

# Manuel Montoto Terrassa, PE, Esq.

Construction / Engineering / Light Rail Transit Maintenance

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Expert performance, operating results, and financial success in the planning and management of complex, big budget projects and contracts in rapid transit maintenance, construction, and manufacturing with major successes in:

- Strategic Planning and Goal Setting
- Project Management
- Control, Power Distribution and Communication Systems
- Technical Leadership
- Organizational Development
- Engineering and Technology Initiatives
- Customer Relationship Management
- Yield Management
- Six Sigma Process
- Productivity/Process/Efficiency Improvements
- Employee Training and Development
- Profit and Loss Management

## CAREER HIGHLIGHTS

TRI-CITY ELECTRICAL CONTRACTORS, INC – ALTAMONTE SPRINGS, FL

2016

### Senior Project Manager, 2016

Managed big budget electrical construction projects totaling over \$10 million including Design Assist efforts at several Healthcare Facilities in the state of Florida, involving Electrical Room Renovations, Bed Tower Expansions and Build-outs, and CEP Additions.

LORD ELECTRIC COMPANY OF PUERTO RICO - SAN JUAN, P.R.

1999 – 2016

### Project Manager, 2011 – 2016

Directed big budget electro-mechanical construction projects for several government agencies, municipalities, and customers

- Led two construction projects totaling \$6 million in Revenue required to install the electrical, communications, plumbing and mechanical systems for a New Parking Structure at the Federal Veteran Affairs Hospital at San Juan and a Public Car Terminal and Multi-purpose Building at the Toa Alta Municipality
- Administered a \$5 million construction project designed for automating twenty (21) water filtration plants of the Metro and East regions of the Puerto Rico Aqueducts and Sewage Authority (PRASA). Led the construction team and subcontractors responsible for the electrical equipment and instrument installation, calibration, and testing.

### Systems Maintenance Manager, 2004 – 2010

Tren Urbano Transit System, San Juan, PR

Promoted to high-profile leadership position managing \$20 million systems engineering contract delivering 24/7 mission critical preventive/corrective maintenance services across 11 mile double-line rail transit system with 16 stations and central operations facility. Provide leadership and technical direction to 30 maintenance technicians, engineers, and several certified subcontractors with oversight for Train Control (Siemens), Power Distribution (Siemens), Communications (PA, Telephone, VMS, SCADA, Fiber Optic, Channel Bank, Seismic Detection, CCTV, SSCS) and Fare Collection System (Cubic Transportation System) that support urban transit operation in San Juan.

- Led cross-functional rapid action teams achieving over 99.9 percent completion ratio on 38,000 maintenance incidents throughout five years of transit system operation, while concurrently managing 22,000 pre-programmed PM work orders.
- Directed the systems maintenance operation that supported the urban transit operation achieving 99.86 percent completion vs. scheduled revenue miles.
- Defined organizational structure, job classification system, and training programs for teams under assignment.
- Efficiently managed scope, schedule and costs, resolved technical, and doubled original profit plan.
- Authored employee manual and provided labor law guidance to the company.

### Project Engineer, 1999 – 2004

Led 55-member team in the implementation and initial installation of Power Distribution, Train Control, and Communications Systems, a full 25% of \$85 million project. Scope of leadership accountability included managing customer relationships, planning and coordinating with civil, electrical, and track contractors, implementing safety and quality standards, delivering post-installation checklists and quality documentation to certify equipment.

- Met all construction scheduling milestones discussed with customer, internal productivity, and financial goals.

THE GENERAL ELECTRIC COMPANY

1992 - 1999

CARIBE GENERAL ELECTRIC, Puerto Rico

### Senior Quality Engineer, 1998 – 1999

Challenged to maintain competitiveness, improve process capabilities, and power distribution at Arecibo Plating and Fabrication plants through lean manufacturing, six sigma methodologies, and new technology.

- Introduced portfolio of quality processes, operating procedures, and continuous improvement programs to enhance plant productivity and efficiency.
- Designed and deployed information system enhancement for Fabrication Department, Tool Room, and Spare Parts inventory, increasing return on asset and productivity levels by significantly reducing production related scrap and equipment downtime.

**Six Sigma Quality Black Belt**, 1996 – 1998

Applied mastery and application of Lean Six Sigma principles, tools and methodologies adding value to GE plants.

Palmer – Led Green Belt Six Sigma Training to all management levels.

- Improved yield quality of CB3 Breaker Line from 87% to 94% and led Green Belt Teams to \$300K+ productivity gains for 1998.
- Humacao - Implemented Six Sigma tools, improving molding process product quality, and subsequent reduction in customer returns.
- Lowered material and labor scrap 40% producing \$360,000 in annual savings.
- Vega Alta – Led Six Sigma quality concepts across heater, coil, and overload production lines.
- Reduced overload customer returns 50% producing annual savings of \$75,000.

**Advance Materials Owner**, 1994 – 1995

Designed and deployed JIT inventory reduction and productivity programs including Supplier Pull and Demand Flow Technology at Añasco plant.

- Reduced inventory by \$500,000 or more than 5% of total volume.

MANUFACTURING MANAGEMENT PROGRAM

GENERAL ELECTRIC MOTORS, Erie, PA

**Manufacturing Engineer**, 1994

Assisted Transition Team create, manage, and execute effective project plan transferring manufacturing operations to Dothan AL, Peterborough, ON, and Monterrey, MX. Planned and coordinated Materials Lab and Tool Crib transfer to Dothan and contributed to the start-up production at manufacturing facility in Monterrey.

**Technical Advisor/Supervisor**, 1993 – 1994

Directed and supported 32-member production team in ISO 9002 certified union shop environment following the announcement of Erie Motors operations transfer.

GE MEDICAL SYSTEMS, Milwaukee, WI

**Quality Process Engineer**, 1993

Led Mistake Proofing and Poke-a-Yoke projects, improving product quality and productivity at X-Ray Tube Manufacturing facilities.

**Materials Analyst**, 1992 – 1993

Managed purchases of cable and harness commodities for CT Scanner and MR facilities and implemented JIT Supplier Pull with key suppliers.

**EDUCATION**

UNIVERSITY OF PUERTO RICO LAW SCHOOL, San Juan, PR

**Juris Doctor**, 2005

WASHINGTON UNIVERSITY, St Louis, MO

**BS Electrical Engineering**, 1992

- Stanley Jacques Academic Award

**LICENSURE/DESIGNATIONS**

- Professional Engineer / Florida Board of Professional Engineers, active member (#80985)
- Professional Engineer / PR College of Engineers and Land Surveyors, active member (#19343)
- Admitted to Practice, Puerto Rico Supreme Court / PR Bar Association, active member (#17351)
- Six Sigma, Black Belt Certification

**RELEVANT TRAINING**

- Project Management Program, 2014 – Institute of Project Management, Mechanical Contractors Association of America (MCAA)
- Primavera P6 Training Course, 2011
- Professional Leader Award - PR College of Engineers and Land Surveyors, 2010
- McCormick Systems Job Estimating Program, 2010
- Train Control System (Siemens), Power Distribution System (Siemens), Communications Systems, and Fare Collection System (Cubic Transportation) Operations and Maintenance Trainings, 2010/2007
- Labor Law Seminars, Fiddler, González & Rodríguez, PSC, 2009/2007
- OSHA 30-Hour Training, 2009/2005
- Southeastern Power Distribution Apparatus School & Conference, Auburn University, AL, 2008
- General Electric Manufacturing Management Program, 1992-1994

**TECHNOLOGY SKILLS**

Accubid Pro, Blue Beam, CGC, Spectrum, Primavera Sure Track, McCormick, and MS Office Suite