

Curriculum Vitae
for
V. Alan Werner, P.E.

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Education

High School, Nile C. Kinnick, Jr. American Dependents School, Yokohama, Japan, 1962

Mechanical Engineering Bachelor of Science, Oregon State University, 1966

Aeronautical Engineering study, University of Washington, 1967-1969

Graduate Mechanical Engineering study, Seattle University, 1969-1971

Project Management Extension, University of Washington, 1982

Project Management Professional training, Project Management Institute, 2003

Patent Litigation training, 2017

Licensure and Certifications

Professional Engineer No. 13867, Washington (P.E.)

Professional Engineer No M27649, California (P.E.)

Professional Engineer No. 67143, Florida (P.E.)

Professional Engineer No. 127333, British Columbia (P.Eng.)

Project Management Professional No. 198693, Project Management Institute (PMP)

Class 100 Clean Room Certification, the Boeing Company. 1986

Environmental Site Training, Prezant Corp, 1990 and 1991

Employment Experience

- VA:W, Principal, mechanical engineering consulting & software application development, 1993 to present, with interruptions*
 - Direct Projects:
 - Virtual Energy Audit: software development for power plant replication with six applications in boiler plants, university campus, and wood products manufacturing.
 - Chemical storage and distribution: Layout of new facility to store and distribute commodity chemicals
 - Concrete pad evaluation: Dept. of Ecology based evaluation of a storage area concrete pad
 - Chemical Storage layout: Layout and detailed design of expanded chemical storage areas
 - Chemical Hoist Design: Design of a traveling hoist to lift 4500 lb. powder supersacks for unloading into a blend tank.
 - Plastics Flammability Study and certification: A study of the flammability of three plastics used in construction of Lumicor panels with embedded materials and the certification of these materials in New York City and Miami-Dad County.
- Morrison Hirschfield, senior engineer, architectural envelope consulting, 2007
- BPB Gypsum Co.*, Plant Engineer, various plant improvement or maintenance projects, 2006-2007
- Nielsen Wurster Group, senior engineer, international project expediting & construction dispute resolution consulting, 2003 to 2005
- Carson Engineering/Direct Contact Inc.*, Mechanical engineer, marketing engineer, process engineering and heat recovery system development/engineering/installation, 1995 to 2003*
- Frigoscandia*, Inc., Systems Engineer, Steam Pasteurization System(SPS) systems trouble shooting and acceptance, 1996 to 1997*
- Chemhaz, developer, chemical inventory analysis software, 1993 to 1995
- Ebasco Environmental, Senior Engineer, environmental studies and analysis, 1991 to 1993
- Harris Group Inc., Senior Mechanical Engineer, process systems and equipment design with emphasis on pulp and paper plants and petrochemical facilities, 1988 to 1990
- The Boeing Company, Facilities Engineer, design and construction of in-company facilities ; facility system requirements documentation, 1983 to 1988
- Resources Conservation Co., Senior Mechanical Engineer, design and construction of process systems and equipment with emphasis on power generation plants and water management systems, 1980 to 1983
- Chiyoda International Corp., Process Engineer, design and construction of process system and equipment in the petrochemical and power generation areas with test systems management experience, 1978 to 1980
- AH Lundberg Inc., Mechanical Engineer, design and construction of pulp and paper process systems equipment, 1976 to 1977
- Noise Control Services, Acoustical Engineer, acoustical analysis and abatement design in a variety of industrial facilities primarily in the wood products industry, 1975 to 1976

- Pacific Car and Foundry, Mechanical Engineer, design of military transportation – truck noise analysis, 1969 to 1975
- The Boeing Co Wind Tunnel, Design Engineer, design and testing of wind tunnel models, 1966 to 1969
- Longview Fibre Co., Engineer Intern, design of pulp and paper equipment, 1965

*by contract under VA:W

CASES

- Shopping Bag Failure Analysis: Performed a forensic analysis to determine the root cause of a shopping bag failure that cause toe damage. The case settled as of July, 2014 with the analysis as confirmation.
- Water Filter Failure Forensic Analysis: Witnessed the forensic examination of a failed water filter assembly by the plaintiff's laboratory; performed independent forensic analysis for the Defense. February 2015. The case was judged a manufacturing error which the forensic analysis collaborated.
- Industrial Injury Analysis and Examination: For the Defense, the equipment manufacturer, analyzed the supplied documentation and performed an on-site inspection of equipment that fell onto and injured the operator. April 2015. The case settled with the report as crucial defense leverage.
- Waste Pipe Failure Analysis: For the plaintiff, analyzed the cause of failure of a copper waste line under a residence, compared the "jury rig" repair to the Uniform Plumbing Code, and obtained specifications for current DWV piping. Computed a plausible failure cause with calculations and observations. The suit is in progress through deposition.
- Personal injury: For the plaintiff, the plaintiff was injured by a snap back on an office chair while examining the chair's operation causing significant neck injury. Was retained to examine the chair and arrive at conclusions related to the probable actions and their causes. The suit settled following deposition.
- Personal Injury: For the plaintiff, the plaintiff suffered finger avulsions from an accident on a riding mower that was modified by the defendant. The case settled out of court.

Associations

National Society of Professional Engineers, Fellow:

Board of Directors Member
 Executive Committee Member
 Regional Vice President
 Regional Secretary/Treasurer
 State President
 State Treasurer

Chapter President

Committees: Board of Directors sub-committee on NSPE Product definition, Policy Review Committee (chair), Licensure and Qualifications Committee, Products and Services, Candidate Screening, Communications, National MathCounts Volunteer, State MathCounts (chair)

American Society of Mechanical Engineers, member
Section Treasurer
Section Board of Directors member

Project Management Institute, member
Section Director of Instruction
Section Sponsorship Task Force Lead

National Ski Patrol, National Award No. 7447
Outdoors Emergency Care (OEC) instructor
Outdoors Emergency Care (OEC) instructor trainer
Outdoors Emergency Care (OEC) Regional Administrator
Level 1 avalanche instructor
Local patrol Board of Directors
Local patrol advisor: Duty Patrol Leader, Communications, Transportation

Publications

- Werner, V.A.: *Water Absorption Studies on Floatation Foams*, Pacific Car & Foundry Co., 1972
- Werner, V.A., Boyce, W., *Truck Noise II, Evaluation and Reduction of Heavy-Duty Truck Noise, Final Report*, Paccar Truck R & D Center, DOT TSC –OST-76-21 1975
- Werner, V.A., Jones, G.R.: *Effluent Neutralization Study, for Hooker Chemicals and Plastics Corp*, Chiyoda International Corp., 1978
- Werner, V.A., et al, *Report on Chiyoda Thoroughbred 121 Prototype Plant, for Gulf Power Plant*, Sneads, FL, Chiyoda International Corp., 1979
- Werner, V.A., et al, *Conceptual Design Study of a CT-121 Package Unit*, Chiyoda International Corp., 1980
- Werner, V.A., *Criteria for Waste Storage Tank Integrity Assessment*, Boeing Aerospace Co, 1981
- Werner, V.A., et al, *Project Memorandum 89-102, Minton Steam Line Analysis, for ITT Rayonier Corp.*, Harris Group Inc., 1990
- Werner, V.A., et al, *Project C-018H Waste Water Engineering Alternative Report, for Westinghouse Hanford Co.*, Ebasco Environmental Co., 1991
- Werner, V. A., et al: *Liquid effluent Treatment Facility Secondary Waste Engineering Study, for Hanford Environmental Restoration Program Support*, Ebasco Environmental Co., 1992

- Werner, V.A., *On-Site Traffic Noise Study for the Boeing Fredrickson Site, for The Boeing Co.*, Ebasco Environmental Co, 1992
- Werner, V.A., et al, *Expanded Noise Study for the Boeing Fredrickson Site, for The Boeing Co.*, Ebasco Environmental Co, 1992
- Werner, V.A., et al, *Noise Study for the Boeing Fredrickson Site, for The Boeing Co.*, Ebasco Environmental Co, 1992
- Werner, V.A., et al, *Noise Study Supplemental for the Boeing Frederickson Site, for the Boeing Co.*, Ebasco Environmental Co., 1992
- Werner, V.A., "Heat Recovery Brings Savings to Seattle," *District Energy* magazine, International District Energy Association, first quarter, 2002
- Werner, V.A., "Membership: It All Adds Up," *PE* magazine, National Society of Professional Engineers, July 2010
- Werner, V.A., "Why Engineers are Invisible," *PE* magazine, National Society of Professional Engineers, October, 2014

Presentations

- Presentation to a Department of Transportation symposium on the Truck Noise Analysis results, Cambridge, MA, 1975
- Direct Contact Inc heat recovery system presentation to the International District Energy Association, Denver, CO, 2003
- Virtual Energy Audit presentation to the International District Energy Association, Orlando, FL (2008) Miami, FL (2010), and San Diego, CA (2012)
- Virtual Energy Audit presentations to the Western Boiler Association in Redding, CA (2006), Spokane, WA (2008), and Eugene, OR (2009)
- Numerous marketing presentations