

Meredith Hardwick

Education

- B.S., Mathematics, Birmingham-Southern College, 1992

Ms. Hardwick currently serves as task leader for the SAFER product. Her unique qualifications are technical experience and knowledge in explosives risk assessment as well as in program management.

Experience

September 1993-Present: *APT Research, Inc., Huntsville, AL.* Task Leader.

Currently managing APT activities for the Risk-Based Explosives Safety Criteria Team (RBESCT) and the Risk and Lethality Commonality Team (RALCT) Phase II. Interfaced with all team members (including Army, Navy, Air Force, Marines, British MOD, Australian MOD, & NATO), coordinated actions, and compiled team results. Compiled software requirements documents in accordance with ISO 9000 and SEI Level 2 for National Standard Explosives Risk Assessment. Responsible for overall production of preliminary and final versions of Safety Assessment for Explosives Risk (SAFER) software and supporting documentation. Key participant in developing a process for a U.S. national standard in explosives risk assessment. Conducted key research supporting Range Commanders' Standard for debris risk criteria. Provided engineering support for the Ground-Based Radar (GBR), Theater High Altitude Area Defense (THAAD), and TMD Targets (Hera) programs. Other experience includes the following:

- Development of spreadsheet analysis tools.
- Software development.
- Fault Tree analysis (FTA).
- Reliability calculations.
- Development of database tools for requirements traceability.
- Development of technical reports and briefings.

Professional Activities

- System Safety Society

Awards

- Nominee for the 2001 International Group Achievement award for development of SAFER tool.

Publications

- "Risk-Based Explosives Safety Methods," Proceedings from the 28th DDESB Explosives Safety Seminar, 10-12 August 1998.
- "Governing Safety with Risk-Based Methods," Proceedings of the International Systems Safety Society Conference, 19 August 1999.
- "Comparison of International QRA Models on the basis of the 'Setup and Results of the Joint UK/Australian 40 Tonne Donor/Acceptor Trial,'" Proceedings from the 29th DDESB Explosives Safety Seminar, 18-20 July 2000.
- "Risk-Based Explosives Safety Modeling," Proceedings from the 29th DDESB Explosives Safety Seminar, 18-20 July 2000.

- "Status of the Risk-Based Explosives Safety Criteria Team," Proceedings from the 29th DDESB Explosives Safety Seminar, 18-20 July 2000.