

DELEGATION ORDER



**Retrainee – Job Creation
Training Proposal for:
EMSolutions Inc.**

Small Business ≤ \$50,000

ET15-0327

Approval Date: 11/14/14

ETP Regional Office: San Francisco Bay Area

Analyst: A. Nastari

CONTRACTOR

- Type of Industry: Manufacturing
Priority Industry: Yes No

- Number of Full-Time Employees
California: 14
Worldwide: 14
Number to be trained: 20
Owner Yes No

- Out-of-State Competition: NAICS Code Eligible
- Special Employment Training (SET): Yes No
- High Unemployment Area (HUA): Yes No
- Turnover Rate: 10%
- Repeat Contractor: Yes No

FUNDING

- Requested Amount: \$19,708
- In-Kind Contribution: \$12,740

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	Business Skills, Computer Skills, Cont. Improv., HazMat, Literacy Skills, Mfg. Skills	14	8 - 60	0	\$884	\$16.25
				Weighted Avg: 34			
2	Retrainee SB <100 Job Creation Initiative Priority Rate	Business Skills, Computer Skills, Cont. Improv., HazMat Literacy Skills, Mfg. Skills	6	8 - 60	0	\$1,222	\$13.55
				Weighted Avg: 47			

- Reimbursement Rate: Job #'s 1 & 2: \$26 SB Priority
- County(ies): Alameda
- Occupations to be Trained: Administrator, Assembler, Buyer, Engineer, Inventory Controller, Machine Operator, Owner, Programming Technician, Project Scheduler, Quality Inspector, Sales/Marketing Staff
- Union Representation: Yes
 No
- Health Benefits: Job #'s 1 & 2: \$1.80 per hour

SUBCONTRACTORS

- Development Services: N/A
- Administrative Services: N/A
- Training Vendors: N/A

OVERVIEW

Founded in 2007 in Fremont, EMSolutions Inc. (EMSolutions), is an electronics contract manufacturing company that provides prototype and production of PCB assembly components. The products are used by manufacturers of semiconductors, wireless communication, networking and security products, as well as medical devices. The Company also manufactures

test (evaluation) boards used by engineers of Memory/Storage devices in testing their latest PC flash memory controllers. EMSolutions' products require precision assembly customized to clients' specifications per complex blueprints provided to EMSolutions' Engineers.

Expansion and Job Creation

In support of job creation, the Panel is offering incentives to companies that commit to hiring new employees. Under the Retrainee-Job Creation program, training for newly-hired employees will be reimbursed at a higher rate and trainees will be subject to a lower post-retention wage.

From 2012 to present, EMSolutions has experienced an increase in customer demand for prototyping and manufacturing of evaluation boards, and reference boards, which has resulted in increased revenue of close to 55% from its 2013 fiscal year. EMSolutions expanded its workforce from eight workers in 2013 to its current employ of 14. EMSolutions plans to hire an additional six workers during the next six months who will participate in the Company's proposed ETP training plan. Therefore, Job Number 2 will be allocated for the training of six new workers.

The Company also purchased two new machines, one for its production floor and one for advanced inspection usage. The management team has determined that in order to accommodate the increase in production demands, new equipment, and additional workforce, it must expand its facility into an adjacent building. Upon completion of the move in September 2014, EMSolutions plans to add two more Surface Mount Technology (SMT) lines in order to increase production capacity required to support a higher turnout of products. The lines should be operational by early 2015. EMSolutions finds that Original Equipment Manufacturers (OEMs) are researching and developing manufacturing processes with local suppliers rather than offshore out-sourcing, thereby reducing time constraints, shipping costs, and language barriers.

In order to meet its expanded business demands, EMSolutions must upgrade the skills of its workforce across all departments. Manufacturing processes and procedural training is required in technical and electronics components, operation of SMT and Automatic Optical Inspection equipment, continuous improvement training in ISO required for documentation traceability and record retention, and computer software programs in Microsoft Office Suite, CAM/CAD viewer, and mechanical software required to analyze project details submitted by its customers.

EMSolutions must further provide training in Vocational Literacy Skills. It reports that 40% of its workforce does not read or speak English. Vocational skills are essential for the Company to continue its growth. Training will consist of Team Communication Skills, Blueprint reading, and manufacturing standards. The Company also represents that these trainees will be hired into "net new jobs" as a condition of contract.

Training Plan

In this proposal, EMSolutions will train its Administrator, Assemblers, Buyers, Engineers, Inventory Controller, Machine Operators, Owners, Programming Technician, Project Scheduler, and Quality Inspectors in Business, Computer, Continuous Improvement, Hazardous Materials, Literacy Skills, and Manufacturing Skills. Some training in Computer and Manufacturing Skills will be delivered by EMSolutions' owners. The Company will acquire vendors to deliver training in Continuous and Computer Skills.

Business Skills: Training will be provided to Administrators, Buyers, Project Managers, and Sales/Marketing Staff in Presentation, Communication, Negotiation, Customer Service, Project and Priorities Management skills. The training is required in order to expand its market and sales capabilities.

Continuous Improvement: Training will be delivered to all occupations, including Owners, who will receive training in Lean Manufacturing, ISO 9001:2008, 5 S Methodology, and PCB

Assembly and Electronics Manufacturing Quality Standards. The training is required in order to meet and maintain standards require by EMSolutions' customers.

Computer Skills: Training will be offered to Administrators, Buyers, Project Managers, and Sales/Marketing Staff, in intermediate/advanced Microsoft Office Suite and Microsoft Project programs. Engineers will receive training specific to CAD, CAM, and Gerber software.

Literacy Skills: Training in vocational English for the workplace will be offered to Assemblers, Operators, Programming Technicians, and Quality Inspectors in order to expand communication within the production floor, provide a clearer understanding of procedural requirements, and understand customers' specifications in to order reduce rework. The needs are based on internal assessments conducted by the workers' management team.

Hazardous Materials: Training will be offered to Assemblers, Machine Operators and Quality Inspectors in the proper handling and elimination of materials used in the manufacturing of EMSolutions products.

Manufacturing Skills: Training will be offered to all occupations specific to their job functions. Administrators, Buyers, Project Managers, Quality Inspectors, Sales and Markeing staff need to have an overview of the products, the Company's manufacturing capabilities and manufacturing time frames in order to address customers' questions. Assemblers will receive training in the Soldering of Electronic components, IPC-A-610 - Acceptability of Electronics Assemblies and Blueprint Reading. Machine operators will receive updated and new manufacturing processes skills in the Company's SMT and AOI machines as well as maintenance procedures.

RECOMMENDATION

Staff recommends approval of this proposal.

Exhibit B: Menu Curriculum

Class/Lab Hours

8 – 60

Trainees may receive any of the following:

BUSINESS SKILLS

- + Presentation and Communication skills
- + Price Analysis and Negotiation skills
- + Customer Service
- + Priorities Management
- + Project Management
- + Vendor Qualification
- + Purchasing
- + Inventory Control

COMPUTER SKILLS

- + CAM, CAD and Gerber software operation and viewing
- + SMT Programming Training
- + Production Software
- + Microsoft Project Software training
- + Microsoft Office Suite training
- + Troubleshooting internal network

CONTINUOUS IMPROVEMENT

- + Communication Skills
- + ISO 9001:2008
- + PCB Assembly and Electronics Manufacturing Quality Standards
- + 5 S Methodology
- + Understanding Lean Manufacturing

HAZARDOUS MATERIALS

- + Ways of properly disposing solder paste, flux, other remaining manufactured material
- + How to handle hazardous material

MANUFACTURING SKILLS

- + Surface Mount Technology Training
 - o Machine Set up
 - o SMT Printing Machine
 - o SMT Pick and Place Machine
 - o Reflow Oven
 - o Comprehension of set up sheets, SMT program sheet, documentation from customers such as assembly programs and written instructions
- + Machine Training
 - o AOI Machine
 - o X Ray and Microscope Operations
 - o Wave Machine
 - o Solder Pot Machine

- Board Cleansing Machine
- ✦ Blueprint reading (Drawings, Gerber files, Mechanical files and others)
- ✦ SMT Programming
- ✦ Material Handling Procedures
- ✦ ESD protection
- ✦ Quality Testing
- ✦ Soldering and Inspection
- ✦ The Basics of Identifying Various Electronics Components
- ✦ Training of IPC-A-610, Acceptability of Electronics Assemblies Training
- ✦ Production Process

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

LITERACY SKILLS

- ✦ Vocational English (Communication, Blueprint Comprehension, Reading and Understanding Procedures, Manufacturing Standards)

Literacy Training cannot exceed 45% of total training hours per-trainee.

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