



**Training Proposal for:  
Murrietta Circuits**

**Small Business**

**ET16-0218**

**Approval Date:** October 20, 2015

**ETP Regional Office:** San Diego

**Analyst:** S. Godin

**CONTRACTOR**

- Type of Industry: Manufacturing  
Aerospace and Defense  
Priority Industry:  Yes  No
- Number of Full-Time Employees  
California: 71  
Worldwide: 71  
Number to be trained: 64  
Owner  Yes  No
- Out-of-State Competition: Competitors Outside CA
- Special Employment Training (SET):  Yes  No
- High Unemployment Area (HUA):  Yes  No
- Turnover Rate: 7%
- Repeat Contractor:  Yes  No

**FUNDING**

- Requested Amount: \$49,920
- In-Kind Contribution: \$30,000

**TRAINING PLAN TABLE**

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee SB <100 Priority Rate	Computer Skills, Continuous Improvement, Manufacturing Skills, OSHA 10/30, HazMat	64	8-60	0	\$780	\$16.02
				Weighted Avg: 30			

- Reimbursement Rate: Job #1: \$26 SB Priority
- County(ies): Orange
- Occupations to be Trained: Administrative Support Staff, Sales Staff, Engineering Staff, Production Personnel, Manager/Supervisor, Owner
- Union Representation:  Yes  
 No
- Health Benefits: Job #1: \$1.77 per hour

**SUBCONTRACTORS**

- Development Services: N/A
- Administrative Services: N/A
- Training Vendors: To Be Determined

**OVERVIEW**

Established in 1980, Murrietta Circuits (Murrietta) ([www.murrietta.com](http://www.murrietta.com)) is a small family owned custom contract manufacturer of printed circuit boards and circuit card assemblies. The Company also provides parts procurement, testing, re-tinning, and box building to specifications for a broad range of companies and industries with a focus on aerospace/military and medical industries.

This will be Murrietta’s second ETP Agreement within the last five years. In its most recent ETP Project (ET12-0434), sixty-six trainees received an average of 60 hours of training in a combination of Manufacturing, Computer, and Continuous Improvement skills. The majority of the training hours focused on the Company’s new manufacturing control/tracking software (Aegis) which went live during the Agreement and replaced an older in-house legacy system. The new software system consolidates shop-floor support functions at each station and provides real-time lot tracking and inventory control.

Training was also delivered in IPC-J Standard, the aerospace quality standard used in the manufacturing of circuit card assemblies. Employees were introduced to the basic concepts of

Lean Manufacturing and completed 5S training during the second half of the Agreement. Training delivered during this agreement provided the skills needed to become MIL-PRF 31032 certified, enabling the Company to manufacture products for the defense industry and expand its customer base.

The Company must continue to refine its manufacturing and business processes and services in order to retain current accounts and acquire new ones. Customer manufacturing and inspection criteria has become more stringent and zero defective parts per million is becoming the standard rather than the exception. To meet changing customer demands and higher quality standards, Murrietta must increase operating efficiencies and manufacturing capacities by building high performance work teams and streamlining operations to increase production output, shorten delivery times, and reduce errors.

The Company has developed a comprehensive plan that builds upon training delivered in the previous project. Lean manufacturing skills (5S) introduced during the first Agreement will be further incorporated across all occupations to improve production processes, product quality, and frontline leadership. Manufacturing and engineering staff will be cross trained on all equipment and processes to maximize production capabilities and reduce waste. Production staff will also receive training in new manufacturing technologies such as “eSurface”, which replaces the traditional way of excess copper etching and circuit board layer build, and is less costly and time consuming than the traditional etching process.

Although the Aegis software was deployed during the previous Agreement, employees only received training on the basic functions. Training on the different modules/components will increase the functionality and user ability of the software.

## Training Plan

**Computer Skills** – Advanced training on the recently deployed Aegis software will be delivered to Engineers, Production Staff and selected Managers/Supervisors to streamline production flow and track quality performance.

**Continuous Improvement** – Trainees in all occupations will receive training in topics such as Team Building, Leadership, and quality concepts. Training in Six Sigma and process improvement will help workers standardize processes, control quality, and improve efficiencies. Team building and problem solving will lead to improved operations and promote enhanced interactions with both internal and external customers. Training will be offered to all job occupations.

**Hazardous Materials** – Production Staff, Managers and Supervisors who work with hazardous materials will receive skills training in hazardous waste/spill operations, emergency response protocol, and proper completion of material safety data sheets.

**Manufacturing Skills** – Training will be offered to Production, Engineering and selected Managers/Supervisors to improve skill sets in all areas of production, processes, and procedures. Training on various machines will allow trainees to operate equipment more efficiently. Topics such as Inspection Techniques and Preventative Maintenance will provide the skills necessary to improve product quality and the Company’s overall manufacturing processes.

## Certified Safety Training

OSHA 10/30. This training is a series of courses “bundled” by industry sector and occupation. It consists of 10 hours of classroom for journey-level workers and 30 hours for frontline

Supervisors. The coursework is geared to the manufacturing and construction industry. Completion of the training results in a certificate that expands employment opportunities. The coursework must be approved by Cal-OSHA, and the instructors must be certified by Cal-OSHA.

### **RECOMMENDATION**

Staff recommends approval of this proposal.

### **PRIOR PROJECTS**

The following table summarizes performance by Murrietta under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET12-0434	Anaheim	6/12/12 – 6/11/14	\$99,008	99,008 (100%)

**Exhibit B: Menu Curriculum****Class/Lab Hours**

8-60

Trainees may receive any of the following:

**COMPUTER SKILLS**

- Aegis Software Skills

**CONTINUOUS IMPROVEMENT**

- Lean Concepts
- Six Sigma
- 5-S/6-S Principles
- MIL-PRF 31031 Certification Updates
- AS-9100 Updates
- ISO-9000-9001 Updates
- ISO Medical
- Material Requirements Planning (MRP) System Updates
- Inspection Techniques
- Inventory Control
- Leadership Skills
- Train the Trainer
- Problem Solving and Decision Making
- Building High Performing Teams
- Process & Quality Improvement

**HAZARDOUS MATERIALS**

- Hazardous Materials Handling & MSDS Documentation
- Registration, Evaluation, Authorization & Restriction of Chemical Substances
- Emergency Response Protocol & Clean-Up

**MANUFACTURING SKILLS**

- Equipment Operations, Preventive Maintenance & Troubleshooting
- X-Ray Certification Skills
- Automated Optical Inspection Machine (AOI) Skills
- IPC-A-600
- IPC-A-610 Updates
- IPC-6012 Updates
- WBS-10 Updates
- Printed Circuit Board (PCB) Skills
- J-Standard Skills
- ESD Skills (Electro Static Discharge)
- eSurface Skills
- Electrical Testing Skills
- Circuit Board Testing (Functional & Stress Testing)
- Assembly Skills

**OSHA 10/30 (Certified OSHA Instructor)**

- OSHA 10 (Requires completion of 10 hours)
- OSHA 30 (Requires completion of 30 hours)

General Safety Training is capped at 10% of a trainee's total training hours

Note: Reimbursement for retraining is capped at 60 total hours per-trainee, regardless of method of delivery.