, Report 920630-9009.
- Zachary, W. W., Zaklad, A. L., Hicinbothom, J. H., Ryder, J. M., & Purcell, J. A. (1993). COGNET Representation of Tactical Decision-Making in Anti-Air Warfare. Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting. (pp. 1112-1116). Santa Monica, CA: Human Factors and Ergonomics Society.
- Zaklad, A. L., & Zachary, W. W. (1992). Decision Support Design Principles for Tactical Decision-Making in Ship-Based Anti-Air Warfare. Springhouse, PA: CHI Systems, Technical Report 920930-9009.
- Zsombok, C., Beach, L. R., & Klein, G. (1992). A Literature Review of Analytical and Naturalistic Decisionmaking. Fairborn, OH: Klein Associates Inc. Technical Report for the Naval Command, Control and Ocean Surveillance Center, San Diego, CA.