WALTER E. LORBER

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OBJECTIVE

Seeking a full-time, part-time, or telecommuting position as a Regulatory Product Safety Engineer.

- Offering extensive experience in the worldwide applications of the Information Technology (60950-1) or Laboratory Equipment (61010) standards.
- Able to direct technicians to conduct product safety tests in internal or external labs, either face-to-face or virtually, using technology interfaces such as Web cams, data acquisition recorders, electronic document sharing, teleconferencing, and Internet-enabled meetings.
- Perform technical consultation from the RFQ phase through final installation and sign-off for Sales & Marketing, Global Trade, Field Service, and others to resolve product safety compliance issues and facilitate the sales process.

EMPLOYMENT HISTORY

HEWLETT-PACKARD

HPCC: R&D design center for HP's commercial desktop computers, Thin Client, and Point of Sale systems.

HPSL: R&D design center for HP's supercomputers (SuperDome & Windjammer) and external I/O racks.

PRODUCT SAFETY ENGINEER / ENVIRONMENTAL TEST ENGINEER

- EVALUATED electrical and mechanical system designs for HPSL and HPCC from inception through ongoing customer field support to insure compliance with national and international (UL/CSA, CCC, BSMI, TUV, PSE/VCCI/MITI, C-Tick, GOST, KCC/MIC, NOM/NYCE, DEMKO/FEMKO/NEMKO/SEMKO, 60950-1) product safety standards.
- WROTE CB report draft for all supported products under the UL Client Test Data and CSA Category programs.
- SUPERVISED technician testing in 17025 accredited test lab under UL and CSA SMT programs.
- NEGOTIATED with regulatory agencies worldwide to avoid adding unnecessary product costs while maintaining conformity to all applicable standards.
 - o COLLABORATED with regulatory agencies to implement Alternate Construction methodology.
 - REDUCED the risk of shipment holds to customers by implementing a Split Inspection Program with UL and TUV.
- EVALUATED all electrical systems for product safety compliance: AC mains systems include internal AC power distribution, bulk AC-to-DC converters, circuit breakers, and interrupt devices; DC power distribution includes high-current Bus bars, distributed DC power bricks, and discrete board-level modules.
- EVALUATED insulation systems (Reinforced, Double, Basic, Operational/Functional) and grounding systems (PE system ground, DC ground, and other discrete systems) for product safety compliance.
- PERFORMED risk assessments and Hazard Based Safety Engineering (HBSE, IEC 62368) analyses for HPSL and HPCC new product designs as part of HP's forward-looking compliance certification process, judging the impact of regulatory changes to product designs throughout the product life cycle.
- COLLABORATED on numerous Hewlett-Packard corporate task forces and R&D design committees to develop solutions and internal policies for multinational product safety issues.

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- Product Safety Technical Advisory Group (TAG) to the HP Corporate Regulations Council Small, select team of product safety engineers who make recommendations regarding how HP should address worldwide product safety issues.
- Hazard Based Safety Engineering Report Format Committee Engineering subcommittee of the HP TAG team whose mission is to develop a standardized methodology and reporting format for HBSE for ultimate use worldwide by IEC Technical Committee TC-108.
- Customer Environmental Criteria for Temperature, Humidity, and Altitude Committee –
 Multidisciplinary team that meets weekly to completely revise the corporate standards on test
 methodologies for new product environmental qualifications.
- o Taiwan Emerging Issue (EI) BSMI Safety Committee Corporate subcommittee of the TAG team assembled to address the dramatic changes in the product certification process made in Taiwan. Team negotiated significant concessions from Taiwan which reduced the impact (costs, approval time, and safety submittal process complexity) for all HP products.
- Common Test Elements Committee Subcommittee of Customer Environmental Criteria for Temperature, Humidity, and Altitude, charged with identifying and standardizing the common test elements in all environmental testing.
- Fans Committee Small committee of engineers that define the common requirements and specifications for the fans used in all HP product lines.
- WROTE and published on the HP intranet a Product Safety Design Guide for Secondary Power Circuits as a design resource for Electrical and Hardware Design Engineers.
- CONSULTED to Mechanical Layout Designers and approve labels as appropriate for product safety
 requirements related to hazard identification (shock, current leakage, heat, multiple power sources, pitch, step,
 tip, trip, weight, laser, acoustics, operational and non-operational magnetics,) as well as regulatory agencies'
 international symbology for hazard identification.
- CONSULTED to internal HP manufacturing as well as external OEMs and ODMs manufacturing factories in order to insure that their product safety submissions meet both HP and regulatory agency requirements.
 - o Review their agency reports; determine when revisions are necessary; and insure that these reports are integrated seamlessly within HP documentation.
 - Serve as the Product Safety liaison and support to external manufacturing sites, especially for factory inspections and the changeover of product models.
- CONSULTED to ad hoc teams to address field service issues: convene to immediately define the situations, determine the scope in terms of worldwide distribution, perform root cause analysis, generate potential solutions, implement engineering changes, and follow-up to insure that intended results were achieved without adverse effects.
- MONITORED and review changes to critical components and circuit design that affect product safety;
 determine the impact of these changes; and communicate with all affected divisions to insure product and corporate integrity. Review and approve all ECOs related to product safety issues and concerns for both the R&D and manufacturing divisions.
- DEVELOPED product safety documentation for publication on the HP Web site to support Sales and Marketing
 initiatives. Also develop Certificates of Conformance, Certificates of Similarities, and other types of Customs
 declarations related to product safety. Consult to documentation staff to develop and maintain product safety
 compliance information in the User, Service, and Installation Manuals.
- CONDUCTED environmental tests for temperature, humidity, altitude, shock, and vibration, both at the system
 and individual module levels. Also conduct operational and non-operational magnetic tests as required by
 international air cargo shipment and operator proximity compliance, as well as testing on the packaging that
 extends from palletized equipment through individual boxed items.

TÜV RHEINLAND OF NORTH AMERICA, Boston, MA & Austin, TX OfficesOct. 1997 – June 2000

Notified Body headquartered in Germany that tests and certifies products for compliance with European and worldwide safety laws and directives.

PRODUCT SAFETY ENGINEER (SPECIALIST I)

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- EVALUATED, tested and certified a wide range of manufactured products for CB Scheme, GS, NRTL, BAUART, and CE, specializing in Information Technology and Telecommunications; also was proficient in the Laboratory Equipment, Luminaries, Lasers, Industrial Controllers, and Household Products areas.
- CONDUCTED safety certifications for U.S., Canadian, European, and international markets for numerous standards, including UL, CSA, IEC and EN 60950-1, 825, 61010, 730, 598-2-17, 50091-1-2, 335, and the LVD.
- WROTE CB, GS, BAUART, and NRTL reports for all of the standards listed above, including all country deviations for both new and alternate construction products.
- REVIEWED and approved other TÜV engineers' investigation reports and confirmed their product findings for technical review.
- CONSULTED to clients on strategies to certify common components and to consolidate multiple models into
 product families in order to reduce certification costs, expedite the certification process, and simplify future
 approvals.
- CONDUCTED factory inspection audits, including both First Factory Quality Reviews and Follow Up Service, for such industries as IT, telecom, household products, and mechanical products. Factories ranged from OEMs and subcontractors to re-licensing manufacturers and subassembly split inspection facilities.
- TRAINED newly hired Product Safety Engineers with backgrounds in different standards, and mentored them until they were certified for independent product investigations; also trained newly hired junior engineers to perform factory inspections.
- DELIVERED half-day seminars for both new and existing clients on EN 60950, the Low Voltage Directive, and the Product Safety Review Process.
- CONDUCTED client audits to examine quality systems and product compliance in the design and manufacturing environments. Selected in 1999 to conduct Y2K assessments throughout the U.S. for key clients.
- Proficient with Microsoft Office Suite, MS Access, Visio, Lotus Notes, SAP, IEEE-488, BASIC, PASCAL, and various proprietary software; working knowledge of C++ and other programming languages.

COMPUTER PRODUCTS, INC., South Boston, MA (now Artesyn Technologies, Framingham, MA).......1984 – 1997

\$500 million multinational corporation that designs and manufactures both standard and custom AC/DC and DC/DC power supplies in the 1 watt to 1500 watt range.

 PRODUCT SAFETY ENGINEER
 1993 – Oct. 1997 (5 years)

 MANAGER OF TEST ENGINEERING
 1988 – 1993 (4 years)

 TEST ENGINEER
 Jan. 1984 – 1988 (4 years)

- ACHIEVED recognition by UL Client Test Data Program, CSA Category Program, and VDE as an Agencyapproved independent Safety Engineer (with TÜV Product Service approval in process).
- PREPARED complete CB Reports with full documentation packages, including hardware drawings, PCB layouts, agency forms, oscilloscope plots, test data sheets, transformer construction forms, critical components forms, compliance data sheets, and photographs.
- SUPPORTED internal and external customers with product safety solutions utilizing extensive knowledge of domestic and international Safety Agency Standards. Proficient in IEC 950, UL 1950, EN 60950, and CSA 22.2 No. 950 for IT applications.
- CONSULTED with team members worldwide (including Design Engineering, Manufacturing Engineering, Component Engineering, Sales, and Marketing) throughout the new product development cycle, translating Safety Agency requirements into clear, concise, and cost-effective action items resulting in product approvals.
- CONDUCTED safety compliance tests for UL, CSA, AUSTEL, BABT, VDE, and TÜV.

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- DESIGNED and supervised the construction of a wide range of test equipment, including a rack-and-stack IEEE-488 power supply test station and its ATE software used for the company's most advanced product lines; room-size and portable elevated temperature burn-in chambers with power cycling; and high voltage dielectric strength test equipment up to 8 KV designed to be safe for unskilled operators.
- PROVIDED Test Engineering support to in-house and contract manufacturers for in-process test, final test, and burn-in during new product introduction cycles. Teamed with Design Engineering, Manufacturing Engineering, and outside contract manufacturers to deliver test solutions.
- DESIGNED in-process and ATE fixturing, developed formal test procedures and written specifications, and wrote ATE software templates for product families. Defined and configured all commercially procured ATE equipment (Intepro and N.H. Research).
- WROTE ISO9001 procedures for the development of test methodologies for all product lines. Developed stepby-step operator manuals for product test, burn-in, equipment calibration, and equipment preventive maintenance.
- HIRED supervised and evaluated the performance of five engineers and technicians in addition to numerous short- and long-term contract staff. Trained technicians to: construct interfaces for ATE/manual test and burnin equipment; troubleshoot production unit failures and test fixtures; write ATE test programs and ISO9000 procedures; perform equipment preventive maintenance and calibration; and maintain a calibration database.

Manufacturer of AC/DC, linear, and switcher power supplies in the 100-1000 watt category.

MANAGER, R&D LABORATORY (1981 – 1984) QUALITY ASSURANCE ENGINEER (1977 – 1981)

- MANAGED 12 employees including engineers, technicians, prototype assemblers, documentation administrators, and calibration personnel. Designed and built all production test equipment, an elevated temperature burn-in room, and an ATE using an early Hewlett Packard GPIB interface.
- SERVED as a member of the Evaluation Team for customer audits, conducted internal audits of the Quality Control Department, and interfaced with customers on quality solutions.
- ASSUMED a wide range of additional duties, including production planning and inventory control, as the company rapidly grew from \$700K to over \$7 million in annual sales.

U.S. Navy - Second Class Petty Officer, ABH2 (E5) Honorable Discharge

EDUCATION

B.S.E.E. – University of Lowell, Lowell, MA (U. Lowell is now part of University of Massachusetts) – (with High Honors) {GPA 3.75} (1982-87 all classes taken at the evening division while working fulltime days)

A.S., COMPUTER SCIENCE (with High Honors) – Dean College, Franklin, MA (with High Honors) {GPA 3.76} (1987-89 all classes taken at the evening division while working fulltime days)

PATENT AWARD

U.S. PATENT – Awarded U.S. Patent No. 6,857,887: Current Limiting Engagement Apparatus (February 22, 2005)

PROFESSIONAL AFFILIATIONS

IEEE Member # 90274333

National Association of Fire Investigators, Certified Fire and Explosion Investigator # 11851-6020 Central Texas Product Safety Engineering Society (IEEE Affiliate) *Steering Committee, 3 years* Central Texas Product Safety Working Group, Austin, TX (CTPSWG)
Northeast Product Safety Society, Boston, MA (NPSS) *Steering Committee, 4 years*

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