

Situational Awareness Object (SAO), Powerful Tools for Decision-Makers

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ABSTRACT

The U. S. Joint Forces Command (USJFCOM), J9 Modeling and Simulation (M&S) Support Team advanced the capability of distributed simulation in support of Urban Resolve 05 (UR05), a collaborative effort conducted by USJFCOM and the Institute for Defense Analyses (IDA). Using real-world data, the scenarios in UR05 realistically replicated current operations and situations faced by warfighters in Baghdad. Experiment subjects use Situational Awareness Objects (SAOs) to share their awareness of the battlespace regarding activities of the adversaries, blue forces and civilian population. SAOs are logged and support real-time, post-experiment evaluation and comprehensive after-action reviews. Throughout each JUO experiment, the SAOs structure evolved to include new options that were based on the operator's needs. The benefit of SAOs is that they are easy to create and modify to fit varied operational missions. They are shared instantly among operators with access to the database and they are displayed on the terrain map as symbolic objects. SAOs contain the author's identification, location coordinates, and time created or modified, SAO category, player's confidence level, free-text comments, associated tracks and the ability to attach graphics and text files to the object. USJFCOM's success in using SAOs to enable the JUO series of experiments and the enthusiasm and innovation that operators show in using them, indicates this simple, yet powerful tool would be useful if implemented in other simulation systems.

ABOUT THE AUTHOR

Michael Anhalt is retired Navy Surface Line Commander with over 23 years of operational experience, including specialties in Amphibious Warfare, Surface, Undersea, and Strike Warfare, and tactical training. Thirteen years experience in planning and directing system-engineering efforts related to modeling & simulation and their integration with military command and control (C2) systems. He provides on-site technical support in planning for and conducting warfighting exercises and experiments, prototype development, and demonstration of advanced technologies for next generation C2 Systems and Command Centers. He holds a Master of Science degree in Educational Technology. Mr. Anhalt co-authored a paper selected for presentation at IITSEC 2005, "Developing Situation Awareness Metrics in a Synthetic Battlespace Environment".