

## **Robert (Bob) M. Gravitz**

Mr. Robert M. Gravitz has over 20 years experience in the fields of research, development, test, and evaluation (RDT&E) of major Department of Defense (DoD) weapon programs. His focus and emphasis has been materiel acquisition, program management, systems engineering and integration activities. He has current, hands-on experience with the verification, validation and accreditation (VV&A) of complex, hardware-in-the-loop simulation systems supporting the Ground-Based Midcourse Defense (GMD) and the Ballistic Missile Defense System (BMDS).

Mr. Gravitz serves as the Director, Systems Engineering and Evaluation Technology Group (SE&E TG) at Aegis Technologies. He is a nationally recognized expert in the field of modeling and simulation (M&S) VV&A and principle architect for a commercial M&S VV&A training class that has been presented to numerous government organizations and Defense contractors throughout the United States and Europe. He served previously as the Aegis Program Manager for the Integrated System Test Capability (ISTC) VV&A Program, a software and hardware-in-the-loop system supporting the Ground Based Missile Defense Program and he was responsible for its programmatic and technical direction.

Mr. Gravitz is responsible for formulating Aegis Technologies' M&S VV&A and evaluation strategies, development of M&S VV&A Program Plans, to include: defining V&V requirements and executing strategies; identifying executing agents; and delineating V&V activities, resources, products, and execution schedules. As the Director of the SE&E TG, Mr. Gravitz manages and supervises a 40 person technical staff engaged in simulation VV&A and systems engineering and evaluation activities. He has directed M&S VV&A tasks for simulation activities of several Major Defense Acquisition Programs (MDAPs) including the: 1) ISTC, a GMD system-level, hardware-in-the-loop (HWIL) test resource; 2) Ground Based Radar-Prototype (GBR-P) Test Bed for the GMD program; 3) Theater High Altitude Area Defense (THAAD) Systems Integration Lab [SIL]; 4) Theater Missile Defense System Exerciser [TMDSE]; and 5) PATRIOT all-digital and millimeter wave HWIL simulations.

He has authored numerous publications and articles on M&S VV&A including:

- “Accreditation: The Essential Focus For Verification And Validation For Nation Missile Defense’s Integrated System Test Capability” in The Proceedings of the International Test and Evaluation Association Modeling and Simulation Workshop (Las Cruces, New Mexico, December 8-11, 1998). © 1987, The International Test and Evaluation Association (ITEA).
- “Incorporating The Integrated System Test Capability (ISTC) Into System Integrated Exercises (SIE) for The National Missile Defense (NMD) Test Program”, in the proceedings of the 1998 Fall Simulation Interoperability Workshop, (Orlando, Florida, September 13-18, 1998). © 1998, The Simulation Interoperability Standards Organization (SISO).
- “Verification, Validation, and Accreditation (VV&A) of the National Missile Defense (NMD) Integrated System Test Capability (ISTC)”, in The Proceedings of the International Test and Evaluation Association Modeling and Simulation Workshop (Las

Cruces, New Mexico, December 8-11, 1997. © 1997, The International Test and Evaluation Association (ITEA).

- “Verification, Validation, and Accreditation (VV&A) Issues of the National Missile Defense (NMD) Integrated System Test Capability (ISTC) Transition to a Distributed Test System”, in the proceedings of the 1997 Fall Simulation Interoperability Workshop (SIW), (Orlando, Florida, September 8-12, 1997). © 1997, SISO.
- “Verification, Validation, and Accreditation (VV&A) of the National Missile Defense (NMD) Integrated System Test Capability (ISTC)”, in The Proceedings of the 1997 Summer Computer Simulation Conference (Arlington, Virginia, July 13-17, 1997). The Society for Computer Simulation, International (SCSI); Mohammad S. Obaidat and John Illgen (editors); © 1997, Simulation Councils, Inc.
- “Verification, Validation, And Accreditation Of High Level Architecture Federates And Federations: A VV&A Strategy For Legacy Models, Simulations, Algorithms And Software Components”, in the proceedings of the 1997 Spring SIW, (Orlando, Florida, March 3-7, 1997). © 1997, SISO.
- “Evolution of a Simulation Program Throughout the System Acquisition Life Cycle”, in The Proceedings of the 1995 Summer Computer Simulation Conference (Ottawa, Ontario, Canada, July 23-26, 1995). SCSI; Tuncer I. Oren (editor); © 1995, Simulation Councils, Inc.
- “The JAVELIN Simulation Program: How One Army Project Office Developed an Integrated Development and Simulation Program”, in The Proceedings of the 1992 Summer Computer Simulation Conference (Reno, Nevada, July 27-30, 1992). SCSI; Paul A. Luker (editor); © 1992, Simulation Councils, Inc.
- “Validation Methodologies for Complex, Hybrid, HWIL, 6-DOF Missile Simulations - A Structured Approach”, in the 1988 Winter Computer Simulation Conference Proceedings (San Diego, California, December 12-14, 1988). SCSI; M. Abrams, P. Heigh, and J. Comfeit (editors); © 1988, Simulation Councils, Inc.