



STEPHEN R. MELVIN, PE, CSP, CPP

CAREER PROFILE

A senior professional engineer with over 18 years developing and leading a broad spectrum of projects, including development of Risk Management Programs (including Process Safety Information, Process Hazards Analyses/Hazard Reviews, Offsite Consequence Analyses, etc.) and security vulnerability assessments for facilities throughout California. He was the Fire Safety Engineer for the Orange County Fire Authority's Hazardous Materials Services Section and served as the co-chair for the Administering Agency Subcommittee of the Local Emergency Planning Committee (Region I). He currently serves as the Homeland Security Representative to the Local Emergency Planning Committee (Region VI) (the only LEPC in the US to provide comments on DHS' proposed Chemical Facility Security Vulnerability Assessment Regulations) and is an active member of both the FBI's Infragard Program (Los Angeles and San Diego Chapters) and the Orange County Private Sector Terrorism Response Group. He was instrumental in Sandia National Laboratories development of their Chemical Facility Vulnerability Assessment Methodology and has been reviewing the anti-terrorism portions of risk management plans for chemical facilities since 1999.

PROFESSIONAL EXPERIENCE

SRM Associates, Inc. June 1996 – Present

President

Develops training materials for communities and businesses to provide community-based instruction on safety, security, emergency preparedness, and anti-terrorism awareness. Responsible for the completion of the City of Perris Water Department Emergency Response Plan and Hazardous Materials Transportation Study. Conducted Tabletop Exercises and Emergency Response Plan Updates for the Orange County Water District. Provides guidance to municipalities, businesses, nonprofits, and agencies on emergency response, preparedness, recovery, and mitigation. Instructs personnel from businesses, agencies and communities on developing a culture of safety and security to ensure that their emergency response plans will be practical, usable and implementable. Develops new technologies and strategies for addressing natural and man-made threats to a business, agency or community. Develops and participates in emergency response exercises, trains personnel on emergency response procedures, and advises municipalities/government organizations on emergency response planning for long-term projects.

Aanko Technologies Inc., Vacaville, CA, June 2004 – July 2006

Vice President of Safety/Security Integration

Responsible for emergency response, planning and security assessment projects, where skills in evaluating client facility emergency response and security plans, programs, training, and exercises, are used to establish and maintain confidence in clients' abilities to effectively protect their resources. Served as a Subject Matter Expert for City of San Francisco Fire Department Headquarters Building Vulnerability Assessment Pilot Project. Developed over 50 risk assessment evaluations for insurance clients in several different industries, including construction, personnel services, transportation, chemical, and commercial and residential leasing. Served as subject matter expert for security/safety assessment for major Midwestern financial institution campus.

Risk Management Professionals, Inc., Mission Viejo, CA 2001-2004

Principal Engineer

- Developed Risk-Based Vulnerability Assessments for chemical and water industry clients
- Lead Security Vulnerability Assessment for numerous water agencies. In that capacity he pioneered the implementation of the RAM-WSM Security Vulnerability Assessment methodology throughout the State of California.
- Developed and refined preliminary screening of water facilities after field visits to the facility sites
- Developed prioritized list of security countermeasures to serve as the basis for the Emergency Response Plan and Capital Improvements Plan for Vulnerability Assessments
- Principal Engineer responsible for the RAM-DSM (Risk Assessment Methodology for Dams) analysis of a major Dam in Southern California.

Orange County Fire Authority; Orange, CA, 1999-2001

Fire Safety Engineer

Hazardous Materials Services Section (HMSS) and Co-Chair of California's (Region I) Local Emergency Planning Committee Administering Agency Subcommittee.

Achievements

- Developed California Accidental Release Prevention Program implementation for jurisdiction of 21 contract cities and the unincorporated areas of Orange County
- Assisted Sandia National Labs in developing Chemical Facility Vulnerability Assessment Methodology
- Served as the leading author for state-wide CalARP guidance document produced by OES.
- Served as the Co-chair of the Local Emergency Planning Committee Region I Administering Agency Subcommittee
- Served on the steering committee member for Community Awareness and Emergency Response
- Served as founding member of Cal-CAER (California Community Awareness Emergency Response)
- Evaluated Risk Management Plans and Programs to ensure compliance with regulatory requirements
- Developed and led several training courses in evaluation of Hazardous Materials Characteristics, Risk Management Program elements and Operational Risk Management
- Reviewed chemical classifications of hazardous materials for accuracy in accordance with California Fire Code
- Selected for Governor's Office of Emergency Services State Emergency Response Commission's Task Force for developing a statewide Release Reporting Guidance Document
- Provided legislative analyses of regulations and laws as they apply to Risk Management Programs for industrial facilities
- Provided input on Hazardous Materials facilities to the OCFA Hazardous Materials Area Plan
- Implemented Y2K hazardous materials triage project for OCFA jurisdiction by triaging over 300 businesses

PLG, Inc.; Newport Beach, CA, 1991-1998

Risk/Safety Analyst

Led risk and safety studies for chemical processing plants, participated in similar studies for nuclear generating stations, and developed/maintained software for performing risk assessments, failure analyses, etc.

Achievements

- Developed methodologies for Counter-Terrorist and Software Threat/Risk Analyses
- Designed Risk Management Programs for compliance with the state and federal regulations

- Evaluated risk levels of systems, equipment and programs for chemical and nuclear plants worldwide
- Designed and implemented analysis software for mechanical systems, nuclear plants and refineries
- Technical lead on the UNOCAL (TOSCO) Rodeo refinery's RMPP upgrade
- Technical manager for the RMPP to RMP upgrade project at the TOSCO LAR, responsible for revalidating HAZOPs, ensuring that the Process Safety Information (PSI) was up to date and verifying Management of Change process was followed for previous changes

Military (Reserve), Joint Staff, Washington, DC; 1998-Present
Engineering Duty Officer

Currently serves as an Action Officer on the Joint Staff, in the Strategic Engagement Division of the C4 Directorate. Liaises the Joint Community Warfighter CIO with COCOM J6s and ASD(NII), leading the effort to establish an implementation plan for command, control, communications, and computer (C4) systems strategic priorities. Provides daily management and oversight for the implementation plan for the joint net-centric operations strategy. Coordinates with Congressional members and staffers during the execution of the strategy. Prepares presentations for Joint Staff J6 Director, Vice Director, and Deputy Director.

Achievements.

- Served as inaugural Executive Aide to Community Flag Officer.
- Officer In Charge; USS Curts (FFG-38)
- Reserve Component Engineering Duty Officer Community Manager (normally held by a senior officer) during a critical transition period until the position could be filled.
- Trained USS Constitution (Old Ironsides) crew on anti-terrorism and WMD Awareness.
- At-Sea Coordinator; NAVSEASYSCOM responsible for coordinating all sea tours for Engineering Duty Qualification personnel worldwide. Expanded program to include submarine tours.
- Project Officer, USS Curts (FFG-38) responsible for over 1350 man-hours of operational support to the Fleet. Member of Combat Information Center watchstanding team seizing ~ 5 tons of cocaine.
- Executive Officer; NWSSB Explosive Outload Team overseeing Operations (Naval Ordnance), Administration, Training & Medical personnel
- Reviewed Knowledge Management program to provide insight and recommendations for improvement for Naval Space and Warfare Command (Charleston, SC)
- Operations Officer; Explosive Outload Team responsible for movement of 80,000+ tons of ammo
- Developed Risk Management methodology for improving decision capabilities of Project Officer and database for tracking Risk Management tasks for USS LaSalle SRA team
- Military Decorations include the Navy Achievement Medal, and the Navy Commendation Medal (2 awards)

EDUCATION, TRAINING & RELATED EXPERIENCE

Bachelor of Science, Mechanical Engineering: University of California, San Diego, CA, 1993
 Master of Arts with Highest Distinction, National Security and Strategic Studies: United States Naval War College, 2008
 Master of Arts, Homeland Security: Naval Postgraduate School (On hold while on Active Duty)
 Graduate Certificate, Government Strategic Leadership, Information Resources Management College, National Defense University, 2010
 Master of Science, Government Information Leader (Information Operations), Information Resources Management College, National Defense University, 2011

WORKS PUBLISHED

Municipal Guidance Documents

Orange County Fire Authority - California Accidental Release Prevention Program Guidance
California Office of Emergency Services - California Accidental Release Prevention Program Guidance
Local Emergency Planning Committee Region I: Guidance for CalARP Program Seismic Assessments

Books and Papers

Keeping Our Neighborhoods Safe, First Printing, March 2004
How to C.O.P.E. With Terrorism, e-book, April 2006
Manteniendo Nuestras Vecindades a Salvo, July 2006
Keeping Our Chemical Facilities Safe, e-book, August 2007, Hardcopy, September 2009 (together with William R. Benson)
Practical Guide to Risk Management Communications, First Edition, January 2000
“A Plan for Homeland Defense” 2002. (Republished in 2004 as “A Plan for Homeland Security”)
“The Impacts of a Major Disaster on Small Local Communities and Some Possible Solutions”, 2006. Co-author.
“An Organizational Plan for the Success of the Department of Homeland Security”, April 2008

CERTIFICATES

Professional Engineer-Mechanical Engineering- California and Nevada
Emergency Response to Terrorism: Self Study - National Fire Academy
Prevention and Response to Suicide Bombing Incidents – Performance Level
DHS – WMD Technical Emergency Response Team Training (COBRA)
DHS – WMD Standardized Awareness Authorized Trainer CERT Trained
Fire Inspection Principles - National Fire Academy Certified Safety Professional
Incidents Response to Terrorist Bombings – Performance Level Certified Protection Professional
DHS – Enhanced Threat and Risk Assessment Course

PROFESSIONAL AFFILIATIONS

- Orange County Private Sector Terrorism Response Group
- Infragard (FBI)
- Local Emergency Planning Committee VI – Homeland Security Representative
- Local Emergency Planning Committee I – Administering Agency Subcommittee Co-Chair
- American Society of Mechanical Engineers – Section Vice-chair and Board member (Professional Practice and Ethics, Government Relations)
- Temecula Citizens Corps
- Orange County Engineering Council - Vice President of Communications
- American Institute for Chemical Engineers
- American Chemical Society
- Industrial Environmental Coalition of Orange County
- Orange County Community Awareness and Emergency Response Group
- Naval Reserve Association - Life Member
- US Naval Institute - Life Member
- Naval Reserve Officers Association – Life Member