DELEGATION ORDER

RETRAINEE - JOB CREATION

Training Proposal for:

Rolls-Royce Engine Services-Oakland, Inc.

Agreement Number: ET16-0359

Approval Date: February 16, 2016

ETP Regional Office: San Francisco Bay Area  Analyst: C. Hoover

PROJECT PROFILE

<table>
<thead>
<tr>
<th>Contract Attributes:</th>
<th>Retrainees</th>
<th>Priority Rate</th>
<th>Job Creation Initiative</th>
<th>Veterans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector(s):</td>
<td>Manufacturing</td>
<td>Aerospace and Defense</td>
<td>Transportation/Logistics</td>
<td></td>
</tr>
<tr>
<td>Priority Industry:</td>
<td>☑ Yes</td>
<td>☐ No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Counties Served:    | Alameda    | Repeat Contractor: | ☑ Yes | ☐ No |

| Union(s):           | ☑ Yes | ☐ No |

| Number of Employees in: | CA: 400 | U.S.: 7,700 | Worldwide: 54,100 |

| Turnover Rate:        | 4%     |

| Managers/Supervisors: | 8%     | (% of total trainees) |

FUNDING DETAIL

<table>
<thead>
<tr>
<th>Program Costs</th>
<th>(Substantial Contribution)</th>
<th>(High Earner Reduction)</th>
<th>= Total ETP Funding</th>
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</thead>
<tbody>
<tr>
<td>$99,706</td>
<td>$0</td>
<td>$0</td>
<td>$99,706</td>
</tr>
</tbody>
</table>

In-Kind Contribution: 100% of Total ETP Funding Required $149,400
## TRAINING PLAN TABLE

<table>
<thead>
<tr>
<th>Job No.</th>
<th>Job Description</th>
<th>Type of Training</th>
<th>Estimated No. of Trainees</th>
<th>Range of Hours</th>
<th>Average Cost per Trainee</th>
<th>Post-Retention Wage</th>
</tr>
</thead>
</table>

**Minimum Wage by County:** Job Numbers 1 & 3: $17.02 per hour for Alameda County. Job Number 2 (Job Creation): $14.19 per hour for Alameda 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

Although employer provides health benefits, they are not being used to meet Post-Retention Wage.

## Wage Range by Occupation

<table>
<thead>
<tr>
<th>Occupation Titles</th>
<th>Wage Range</th>
<th>Estimated # of Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Repair Technicians</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td>Engine Mechanics and Testers</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>Engine Inspectors</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Engineers</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Sales Staff I</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Sales Staff II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Supervisors/Managers I</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Supervisors/Managers II</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Project Managers I</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Project Managers II</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
INTRODUCTION

Rolls-Royce Engine Services-Oakland, Inc. (RRESO) (www.rolls-royce.com), a subsidiary of Rolls-Royce North America, provides maintenance, repair and overhaul of Rolls-Royce brand aviation gas turbine engines and component parts. The Oakland facility was established in 1999. Its customers include the US Department of Defense (Navy, Marines, Air Force, etc.), foreign military entities (British and Algerian Air Force), municipal governments (Los Angeles Police Department helicopters), and private and commercial aircraft owners and operators (Lynden Air Cargo).

RRESO operates in a competitive industry and many competitors are located outside the State of California. The Company maintains its competitive edge by reducing cost through continuous improvement (6-Sigma and Lean Manufacturing) and assuring high quality services and products.

This is RRESO’s second ETP Agreement. In the prior ETP Agreement, which is still active, the Company made significant investments in its Oakland site to expand the facility and production, while introducing new technologies in manufacturing and engine testing. Some of the training courses listed in the curriculum are repeated from the Company's prior Agreement. No trainee who received this type of training in active Agreement will receive it in this proposal. [Note: The active Agreement is entering fiscal close-out.] Training will also be delivered to a new trainee population, under Job Creation.

RRESO needs to develop a more flexible workforce where employees will be cross-trained in the repair and overhaul of multiple engine product lines to increase productivity, reduce costs, increase retention and improve competitiveness. Without ETP funding, the Company would take much longer to train its employees in multiple skills (i.e.- Business, Computer and Manufacturing Skills) and the Continuous Improvement training would only be provided to a small segment of its employee population. In addition, new Supervisors and Managers will receive Management Skills training, and 21 new employees will be hired.

Retrainee - Job Creation

The Panel offers 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.

In this proposal, RRESO has committed to hiring 21 new employees (Job Number 2). RRESO represents that the date-of-hire for all trainees in the Job Creation program will be within the three-month period before contract approval or within the term-of-contract. The Company also represents that these trainees will be hired into “net new jobs” as a condition of contract.

Due to an increase in customer demand, RRESO needs to hire 21 additional employees. The AE2100 engine product line has seen a surge in unplanned engine removals (due to engine performance reasons) from the United States Air Force and the United States Marine Corps. This surge in demand has exceeded the Company’s AE2100 assembly capacity in terms of trained assembly technicians. As a result, military aircraft have been grounded due to lack of serviceable engines. The Company needs to hire workers to meet these demands.

PROJECT DETAILS

RRESO is focused on building a high performance workplace where employees are able to work in multiple jobs, solve problems, and identify and implement ideas for continuous improvement.
This training builds on workforce skills obtained under the Company's previous ETP Agreement. Training goals include:

- Increase skill base (Project Mgmt., Communication, & Technical Report Writing)
- Increase productivity and quality (Six Sigma, High Performance Culture, & Quality Mgmt. Systems)
- On-time delivery and customer satisfaction (Customer Relationship Mgmt.)

Each engine product line (AE1107, AE2100, Engine Nacelle and T56) supports a different military aircraft, which has different component parts and requires specific training. In the past, most employees only developed skills in one engine line. ETP funding will enable RRESO to train its employees to work on multiple engine lines.

### Training Plan

Classroom/Laboratory (Class/Lab), Productive Lab (PL) and Computer-Based Training (CBT) will be provided in the following:

**Business Skills** (4%): Training will be provided to Administrative Staff, Engineers, Sales Staff, Project Managers and Supervisors/Managers. Training will focus on Project Management, Risk Management, Leadership, Communication and other job-related skills.

**Computer Skills** (2%): Training will be provided to Supervisors/Managers. A significant portion of this training will support the transition to a new HR system (Work Day).

**Continuous Improvement** (14%): Training will be provided to Engineers, Component Repair Technicians, Engine Inspectors, Engine Mechanics and Testers. With RRESO’s commitment to continuous improvement, the Company has a staff of Six Sigma Black Belts that support ambitious improvement goals. Training will support its plan to reach Gold status for all work centers. Training will build a high performance culture.

**Hazardous Materials** (1%): Training will be provided to Component Repair Technicians, Engine Inspectors, Engine Mechanics and Testers in Hazardous Materials handling procedures and proper use of Material Safety Data Sheets.

**Manufacturing Skills** (15%): Training will be provided to Component Repair Technicians, Engine Inspectors, Engine Mechanics and Testers in Precision Measurement, Inspection, Engine Assembly/Disassembly, Computer Numerical Control Machining, Heat Treatment, Chemical Cleaning and Grinding. Trainers will be provided with skills for structured on-the-job training (OJT) and job skills assessment. Training will also be provided to Engineers and include Geometric Dimensioning and Tolerance and advanced process training in a variety of areas including heat treatment, metals, adaptive machining and coating.

**Management Skills** (4%): Training will be provided to Supervisors/Managers and Project Managers to lead teams effectively and efficiently.

**PL-Manufacturing Skills** (60%): Training will be provided to Engine Inspectors, Component Repair Technicians, and Engine Mechanics and Testers. This PL training will be utilized to cross-train employees on multiple engine lines. Skills must be practiced and demonstrated at a sufficient level to assure an airworthy end product.

Trainees may produce goods for profit as part of PL training in the courses identified under the Curriculum. The instructor must be dedicated to training delivery during all hours of training.

PL training will be structured training on the production floor to assure skills learned are practiced and demonstrated at a sufficient level to assure quality products. PL is necessary due
to the large amount of specialized tooling and machinery used on the production floor, which cannot be accomplished in a classroom environment.

RRESO will train approximately 150 employees in PL-Manufacturing Skills with a trainer-to-trainee ratio of 1:1. Trainees may receive up to 60 hours of PL training due to the specialized production environment and the lack (and expense) of duplicate tooling and machinery for classroom training. All PL training will be conducted by an experienced subject matter expert.

Production will be slowed during the training due to the practice and explanations given. PL training has proven to be a very effective training environment for the jet engine repair industry. Due to the critical specification required in the repair and overhaul of an aircraft engine, training time will take at least 60 hours.

**Certified Safety Training**

Hazardous Materials (HAZMAT): This training is also a series of courses, specific to industry sectors involved in the transport of hazardous materials. The coursework varies in length depending on the industry and the occupational title, as organized in five levels ranging from “first responder” to “incident commander.” It is generally a minimum of 24 hours with an 8-hour annual refresher, and may be delivered by classroom or CBT. In this proposal, Component Repair Technicians, Engine Inspectors, Engine Mechanics, and Testers will receive up to 50 hours of training. Field training may be required, although not funded by ETP. Completion of the training results in a certificate that expands employment opportunities. This coursework is not under Cal-OSHA, but is administered under the Department of Transportation and CalTRANS. There are various certification entities for the coursework and instructors. In this proposal, an in-house certified trainer who recently completed a Lion Technology, Inc. (certification entity) Hazardous Waste in California Workshop will provide training.

**Computer-Based Training**

While the majority of the training will be PL and Class/Lab, Computer-Based Training (CBT) will be provided for curricula that RRESO employees can take at their own pace without instructors. CBT is restricted to no more than 50% of a trainee’s total training hours.

**Temporary to Permanent Hiring**

RRESO estimates that 21 trainees (Job Number 2) will come under Panel guidelines for “temporary to permanent” employment. RRESO has retained these employees through a temporary agency, with the intention of hiring them into full-time, permanent positions after training. RRESO retains its workers in temporary status for approximately 12 to 18 months. Once a temp-to-perm worker is hired by the Company, eligible health benefits are available on the date of hire.

These trainees must be determined eligible to participate in ETP-funded training before the start of training, while on payroll with the temporary agency. However, the retention and post-retention wage requirements cannot be satisfied until after trainees have been hired by the RRESO. Until then, RRESO may not receive progress payments.

The Panel’s adoption of a six-month (180-day) time period for the use of ETP funds under the Temp-to-Perm Program is measured from Date of Hire into a full-time permanent position, looking back to the first day of training, per trainee.
Veterans Program

RRESO appreciates qualities and skills that veterans gain from their military service. The Company is passionate about hiring veterans that bring a unique set of skills and abilities its workforce. The skills learned in military service transfer readily to RRESO products and services. The Company is particularly focused on Veterans hiring given its Department of Defense customer base. The Company’s current workforce is comprised of approximately 25% Veterans. They were not identified for training in the active ETP Agreement, inadvertently. In this proposal, the training plan accurately reflects 100 incumbent Veteran workers (Job Number 3).

The Panel has established a higher reimbursement rate and other incentives for training California veterans, as will be reflected in the contract.

Commitment to Training

RRESO spends $300,000 on training annually. Most of the training is job specific, and includes Train the Workplace Trainers, Health, Safety and Environment and Leadership, and SAP training.

RRESO 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.

➢ Training Infrastructure

RRESO has dedicated one employee to scheduling training, enrolling trainees, tracking training hours, and meeting with ETP staff.

Impact/Outcome

RRESO’s training goals include: cross-train workers; improve productivity through reduction of non-productive time; improve product quality; improve on time delivery and customer satisfaction; increase use of virtual training to reduce travel costs.

RECOMMENDATION

Staff recommends approval of this proposal.

ACTIVE PROJECTS

The following table summarizes performance by RRESO under an active ETP Agreement:

<table>
<thead>
<tr>
<th>Agreement No.</th>
<th>Approved Amount</th>
<th>Term</th>
<th>No. Trainees (Estimated)</th>
<th>No. Completed Training</th>
<th>No. Retained</th>
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</thead>
<tbody>
<tr>
<td>ET14-0332</td>
<td>$99,864</td>
<td>5/5/14 – 5/4/16</td>
<td>146</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

The last day of training was 2/4/16 and this contract is entering the final invoicing and fiscal close-out stage. The ETP Online System shows 5,250 reimbursable hours for potential earning of $94,513 (95% of approved amount).
DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

GP Strategies of Santa Maria has been retained to provide Management Skills and Continuous Improvement training. Other training vendors will be identified for ETP record-keeping purposes, as they are retained by RRESO.
Exhibit B: Menu Curriculum

Class/Lab Hours
8-200

Trainees may receive any of the following:

BUSINESS SKILLS
- Technical Report Writing
- Project Management
- Dealing Effectively With Conflict
- Giving Feedback
- Communication
- Project Management
- Scope Management
- Customer Relationship Management

COMPUTER SKILLS
- SAP End User Training
- SAP Key User Training
- SAP Super User Training
- Shop Floor Management
- Programmable Logic Controller Programming

CONTINUOUS IMPROVEMENT
- Leadership for Frontline Workers
- Understanding/Improving Business of Operations
- Six Sigma Green Belt
- Six Sigma Black Belt
- Yellow Belt
- Lean Manufacturing
- Problem Solving/Root Cause Analysis
- Eight Disciplines Problem Solving
- Risk Assessments
- Failure Modes and Effects Analysis
- High Performance Culture
- Quality Management Systems
- Role of the Project Sponsor
- Process Excellence Leadership Academy - Part 1
- Process Excellence Leadership Academy - Part 2
- Rolls-Royce Production System
- Lean Real Time Workshop
- Lean Sigma Green Belt

HAZARDOUS MATERIALS
- Hazardous Materials
- Material Safety Data Sheets
- Health, Safety & Environment Responsibilities
- Environmental/Air Quality Management District/Air Permits

MANAGEMENT SKILLS (MANAGERS/SUPERVISORS ONLY)
- Team Leader Essentials
- Management Essentials
- Crucial Conversation Mastery
**MANUFACTURING SKILLS**
- Interpreting the Maintenance Manual and Planning Repair
- Using Measurement Tools
- Interpreting Drawings
- Technical Processes (Heat Treat, Welding, Coatings)
- Advanced Adaptive Machining
- Train the Workplace Trainer
- Train the Workplace Assessor
- Advanced Adaptive Machining
- Geometric Dimensioning and Tolerance
- Statistical Process Control
- Instrumentation and Controls
- Manufacturing Engineering Foundation Course
- Cost Management for Manufacturing Engineers
- Precision Measurement Instruments
- National Physical Laboratory - Level 1

Safety Training is capped at 10% of a trainee's total training hours
(This cap does not apply to HAZMAT)

**Productive Lab Hours**
0-60

**MANUFACTURING SKILLS** (Ratio 1:1)
- Engine Inspection
- Fitter (Assembly)
- Machinist
- Thermal Spray
- Airflow
- Plasticize
- Heat Treat
- Rework
- Cleaning Tech
- Paint Tech
- Metrology
- NDT
- Kitting
- Sheet Metal
- Accessory Tech (Electrical)
- Accessory Tech (Small)
- Accessory Tech (Large)
- Laboratory
- Welding
- Compressor Case
- Gearbox
- Document Control
- Test Cell
- AEP
- Bearing
CBT Hours
0-20

BUSINESS SKILLS
- Objective Setting (1 hr.)
- Strategic Export Control (1 hr.)
- Project Curriculum Earned Value (EV) Cost Planning and Control (3 hrs.)
- Project Curriculum Estimating (3 hrs.)
- Project Curriculum Planning and Scheduling (5 hrs.)
- Project Curriculum Resource Management (3 hrs.)
- Project Curriculum Risk Analysis and Management (3 hrs.)
- Protecting Trade Secrets (.3 hr.)
- Supply Chain Planning and Control - Technical Development Remedies (.5 hr.)
- Integrated Product and Production Readiness Process (.75 hr.)
- Project Curriculum Planning and Scheduling (5 hrs.)
- Planning and Control Awareness (1 hr.)
- Intellectual Property and Proprietary Rights (4 hrs.)
- Risk Basics (1.4 hrs.)
- Supply Chain Planning and Control (SCPC) - Inventory Overview (.5 hr.)
- Supply Chain Planning and Control (SCPC) - Cell League Table Performance Monitoring (.5 hr.)
- Supply Chain Planning and Control (SCPC) Level 1 Customer Demand Knowledge (3 hrs.)
- Supply Chain Planning and Control (SCPC) Level 2 Customer Demand Knowledge (3.3 hrs.)
- Supply Chain Planning and Control (SCPC) Level 2 Supply Base Knowledge Training (3 hrs.)
- Production Planning Principles (.45 hr.)
- Lead Time and its Impact on Cell Performance (1 hr.)
- Basics of Shop Floor Control (1 hr.)
- Load and Capacity (1 hr.)

COMPUTER SKILLS
- ITSM (IT Service Management Tool): Service Request Management (3 hrs.)

CONTINUOUS IMPROVEMENT
- Rolls-Royce Production System (1 hr.)
- Building a Quality Management System (2 hrs.)
- Process Excellence and Quality (1 hr.)
- Product Safety (1.3 hrs.)
- Foreign Object Defect (FOD) Prevention Awareness (.3 hr.)
- Process Excellence and Quality (1 hr.)
- Product Integrity - Safety Issues within the Aerospace Sectors (1.3 hrs.)
- Process Failure Mode and Effect Analysis (FMEA) (1 hr.)
- 7 Step Process (.5 hr.)
- Getting Results by Building Relationships (2 hrs.)
- Customer Focused Management (2.3 hrs.)
- Concept of Value Stream (.45 hr.)
- Manufacturing Cell Concept (1 hr.)
**MANAGEMENT SKILLS** (MANAGERS/SUPERVISORS ONLY)
- Component Definition (Drawing) Awareness (3.5 hrs.)
- Health Safety and Environment and Occupational Health for Managers (1 hr.)
- Interpersonal Communication: Listening Essentials (1 hr.)
- Interpersonal Communication: Communicating Assertively (1 hr.)

**MANUFACTURING SKILLS**
- Manual Handling Techniques (3.5 hrs.)
- Gas Turbine Technology (.5 hr.)

CBT hours are capped at 50% of trainee’s total training hours

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery. CBT is capped at 50% of total training hours, per trainee excluding HAZMAT. PL is capped at 60 hours per-trainee.