



RETRAINEE - JOB CREATION

Training Proposal for:

M.S. Aerospace Inc.

Agreement Number: ET16-0180

Panel Meeting of: September 25, 2015

ETP Regional Office: North Hollywood

Analyst: J. Romero

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate Job Creation Initiative	Industry Sector(s):	Aerospace and Defense Manufacturing Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Los Angeles	Repeat Contractor:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Union(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Number of Employees in:	CA: 290	U.S.: 290	Worldwide: 290
<u>Turnover Rate:</u>	4%		
<u>Managers/Supervisors:</u> (% of total trainees)	5%		

FUNDING DETAIL

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">Program Costs</td></tr> <tr><td style="text-align: center;">\$188,300</td></tr> </table>	Program Costs	\$188,300	-	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">(Substantial Contribution)</td> <td style="text-align: center;">(High Earner Reduction)</td> </tr> <tr> <td style="text-align: center;">\$0</td> <td style="text-align: center;">\$0</td> </tr> </table>	(Substantial Contribution)	(High Earner Reduction)	\$0	\$0	=	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">Total ETP Funding</td></tr> <tr><td style="text-align: center;">\$188,300</td></tr> </table>	Total ETP Funding	\$188,300
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In-Kind Contribution:	100% of Total ETP Funding Required	\$256,550
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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 Priority Rate	Business Skills, Computer Skills, Continuous Improvement, Hazardous Materials, Management Skills, OSHA 10, Osha 30, Advanced Technology, Manufacturing Skills, PL-Manufacturing	175	8 - 200	0	\$936	\$15.97
				Weighted Avg: 52			
2	Retrainee Job Creation Initiative Priority Rate	Business Skills, Computer Skills, Continuous Improvement, Hazardous Materials, Management Skills, OSHA 10, Osha 30, Advanced Technology, Manufacturing Skills, PL-Manufacturing	25	8 - 200	0	\$980	\$13.31
				Weighted Avg: 49			

Minimum Wage by County: Job Number 1: \$15.97 per hour Standard Wage for Los Angeles County; Job Number 2 (Job Creation): \$13.31 per hour for Los Angeles County
Health Benefits: Yes No This is employer share of cost for healthcare premiums – medical, dental, vision.
Used to meet the Post-Retention Wage?: Yes No Maybe
 Up to \$2.00 per hour may be used to meet the Post-Retention Wage.

Wage Range by Occupation		
Occupation Titles	Wage Range	Estimated # of Trainees
Job Number 1		
Administrative Staff		10
Maintenance Staff		6
Managers & Supervisors		6

Production Staff		130
Quality Assurance Staff		15
Sales Staff		4
Job Number 2		
Maintenance Staff		2
Production Staff		20
Quality Assurance Staff		3

INTRODUCTION

Founded in 1992, M.S. Aerospace, Inc. (MSA), (www.msaerospace.com) manufactures high temperature and high strength aerospace fasteners, bolts, studs, pins, and screws for the aerospace, military and medical industries. Some of their clients include: US Government, General Electric and Pratt & Whitney. MSA produces superior quality specialty fasteners in styles such as 12-Point, D-Head, 6-Lobe, Slab-Head, Hex Head, Shear Head, Flush Head, and Spline Head configurations. MSA is also capable of designing parts for any application which can be custom fabricated to customer specifications. MSA continues to add many high-strength, high-fatigue structural and landing system parts, medical parts, and other high-performance parts to its company portfolio. MSA has rigorous expectations of product excellence and adheres to strict regulations in the performance, documentation, reliability and safety of their products. Presently, the Company is certified to both ISO 9001:2009 and AS 9100:2009. MSA is also Qualified Suppliers List of Distributors approved by the Department Of Defense and has National Aerospace and Defense Contractors Accreditation Program (NADCAP) accreditation in their Laboratory, Heat Treatment and Non- Destructive Testing areas.

MSA's continued growth and the consistent increase in demand for their products has prompted the need to train and upgrade the skills of their employees. The need to acquire new equipment to sustain the quality and reliability of the Company and manufacturing has also increased the demand for training. In order for the Company to grow and meet the demands of their customers, MSA needs to ensure that their workforce is highly qualified to operate both existing and newly acquired equipment. In addition, MSA wants to be prepared to meet the demands of the new market for new jet engines which would increase their sales by 20% - 40% in the next two years.

Training will take place at the Company's facilities in Sylmar. MSA is in a Priority Industry and engaged in an industry that faces out-of-state competition. This will be MSA's first ETP agreement.

PROJECT DETAILS

Training, including cross-training new hires and incumbent workers in different processes and equipment use, will improve employees' skills and enable MSA to meet production schedules, improve product quality and have a leaner order-to-delivery process. The proposed training will also certify employees from a wide variety of sources in areas of: ISO, NADCAP, and NIST (National Institute of Standards and Technology) and will increase employee engagement and retention.

MSA recently purchased several new pieces of equipment which include a 3D printer, Fanuc robots 3, a Weldon CNC OD Grinder and a RSS CNC Centerless grinder which require staff

training to maximize use. MSA also plans to purchase an automated computerized vertical storage unit, two new forging presses and additional robots within the next six months. This equipment will require various levels of training once installed.

Retrainee - Job Creation

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

MSA has committed to hiring 25 new employees (Job Number 2). The date-of-hire for all trainees will be within the three-month period before contract approval or within the term-of-contract. Trainees will be hired into "net new jobs" as a condition of contract.

Training Plan

MSA conducted a company-wide needs assessment which identified specific needs in each department requiring an upgrade in work processes. The proposed training is designed to provide task-oriented skills and cross training on MSA's highly technical equipment. Training will be provided to the following occupations: Administration/Sales Staff, Maintenance Staff, Production Staff, Quality Assurance Staff, Manager and supervisors.

Business Skills (5%): This training will be offered to all staff and includes Customer Service, Conflict Management, Effective Communication, Writing Skills and Strategic Planning.

Computer Skills (5%): This training will be offered to Maintenance, Production and Quality Assurance Staff. Trainees will be trained on the software requirements of the Company's production equipment and its Manufacturing Resource Planning software.

Continuous Improvement (5%): This training will be offered to all staff to learn the skills of Leadership, Team Building and Decision Making. Maintenance, Production and Quality Assurance Staff will be trained in Statistical Process Control.

Management Skills (10%): Coaching, Leadership, Motivation and Decision Making will be offered to Managers and Supervisors.

Manufacturing Skills (50%): This training will be offered to Production and Quality Assurance Staff to cross train in various production equipment and acquire knowledge and skills in Production Operations, CNC Operations, Machine Operations, Blue Print Reading, Precision Measurement, Powered Equipment operations, Lock Out Tag Out, and Confined Space training. This training will advance the company in its goal of becoming a High Performance Workplace.

Hazardous Materials (5%): This training will be offered to Maintenance Staff to ensure the proper and safe handling of toxic materials involved in Manufacturing.

OSHA 10/30 (5%): This training is a series of courses "bundled" by industry sector and occupation. It consists of 10 hours of classroom or CBT training for journey-level workers and 30 hours for frontline supervisors. The coursework is geared to construction work, and also manufacturing. 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.

Advanced Technology (5%): This training will be offered to select production and Quality Assurance Staff consisting of Mechanical engineers; Electrical engineers' Production Planners,

Prototype manufacturing and Tool and die design/fabrication staff. They will receive training in Solid/Parametric modeling, Digital prototyping, Additive manufacturing, and Programmable logic controllers for Robotic Operations and CAD/CAM.

PL – Manufacturing Skills (10%): This training will be offered to Production and Quality Assurance staff. This training is necessary to provide the link between the initial training and the implementation of the skills learned.

Advanced Technology

There are approximately 15 employees who will participate in Advanced Technology (AT) courses in the following occupations: Mechanical engineers, Electrical engineers, Production planner, Prototype manufacturing staff and Tool and die designers and fabricators. These individuals work on programming and designing applications based on the tolerance levels required by the specifications. They are responsible for writing programs and adapting software to adhere to our strict tolerances. The required equipment are AutoCAD; Inventor Solid Modeling Software, SPC software and Robotics. The specifications and tolerance limits require very advanced calculations and specialized manufacturing processes. Staff in these occupations determine how to meet those requirements using MSA equipment and processes and would therefore benefit from training.

The trainer-to-trainee ratio is 1:10 for AT, to allow in-depth coverage and personal attention from the instructor.

Certified Safety Training

1. OSHA 10/30. This training is a series of courses “bundled” by industry sector and occupation. It consists of 10 hours of classroom or CBT training for journey-level workers and 30 hours for frontline supervisors. The coursework is geared to construction work, and also manufacturing. 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.

Productive Laboratory

The Panel adopted regulations to authorize reimbursement for training delivered in a Productive Laboratory (PL) setting. Trainees may produce goods for profit as part of the PL training in the courses identified under the Curriculum. The instructor must be dedicated to training delivery during all hours of training. Productive Lab will be provided to 145 Production and Quality Assurance Staff. Each trainee will receive a minimum of 1 hour of PL training but will not exceed 20 hours. PL training will be provided in the MSA production area at a 1:1 Trainer-to-Trainee ratio. PL training will be on existing and newly purchased equipment.

Commitment to Training

ETP funds will not displace MSA’s existing financial commitment to training. MSA will continue to provide mandatory and job-specific training at its own expense during the term of the proposed Agreement, including orientation, anti-harassment and computer-based training software which is part of their annual training budget of \$30,000. The Company also represents that that safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

➤ Training Infrastructure

The Company is ready to start training upon approval of the Agreement. MSA has qualified trainers in place who will provide training on specific areas of their expertise. MSA also retained the services of Tax Credit Co., for the administration of this project, who will work with the Company's Human Resources personnel to assist in the enrollment process, training data collection and entry into ETP's online class/lab tracking system.

RECOMMENDATION

Staff recommends approval of this proposal.

DEVELOPMENT SERVICES

MSA retained Tax Credit Co. in Los Angeles to assist with development of this proposal for a flat fee of \$15,000.

ADMINISTRATIVE SERVICES

MSA also retained Tax Credit Co. to perform administrative services in connection with this proposal for a fee not to exceed 13% of payment earned.

TRAINING VENDORS

To Be Determined

Exhibit B: Menu Curriculum

Class/Lab Hours

8-200

Trainees may receive any of the following:

BUSINESS SKILLS

- Customer Service
- New Product Knowledge
- Strategic Planning
- Business writing
- Conflict Management
- Interpersonal Skills
- Effective Communication
- Business Performance

COMPUTER SKILLS

- MRP
- New Equipment software and operations

CONTINUOUS IMPROVEMENT

- Statistical Process Control
- Leadership Skills
- Team Building
- Decision Making

MANAGEMENT SKILLS (Limited to Managers only)

- Coaching
- Leadership
- Motivation
- Decision Making

HAZARDOUS MATERIALS

- Hazardous Material Handling

OSHA

- OSHA 10 (Requires Completion of 10 Hours)
- OSHA 30 (Requires Completion of 30 Hours)

MANUFACTURING SKILLS

- Production Operations
- CNC Operations
- Cross Training
- Machine Operations
- Blue Print Reading
- Precision Measurement
- Lock Out Tag Out
- Powered Equipment Operation
- Confined Spaces

Productive Lab

0-20

PL - MANUFACTURING SKILLS (Ratio is 1:1)

- Production Machines (16 hours)
- Heat Treat Furnace (12 hours)
- Wire EDM Machine(12 hours)
- Measurement Tools (12 hours)
- Count Verification Stations (6 hours)
- Visual Inspection Station (8 hours)

Safety Training cannot exceed 10% of total training hours per-trainee (This cap does not apply to Hazmat, OSHA 10/30)

AT Hours

0-20

ADVANCED TECHNOLOGY (Ratio 1:10)

- Solid/Parametric Modeling
- Digital Prototyping
- Additive Manufacturing
- Programmable Logic Controllers for Robotic Operations
- CAD/CAM

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery. PL is capped at 20 hours per-trainee.