Harrison F. Kerschner

Pacific Northwest National Laboratory

Mr. Kerschner's career has been one of providing accomplished leadership and successful management of facilities, organizations, projects and programs. His ability is to build teams that execute challenging and high visibility tasks with a reputation for getting the job done.

In October 2008, Mr. Kerschner was assigned as Manager of the Radiochemical Process Laboratory, a Department of Energy hazard category 2 nuclear research facility. He led completion a $37 million facility life-extension program, successfully implemented a new safety basis, and installed four new hot cells and three gloveboxes and achieved operational readiness. Nuclear operations, staffing and funding bases were significantly improved. In 2011, an additional $5.6 million in infrastructure investments were completed.

From 2006 to 2008, Mr. Kerschner was assigned to the Capability Replacement Laboratory project. This was the largest construction project in Pacific Northwest National Laboratory (PNNL) history. As 300 Area Project Manager, he successfully delivered, on a fixed schedule and budget, life extension design and construction deliverables for four facilities: the Radiochemical Processing Laboratory, the Life Sciences Laboratory, the Radiological Calibrations Facility, and the Plant Operations & Maintenance Facility.

From 1998 to 2002, Mr. Kerschner served as Battelle's off-site Project Manager for architect and engineering design of the Pit Disassembly and Conversion Facility, providing effective management of one of PNNL's largest "Work for Others" contracts. This strategic project is directly tied to U.S. treaty commitments for management and disposition of excess weapons material with Russia. Technical areas of responsibility included: criticality, radiological engineering, nuclear safety, safeguards and security, classification, and plutonium technology. Positive interface and relationships were established with staffs from: Defense Nuclear Facilities Safety Board, Los Alamos National Laboratory, Savannah River Site, and the National Nuclear Security Administration (NNSA). Significant improvements were made in technical deliverables, client relationships and off-site staffing, while increasing annual business volume.

From 1996 to 1998, Mr. Kerschner helped to stand up the Independent Oversight Office.

Lawrence Livermore National Laboratory

Mr. Kerschner served as Deputy Manager for the Device Assembly Facility (DAF) at the Nevada Test Site from 2002 to 2006. The DAF is a nuclear explosive-hazard category 2 nuclear facility supporting the following missions: Nuclear Explosive Operations, Underground Test Readiness, Sub-critical experiments program, disposition of damaged nuclear weapons; and programs in support of national security interests. During this assignment he successfully directed startup activities and implementation of the safety basis for relocation of special nuclear material from Los Alamos National Laboratory Technical Area 18 Criticality Experiments Facility. This culminated in successful completion of an NNSA-HQ-led Operational Readiness Review meeting a key NNSA Secretarial Security Initiative and NA-10's "highest priority" project in which Lawrence Livermore National Laboratory received the NNSA Special Achievement Award. Mr. Kerschner also directed the successful completion of a time critical, highly visible Nuclear Explosive Safety Master Study; a key contract deliverable.

He supported the Nonproliferation, Arms Control & International Security Directorate, as well as laboratory science organizations. Mr. Kerschner was assigned as Acting, Nuclear Test Operations Facility Security Officer.

Reynolds Electrical & Engineering Co. Inc., Nevada Test Site

From 1991 to 1996, Mr. Kerschner served as the Radiological Control Manager overseeing a 200+ health protection staff supporting underground nuclear testing at the Nevada Test Site. Functional components included: radiological controls, nuclear dosimetry, environmental monitoring, nuclear instrumentation, industrial hygiene, litigation support, health physics, and radiological engineering/decontamination services. Areas of technical weakness were addressed and strengthened by aggressive staff recruitment and establishing professional development programs. Mr. Kerschner received the Department of Energy Weapons Recognition Award for implementing 10CFR835 Radiological Controls Program at the Nevada Test Site. He was assigned to the Nuclear Emergency Support Team (NEST) and was Environment, Safety & Health Manager for the national Accident Response Group.

U.S. Navy

A career officer, Mr. Kerschner held various assignments including senior-level program management and liaison for the Navy with other federal agencies, the Nuclear Regulatory Commission, and the Department of Energy. These included: Program Manager, Undersea Medicine and Radiation Health, Navy Bureau Medicine and Surgery, Washington, D.C. and Assistant Director, Radiation Health Division, Puget Sound Naval Shipyard.

Other assignments: Military Research Associate at Los Alamos National Laboratory; Nuclear Weapons Officer, Surface Warfare Officer; Navy Deep-Sea Diver.

Education/ Special Training

M.S., Health Physics, University of Arkansas

B.S., Biology/ Chemistry, Texas Lutheran College

Executive Project Management, George Washington University

Japanese, University of Washington

Arabic, Defense Language Institute, Monterey

Comprehensive Health Physics Certification by the American Board of Health Physics, 1986; re-certified through 2014.

Professional Affiliations

Institute of Nuclear Materials Management

- INMM representative to the American National Standards Institute, N13, Radiation Protection
- Facility Operations Division

American Health Physics Society

American Board of Health Physics

American Nuclear Society

Publications

Kerschner, H.F. "Superheated Liquid Drop (Bubble Technology): U.S. Navy Program of Test and Evaluation". 9th International Conference on Solid State Dosimetry. Vienna. 1989.

Harper, M.J., Johnson, T.L., Jones, C.R., Kerschner, H.F., Lindler, K.W., Nelson, M.E, Rabovsky J.L., Riel, G.K., and Schwartz, R.B. "Superheated Drop Bubble Dosimeters". Proceedings, U.S. Department of Energy 11th Neutron Workshop. 1991.

Kerschner, H.F. "The Health Effects of Extremely and Very Low Frequency Electromagnetic Fields". International Conference on Electromagnetic Compatibility. 1991. (Best Session Paper)

Kerschner, H.F. "Health Physics Considerations with Cellular and Mobile High Frequency Transmissions" CENELEC/ European Technical Standards Institute. Nice, France. 1991. (Invited speaker, U.S. Representative)

Riel, G.K., Kerschner, H.F., Nelson, M.E., and Rao, N. "Superheated Drop, 'Bubble Dosimeter' Neutron Dosimeter Performance in a Work Environment". IEEE Transactions on Nuclear Science, 38, 2, April 1991.

Allen, T.E., Zervoudis, E., Bastian, C.T. and Kerschner, H.F. DOE/NV/10630-64, A Technical Basis for Internal Dosimetry at the Nevada Test Site. 1993.

Gilmer, J.E., Kerschner, H.F., and Clark, T.G. "Integrating Safeguards into the Pit Disassembly & Conversion Facility". 43rd Meeting, Institute of Nuclear Materials Management. 2002.

Kerschner, H. Yarbro, S. Bedell, J.Sportelli, J., and Cunningham, J. "Life Extension of a Nuclear Facility: Export Control Implications". Institute of Nuclear Materials Management, Pacific Northwest International Conference on Global Nuclear Security. 2010

Steen, Thornhill, Cunningham, Kerschner, Pierce, Shaw. 11th International Conference on Radiation Shielding (ICRS-11) and the 15th Topical Meeting of the Radiation and Shielding Division of the American Nuclear Society. Poster Session: Expanding Facility Hot Cell Capabilities via Modular Hot Cell Design. April 13-18, 2008 Pine Mountain, GA

Kerschner, H, Cunningham, J., Sportelli J., Yarbro, S. Life Extension of a Nuclear Facility: Export Control Implications. Institute of Nuclear Materials Management, Pacific Northwest International Conference on Global Nuclear Security. April 11-16, 2010, Portland, OR

Kerschner, H, Hanson E., Blackburn, T., Yarbro, S. Installation of Modular Hot Cells; Extending the Life of an Operational Facility. 52nd Meeting, Institute of Nuclear Materials Management. July 17-21, 2011. Palm Springs CA

Accepted for publication in Operational Radiation Safety, 2012. Thomas, Elizabeth M; Sweet, Luke; MacFarlan, Paul J; McNamara, Bruce K; Kerschner, Skip., "A Comparative Study for Radiological Decontamination of Laboratory Fumehood Materials".