

Andrew S. Loebel, Ph.D.

Modeling and Simulation Group
Computational Sciences and Engineering Division

Oak Ridge National Laboratory

Phone: (865)574-5966

Fax: (865) 241-4064

Email: loeblas@ornl.gov

Ph.D. Sociology with special emphasis on Statistics & Demography,
at the University of Missouri, Columbia, Missouri, 1973

Andrew Loebel holds the position of Program Manager at Oak Ridge National Laboratory (ORNL). Since ~2000, Dr. Loebel was assigned to various specialty areas & advisory capacities on command and control systems & software engineering in development of the Army's Future Combat System as well as Objective Force concept development activities. Between 1979 and 2000, Loebel was responsible for a program at ORNL that focused on data & model validation for both the Department of Energy & the Department of Defense (DoD). DoD work began with safety systems analysis, expanding to introduction of computer based, reliability centered maintenance initiatives for each Service (beginning ~1982). Development of modern logistics systems for each military transportation/logistics command (beginning ~1984) led to modernization of the U.S. World Wide Military Command & Control System (specific to the Army & Air Force Programs, beginning ~1987); modeling & simulation for the Joint Chiefs of Staff(~1989); command center modernization for the Pentagon & several Major Command hdqt's around the world resulting also in DoD adoption of several new Standard systems for both strategic & tactical operations (ending ~1991). This work focused on micro-processor based software, computer, & network concepts & configurations reforming (for example, mobile command and control concepts); on-board training systems for the Navy; reliability-centered analysis for Army aviation; support for design & development of the Navy's Seawolf Submarine, Amphibious Assault Vehicle (AAV), Advanced AAV; and microprocessor-based system development of command and control, human machine interface & safety concepts.

Credibility of work resulted in, for example, ORNL direct tactical & operational support to Desert Storm & other, similar actions. This then led to development of modern concepts of 4th generation computer, data, and information fusion technology applied to decision making, communications, networks, modeling and simulation, strategic planning & operations. Assignments encompassed staff and subcontractor personnel assigned to an annual program of over 125 inter-agency agreements & 200 separate projects.

Other major past assignments encompassed R&D relevant to environmental management, transportation, energy conservation, environmental remediation & brown fields development, epidemiology, and digital systems security. Current assignments include safety-critical digital systems engineering, software architecture and model-driven software development.