

STAN RAYKHMAN, P.M.P.

Vice President



Summary

Stan Raykhman has more than 25 years of experience in electrical, controls and power systems engineering across marine, defense, critical infrastructure and industrial environments. His expertise includes vessel power and control systems, propulsion controls, regulatory approvals, root cause investigations and forensic analysis. He has supported naval, commercial and government vessel programs and led engineering standards, quality and compliance programs for critical infrastructure control systems. Stan provides forensic investigation, root cause analysis and litigation support for marine automation, control and electrical power systems.

Areas of Technical Expertise

- Marine Automation & Propulsion Control Systems
- Alarm, Monitoring & ACCU-Classed Systems
- Electrical Power & Switchgear Systems
- PLC / HMI / SCADA Integration
- Marine & Defense Compliance (USCG / ABS / MIL-STD)
- Critical Infrastructure & Data Center Power Systems
- Root Cause & Failure Analysis
- Forensic Engineering

Education

- M.S., Electrical & Computer Engineering, 2009, New York Institute of Technology
- B.S., Electrical Engineering, 2006, New York Institute of Technology

Certifications

- Project Management Professional (PMP), Project Management Institute
- Certified ISO 9001:2015 Lead Auditor (QM, AU, TL), Exemplar Global
- OSHA 30 / NFPA 70E

Select Project Experience

Root Cause & Failure Analysis

Engine Room Fire - Passenger Ferry,* Performed remote analysis of alarm and monitoring system trend data within 24 hours of an engine room fire, in the role of the alarm and monitoring system provider. Identified the cause of the fuel system failure and a gap in required alarm coverage under applicable classification and regulatory requirements. Recommended corrective action using existing instrumentation.

Standby Generator Fail-to-Start - Critical Power Facility,*

Led root cause investigation of a repeated fail-to-start condition initially attributed to a control programming error. Rejected the initial diagnosis, preserved the suspect control module under chain of custody, and coordinated original equipment manufacturer laboratory analysis. Microscopy identified micro-arcing on a normally energized fail-safe relay contact, with contact degradation driven by condensation exposure. Investigation resulted in corrective action and a design standard change relocating critical input and output hardware to a conditioned environment.

Marine Automation and Propulsion Control

U.S. Navy Vessel Programs,* Designed integrated control, alarm, and monitoring systems, and managed installation and commissioning of alarm and monitoring, propulsion control, and dynamic positioning class 2 systems.

Passenger Ferry Propulsion Control Platform,* Managed design, installation, and commissioning of the propulsion control platform for a passenger ferry program.

Commercial Ferry Fleet Alarm and Monitoring Systems,*

Engineered ACCU-classed alarm and monitoring systems integrating more than 1,500 input and output points for commercial ferry fleets.

*Denotes work performed with previous employer.

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Government Hopper Dredge Programs,* Designed generator monitoring, ballast, tank level, and propulsion control systems for government-operated hopper dredges.

Cargo Control and Tank Monitoring System - Government Vessel Class,* Designed cargo control and tank monitoring systems for a government-operated vessel class.

Automatic Generator Transfer System - Commercial ATB Fleet,* Developed and designed a proactive automatic generator transfer system deployed across a fleet of 23 articulated tug and barge vessels.

Regulatory Approval and Type Approval

Intrinsically Safe Tank Monitoring System,* Designed an intrinsically safe tank monitoring system incorporating more than 80 sensors and obtained U.S. Coast Guard regulatory approval.

PLC Platform ABS Type Approval,* Led a next-generation programmable logic controller platform through laboratory qualification testing to achieve American Bureau of Shipping type approval.

ABS Plan Review - Classed Vessel Programs,* Served as the engineering point of contact for American Bureau of Shipping plan review on multiple classed vessel programs, including articulated tug and barge units.

Critical Power and Data Center Systems

Custom Control System Programs - Data Center and Critical Infrastructure,* Directed end-to-end execution of custom control system projects across data center, telecommunications, and critical infrastructure sectors, with accountability for technical quality, regulatory conformance, and delivery. Led root cause analysis for field issues, coordinating design corrections, equipment substitutions, and client-facing technical reviews.

UL 508A Industrial Control Panel Compliance,* Served as designated UL 508A compliance representative, overseeing adherence to industrial control panel standards across design, documentation, and fabrication workflows, and establishing design review checkpoints prior to fabrication.

Military Service

Electrician's Mate Second Class (EM2), United States Navy, 1999 to 2003. Shipboard electrical operations for power generation and distribution systems. Scope of work includes supervision of planned maintenance for switchgear, ship's service diesel generators and 400 Hz motor-generator systems, contractor supervision during power generation system overhaul and diesel generator governor controller replacement and calibration.

CONTACT

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