



Training Proposal for:
Lockheed Martin Aeronautics Company, A Division of
Lockheed Martin Corporation
Agreement Number: ET15-0152

Panel Meeting of: June 27, 2014

ETP Regional Office: North Hollywood

Analyst: N. Weingart

PROJECT PROFILE

| | | | |
|---|---|---------------------|---|
| Contract Attributes: | Retrainee Priority Rate HUA | Industry Sector(s): | Aerospace and Defense Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Counties Served: | Los Angeles, Kern | Repeat Contractor: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Union(s): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No International Association of Machinists and Aerospace Workers, District 724, Area 4 | | |
| Number of Employees in: | CA: 12,400 | U.S.: 108,000 | Worldwide: 113,000 |
| <u>Turnover Rate:</u> | 7% | | |
| <u>Managers/Supervisors:</u> (% of total trainees) | 15% | | |

FUNDING DETAIL

| | | | | | |
|---------------|---|----------------------------|-------------------------|---|--------------------------|
| Program Costs | - | [Substantial Contribution] | [High Earner Reduction] | = | Total ETP Funding |
| \$524,880 | | 0% | 0% | | \$524,880 |

| | | |
|-----------------------|------------------------------------|-------------|
| In-Kind Contribution: | 100% of Total ETP Funding Required | \$1,174,880 |
|-----------------------|------------------------------------|-------------|

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, Continuous Imp., Mfg. Skills, Advanced Tech. | 810 | 8-200 | 0 | \$648 | \$16.04 |
| | | | | Weighted Avg: 36 | | | |

Minimum Wage by County: \$16.04 per hour for Los Angeles County and \$14.90 per hour for Kern 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 \$0.69 per hour may be used to meet the Post-Retention Wage.

Wage Range by Occupation

| Occupation Titles | Wage Range | Estimated # of Trainees |
|-------------------------------------|------------|-------------------------|
| Production Worker I | | 200 |
| Production Worker II | | 30 |
| Engineer I | | 60 |
| Engineer II | | 120 |
| Engineer III | | 200 |
| Finance and Business Operations I | | 20 |
| Finance and Business Operations II | | 40 |
| Finance and Business Operations III | | 60 |
| Manager I | | 40 |
| Manager II | | 40 |

INTRODUCTION

This will be the third Agreement between the Employment Training Panel and Lockheed Martin Aeronautics Company, A Division of Lockheed Martin Corporation (LMAC) located in Palmdale (www.lockheedmartin.com). LMAC is engaged in the research, design, development, manufacture, integration, sustainment, support, testing, and upgrading of advanced military aircraft. This includes combat and air mobility aircraft, unmanned air vehicles, and related technologies.

The Palmdale facility is home to LMAC's Advanced Development Programs (ADP) (familiarily called "Skunk Works"). The ADP group of engineers was responsible for the development of stealth technology, as well as several aircraft designs including the U-2, the SR-71 Blackbird, the F-117 Nighthawk, the F-22 Raptor, and the F-35 Lightning II. This group currently works on a number of forward-looking classified projects that integrate the world's most advanced technologies. Edwards AFB engages primarily in aircraft testing. LMAC's customers include

the US military along with government agencies of other countries. In 2013, the U.S. military accounted for 78% of overall sales.

LMAC, headquartered in Fort Worth, Texas, was formed in March 1995, and is a division of Lockheed Martin Corporation. The parent corporation operates 518 locations, primarily in the US. Training will take place in Los Angeles and Kern counties. Both locations are in High Unemployment Areas.

The International Association of Machinists and Aerospace Workers, District 724, has submitted a letter of support for training Production Workers. The other occupations are not represented.

According to staff, LMAC is a project-based business. In today's economic climate, the Company is under increasing customer pressure to reduce operating costs and improve efficiencies to meet current contract requirements and secure follow-on business. LMAC must continue to leverage the latest technologies and most advanced tools to deliver highly complex products meeting rigid quality standards in a cost-effective manner. Successfully accomplishing these goals will allow LMAC to sustain current business and position the organization to secure critical future contracts.

Designing, manufacturing, testing, and sustaining advanced military aircraft requires state-of-the-art design software, tools, test equipment, and manufacturing capabilities. Technological advancements and process changes are an on-going endeavor, and capital investments are imperative in implementing these changes. LMAC invests tens of millions of dollars annually in new equipment and technology, and must provide ongoing, updated, and revised training to affected employees.

Repeat Contractor

Under the first Palmdale Agreement (ET07-0386), LMAC expanded its Role-Based Training initiative to broaden job responsibilities, and conducted a company-wide migration to newer versions of a number of advanced software tools. Training focused on Engineers and Managers in Continuous Improvement and Advanced Technology. Training under the second Agreement (ET10-0266) served only a small portion of the 3,100+ workers, focusing on a limited population of Engineers and Finance & Business Operations personnel.

This new proposal will target a much larger audience, and will include union Production Workers for the first time. Although there is some overlap of curriculum topics from the past, the majority of the courses have been updated to reflect current business needs; and many of the modules, such as Advanced Aeronautics and Manufacturing Skills, are completely new.

PROJECT DETAILS

Training Plan

Training needs are based on specific contract deliverables. Management determines the skills and technologies that should be leveraged to satisfy a customer's requirements. This demand-driven approach allows the Company to better meet strategic organizational goals. It also helps employees achieve personal goals for professional development.

Business Skills (20%): Training will be offered to Financial and Business Operations Staff that support core engineering and production functions. Staff administers compliance and billing on sophisticated customer contracts, interfaces with customer and internal technical personnel, and responds to contracting opportunities. Training will be provided in numerous facets of program

management, subcontract management, and project management. This training will lead to increased “win” rates on new contracts, ensure that staff properly administer contracts and engage customers with a consistent approach, and develop full-spectrum leaders to manage the organization internally.

Continuous Improvement (20%): Training will be offered to all occupations in problem solving skills including Six Sigma Green and Black Belt courses to reduce process waste, errors, and process times. Training will ensure the application of uniform quality standards company-wide.

Manufacturing Skills (30%): Training will be offered to Engineers and Production Workers. Engineers will receive theory-based Advanced Aeronautics training to capitalize on the latest advances in materials, production methods, and performance data that impact the design and performance of 5th generation aircraft. Production Workers will be trained in specialized manufacturing processes related to painting, coating, and aircraft structures (advanced composites) to keep pace with technology. Both occupations will receive quality training. As a result, the frontline workforce will possess a broader set of tools for ensuring production quality is at the highest level.

Advanced Technology – Computer Skills (30%)

LMAC is requesting Advanced Technology reimbursement of \$26.00 per hour for Engineers who require advanced courses in aircraft design and analysis to design, develop, and test highly sophisticated aircraft structures, components and systems, and implement production processes. These specialized software tools include CATIA, 3DVIA, Brawler Air-to-Air Simulations, Moldflow, FiberSIM, AMESim, and QuickSilver. These trainees also require Software Management training to incorporate the latest coding standards and best practices to ensure quality standards in the software that controls and connects various components, functions, and subsystems.

The cost of delivering these courses significantly exceeds the traditional classroom reimbursement. Many of the advanced software tools require computers with enhanced processing capabilities, and are considerably more expensive than ordinary workstations. Several courses require delivery via external licensed vendors that can reach up to \$3,000 per instructional day. Given the complex nature of the coursework, a maximum trainer to trainee ratio of 1:10 will be maintained to ensure that the trainees have sufficient individual attention to fully grasp the concepts.

Impact/Outcome

Some training will result in formal industry-recognized certifications (such as Six Sigma Black Belt and Green Belt). Many of the manufacturing skills modules for Production Workers will result in internal company certifications that employees need to perform specific tasks on aircraft.

Training Infrastructure

Training will begin upon Panel approval at the Company’s worksites and at offsite meeting facilities in or near Palmdale and Edwards AFB. Training will be delivered by in-house experts and third party vendors. The program will be coordinated centrally through staff in Fort Worth, Texas: the Economic Development Lead will oversee the program and serve as the ETP contact person, and Training Coordinators will schedule classes and communicate with the Palmdale Training Manager and Training Support Coordinator. Training for Production Workers will be coordinated by Palmdale instructors.

The Palmdale Training Manager will oversee training locally; the Training Support Coordinator will assign training rooms and collect rosters for entry into the Learning Management System (LMS), MyLearning. The Training Manager will coordinate with a third party administrative vendor (see Administrative Services below).

Commitment to Training

Lockheed Martin has a multi-million dollar annual training budget for the Palmdale, Fort Worth (TX), and Marietta (GA) facilities, and various ancillary sites; there is no specific breakout available for Palmdale and Edwards AFB alone. The budget covers direct costs for a variety of mandatory courses including ethic, diversity, sexual harassment prevention, security practices, compliance, new employee orientation, and safety training. LMAC also offers a number of elective topics such as leadership, finance, production, and engineering courses. Training extends across all operational functions and occupations, and is delivered using a variety of training methodologies based on effectiveness and cost. More in-depth, complex subjects are taught in a class/lab setting, while overview and introductory portions are regularly delivered via Computer-Based Training, which is not a part of this proposal.

ETP funding will allow delivery of coursework that is critical to business operations but for which training volumes have been drastically reduced due to budgetary pressures. Through ETP assistance, LMAC will be able to extend training efforts to broader population and deliver an expanded curriculum of topics beyond what is currently feasible. LMAC has an established internal process whereby ETP funds are directly returned to the training budget, thereby ensuring the effectiveness of the funds in expanding training that would not otherwise be delivered.

After the ETP program has concluded, LMAC will continue to deliver training to keep pace with technology upgrades, changing manufacturing procedures, and continuous improvement efforts to the extent possible, constrained only by future budgetary limitations. Although the Company expects budgetary pressures to continue into the future, technology and innovation are the backbone of its business. As such, LMAC expects continued budget support for mandated training plus support for those other needs determined to be the most critical to meeting customer contract requirements.

LMAC represents that ETP funds will not displace the existing financial commitment to training. Safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

High Unemployment Area

The 810 trainees work in High Unemployment Areas (HUA), with unemployment exceeding the state average by 25% under the Panel's standards. The Company's locations in Palmdale (Los Angeles County) and Edwards AFB (Kern County) qualify for HUA status under these standards. For these trainees, the Panel may modify the ETP Minimum Wage by up to 25% if post-retention wages exceed the start-of-training wages. However, LMAC is not asking for a wage modification.

Other Resources

LMAC has historically claimed the CA Enterprise Zone hiring credit for its California locations that reside within designated zones, including Palmdale. The overall statewide credit generally ranges from \$300k to \$500k annually. The Company states that these funds are not used for training.

LMS

The LMS has been reviewed and approved by ETP staff for documentation of all training.

RECOMMENDATION

Staff recommends approval of this proposal and Advanced Technology reimbursement.

PRIOR PROJECTS

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

| Agreement No. | Location (City) | Term | Approved Amount | Payment Earned \$ % |
|---------------|-----------------|------------------------|-----------------|------------------------|
| ET10-0266 | Palmdale | 11/02/09 – 11/01/11 | \$176,679 | \$175,142 (99%) |

DEVELOPMENT SERVICES

The Marquis Group in Volente, Texas assisted with development for a flat fee of \$28,058.

ADMINISTRATIVE SERVICES

The Marquis Group will also perform administrative services for a fee not to exceed 13% of payment earned.

TRAINING VENDORS

Rand Worldwide, Newport Beach, for CATIA and Moldflow training. Other trainers will be identified for ETP recordkeeping purposes as they are retained.

Exhibit B: Menu Curriculum

Class/Lab Hours

8 - 200

Trainees may receive any of the following:

BUSINESS SKILLS

- ✚ Program Management
 - Program Management
 - Control Account Management
 - Subcontract Management
 - Tools for Emerging Leaders
 - Project Management
 - Team Leadership
 - Contract Research & Development Capture
 - Capture Strategy
 - Capture Management

CONTINUOUS IMPROVEMENT

- ✚ Six Sigma & Problem Solving Methodologies:
 - Green Belt
 - Black Belt
 - Root Cause Analysis
 - Statistical Process Control
 - Corrective Action

MANUFACTURING SKILLS

- ✚ Aircraft Paint & Coatings
- ✚ Aircraft Structures
- ✚ Advanced Aeronautics:
 - Airworthiness
 - External Structural Loads
 - AS9100
 - Aeroelasticity
 - Structural Integrity
 - Aviation Safety
 - Geometric Dimensioning & Tolerancing
 - Structural Repair Considerations
 - Structural Analysis
- ✚ Manufacturing Quality:
 - Quality 101
 - Human Factors
 - Advanced Foreign Object Damage

ADVANCED TECHNOLOGY**+ Design & Analysis Software:**

- 3DVIA Composer
- CATIA V5
- Brawler Air-to-Air Simulations
- Moldflow
- FiberSIM
- AMESim
- Quicksilver

+ Software Management:

- Software Product Evaluation
- Software Quantitative Management
- Software Estimation

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



ET15-0152

April 22, 2014

Ms. Naomi Weingart
Contract Analyst
North Hollywood Regional Office
Employment Training Panel (ETP) Program
4640 Lankershim Blvd., Suite 311
North Hollywood, CA 91602

Dear Ms. Weingart:

On behalf of the The International Association of Machinists and Aerospace Workers (IAM), I would like to express our support of Lockheed Martin Aeronautics Company's application to the California Employment Training Panel (ETP) Program. The planned training will directly benefit our members by improving their technical skills and knowledge in aircraft structures, painting/coatings, and in various facets of manufacturing quality.

Developing employee skills and preparing them for long-term professional success is a major goal of our organization's mission. We appreciate the steps Lockheed Martin Aeronautics Company is taking to invest in the skills of its workforce. Accordingly, the IAM provides our endorsement of this application providing enhanced training activity for our membership.

Sincerely,


Bus Rep. D/L 725