



**RETRAINEE – JOB CREATION**

**Training Proposal for:  
ICON Aircraft, Inc.**

**Agreement Number: ET15-0465**

**Panel Meeting of:** June 26, 2015

**ETP Regional Office:** Sacramento

**Analyst:** W. Sabah

**PROJECT PROFILE**

Contract Attributes:	Critical Proposal Priority Rate Retrainee Job Creation Initiative	Industry Sector(s):	Manufacturing Services  Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Solano	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: 95	U.S.: 95	Worldwide: 95
Turnover Rate:	4%		
Managers/Supervisors: (% of total trainees)	N/A		

**FUNDING DETAIL**

Program Costs	-	(Substantial Contribution)	(High Earner Reduction)	=	<b>Total ETP Funding</b>
\$315,540		\$0	\$0		\$315,540

In-Kind Contribution:	100% of Total ETP Funding Required	\$288,900
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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, Cont. Imp., HazMat, Mfg. Skills, PL-Mfg. Skills	25	8-200	0	\$900	\$15.07
				Weighted Avg: 45			
2	Retrainee Job Creation Initiative Priority Rate	Business Skills, Computer Skills, Cont. Imp., HazMat, Mfg. Skills, PL-Mfg. Skills	222	8-200	0	\$1,320	\$13.75
				Weighted Avg: 60			

**Minimum Wage by County:** Job Number 1: \$15.07 per hour for Solano County

Job Number 2(Job Creation): \$12.33 per hour for Solano 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 \$1.32 per hour may be used to meet the Post-Retention Wage for Job Number 1 only.

**Wage Range by Occupation**

Occupation Titles	Wage Range	Estimated # of Trainees
<b>Job Numbers 1 &amp; 2</b>		
Composite Manufacturing Technician		4
Composite Structural Entry-Level Staff (Job No.2)		30
Composite Structural Mid-Level Staff (Job No.2)		21
Composite Structural Senior-Level Staff (Job No.2)		7
Aviation R&D Technician		6
Facility Technician		2
Engineering Document Control Clerk		2
Materials and Planning Staff		15
Paint & Assembly Technician		97
Paint & Assembly Painter		5
Paint & Assembly Painter (Job No.2)		46
Purchasing Buyer		2
Purchasing Buyer (Job No. 2)		1
Quality Inspector		2
Quality Inspector (Job No. 2)		7

## **Critical Proposal**

This proposal for ICON Aircraft, Inc. (ICON Aircraft) is designated a "Critical Proposal", as defined in Title 22, California Code of Regulations (CCR) 4402.2, by the Governor's Office of Business and Economic Development (Go-BIZ). ICON Aircraft is expanding within California through the addition of new jobs as a result of a new facility in Vacaville. This project will assist ICON Aircraft to develop new job skills for incumbent workers and newly-hired workers.

## **INTRODUCTION**

Founded in 2006 and headquartered in Los Angeles, ICON (<http://www.iconaircraft.com>) is a designer, developer, and manufacturer of light sports aircraft. The Company's current manufacturing and paint operations are in Tehachapi. In 2004, the Federal Aviation Administration created the Light Sport Aircraft for lightweight, simple and easy-to-fly recreational aircraft, which are considered safe, affordable and more accessible than traditional transportation category aircraft. This regulatory change allowed ICON Aircraft to become one of the premier producers of the new class of consumer-focused sport airplanes. In addition to manufacturing aircrafts, ICON Aircraft provides routine maintenance services to their customers. The Company's customers primarily include individuals that like to fly recreationally.

## **Need for Training**

ICON Aircraft leased a new 140,000 square feet facility in Vacaville to house all its engineering, design and manufacturing operations. The Vacaville facility upgrades are currently in process, and the Company anticipates moving all employees from their Tehachapi facility to the Vacaville facility mid-2015. With the expansion of a new facility, staff will be required to improve products and efficiency specifically in manufacturing, quality and support functions. The Company currently has 1,271 sports aircrafts on order with the first production fuselage currently in production at the Tehachapi facility. Production will be completed at the Vacaville facility once all new equipment has been installed.

The Company will run a multi-shift operation to sequence the build of their products to supply customers with aircrafts within the scheduled delivery dates. Both seasoned and new employees will be reallocated evenly to all shifts to support production at all level and improve efficiency. This will require cross-training among all employees to become more versatile, reduce production time and successfully implement Lean Manufacturing Principles. In addition, continuous improvement training will empower employees, encourage open communication and allow employees to quickly identify and resolve issues.

## **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.

ICON Aircraft has committed to hiring 222 new employees (Job Number 2). The Company 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.

All newly hired staff will be for ICON Aircraft's new facility in Vacaville. The new facility will house all engineering, design and manufacturing operations which subsequently will require the additional employees. The Company has begun hiring in the Vacaville and Sacramento area to

increase production and meet customer needs. ICON Aircraft also represents that these trainees will be hired into “net new jobs” as a condition of contract.

## **PROJECT DETAILS**

### **Training Plan**

ICON Aircraft will provide 8-200 hours of Class/lab training and up to 60 hours of Productive Lab (PL) training. This proposal will have a “blended” reimbursement rate for Retrainees and Job Creation employees. Retrainees will be reimbursed at a blended rate of \$20 per hour and Job Creation employees will be reimbursed at a blended rate of \$22.

**Business Skills (20%):** Training will be offered to all occupations except Aviation R&D Technicians. Training will focus on Product Knowledge and Project Management to manage workload, accurately identify product problems and resolve issues quickly. Technicians will receive training in inventory control and communication to improve workflow processes and increase effective communication within staff.

**Computer Skills (10%):** Training will be offered to Engineering Document Control Clerks in ERP PLEX System, Graphics, Programming, Publishing, Database Management, and other related applications. ETP PLEX system training will allow trainees to use the configuration management for the Bill of Materials to improve engineering drawings, material usage requirements, purchasing, and production planning. The Company also has a MRP system that will allow employees to design and manufacture new customized products and services efficiently.

**Continuous Improvement (25%):** Training will be offered to Composite Manufacturing Technicians, Composite Structural Entry-Level Staff, Composite Structural Mid-Level Staff, Composite Structural Senior-Level Staff, Engineering Document Control Clerks, Paint and Assembly Technicians, Paint and Assembly Painters and Quality Inspectors. The Company has determined that a formal continuous training program is critical to its success. Training will focus on Lean Manufacturing, Root Cause Analysis and Total Quality Management to reduce costs and improve product quality to meet the evolving needs of customers.

**Hazardous Materials (10%):** Training will be offered to Paint and Assembly Technicians and Paint and Assembly Painters to correctly handle and dispose explosive materials. Training course topic will include Explosive Materials Handling and Disposal.

**Manufacturing Skills (35%):** Training will be offered to Composite Manufacturing Technicians, Composite Structural Entry Level-Staff, Composite Structural Mid-Level Staff, Composite Structural Senior-Level Staff, Paint and Assembly Technicians, Paint and Assembly Painters and Quality Inspectors. Workers will be trained in manufacturing equipment and processes to make aircraft including PLC, common measurement tools, manual assembly tooling and inspection techniques. In addition, Paint and Assembly Technicians and Painters will be trained on paint booth controls, proper spraying techniques and material bonding requirements to ensure a safe working environment.

### **Productive Laboratory**

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

PL-Manufacturing training will be offered to Composite Manufacturing Technicians, Paint and Assembly Technicians, Paint and Assembly Painters and Quality Inspectors. PL training will supplement Class/Lab training to strengthen employees understanding of how to verify special process techniques on parts and components for final completion of aircrafts. Trainees will also receive hands-on training in painting, sanding and bonding application to prevent equipment damage and injuries to themselves. Equipment will include Hand Sanders, Hand Paint Guns, and Non-Destructing Testing equipment and processes.

PL trainers will be subject matter experts that provide demonstration of the process prior to observing the trainee perform the task. ICON Aircraft will use in-house trainers to observe the trainees to ensure no defect or errors are made. The trainer will provide coaching and mentoring until the trainee has been determined competent in the process. During PL training, production is expected to decrease, as the trainees will be working with new equipment and required to meet established quality standards. The trainer-to-trainee ratio for PL training will not exceed 1:3. The 1:3 PL ratio will allow ICON Aircraft to train the maximum number of new hires at one time to meet the demands of customer orders while insuring aircraft quality is maintained during all phases of manufacturing and inspection processes. In addition, the 1:3 ratio will be more efficient and feasible for the Company as they train new hires.

### **Temporary to Permanent Hiring**

The trainees in Job Number 2 come under Panel guidelines for “temporary to permanent” employment. ICON Aircraft has retained these employees through a temporary agency, with the intention of hiring them into full-time, permanent positions after training.

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 they have been hired by ICON Aircraft. Until then, ICON Aircraft will not receive progress payments.

### **Commitment to Training**

ICON Aircraft has an annual training budget of \$1,000. The Company did not have a formal training plan previously and all training has been on-the-job training on specific pieces of equipment. ETP funds will allow the Company to implement a formal training plan at their Vacaville facility.

ICON Aircraft 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

Training is scheduled to begin July 2015. ICON Aircraft has identified a full time Human Resources employee in Vacaville to implement and administer this project.

### **RECOMMENDATION**

Staff recommends approval of this proposal.

### **DEVELOPMENT SERVICES**

The Corporation for Manufacturing Excellence assisted with development of this proposal. [Note: California Manufacturing Technology Consulting is eligible to receive 10% of the

approved amount of funding for referrals such as this, under a marketing agreement with ETP, not to exceed \$15,000].

**ADMINISTRATIVE SERVICES**

N/A

**TRAINING VENDORS**

To Be Determined

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

8-200

Trainees may receive any of the following:

**BUSINESS SKILLS**

- Budget Analysis
- Business Plans
- Business Strategies
- Communication Skills
- Computer/Internet Applications in Business
- Customer Service
- ERP - PLEX
- Inventory Control
- Listening Skills
- Materials Management
- Multi-Cultural Awareness
- Negotiating Skills
- New Product Introduction
- Project Management
- Relationship Building for Small/Medium-Sized Mfg.
- Business Administration for Small/Medium-Sized Mfg.
- Selling/Serving the Customer
- Strategic Planning
- Sustainability
- Technical Writing

**COMPUTER SKILLS**

- Accounting Systems
- Basic Operations
- Communications Systems
- Database Management
- Computer Aided Design
- Computer Aided Engineering
- Enterprise Resource Planning/ Material Requirements Planning /Material Review Board PLEX System
- Graphics
- Internet
- Payroll Systems
- Presentations
- Programming
- Publishing
- Spreadsheets
- Technical Writing
- Telecommuting
- Website Development and Maintenance

**CONTINUOUS IMPROVEMENT**

- Basic Quality Tools
- Building Teams
- Business Improvement Principles

- Communication Skills
- Continuous Improvement Skills
- Cycle-Time Reduction Techniques
- Cycle-Time Management Techniques
- Decision Making Skills
- Defining Problems
- Design for Manufacturing Acceptability
- Design of Experiments
- Effective Meetings
- Effective Teams
- Effective Writing
- Interpreting & Analyzing Data
- ISO
- Lean Manufacturing
- Leadership Skills
- Manufacturing Excellence
- Monitoring The Process
- Process Control Principles
- Process Capabilities
- Process Improvement
- Process/Product Handling
- Production Scheduling
- Production Operations/Workflow
- Root Cause Analysis:
  - Data Collection
  - Design for Manufacturing Acceptability
  - Design of Experiments
  - Developing Statistical Process Control (SPC)
  - Documenting Processes
  - Evaluating SPC
  - Failure Mode Effects Analysis
  - 5S Principles
  - Implementing SPC
  - Kaizen Principles
  - Kanban Principles
  - Key Process Indicators
  - Lean Manufacturing Principles
  - Organizing for SPC
  - Root Cause Analysis
  - SPC Concepts, Theory & Application
  - SPC Tools
  - SPC
  - Six Sigma
  - Statistical Techniques
  - Taguchi Methods
  - Variation/Process Control
  - Validation
- System Analysis
- System Strategies

- Team Building/Problem Solving:
  - Building Teams
  - Communication
  - Creative/Innovative Thinking
  - Decision Making
  - Developing Action Plans
  - Developing Solutions
  - Effective Teams
  - Empowerment Process
  - High Performance Work Teams
  - Leadership
  - Multicultural Communication/Diversity
  - Problem Solving
  - Self-Directed Work Teams
  - Situation/Problem Solving
  - Team Concepts
  - Team Building/Problem Solving
  - Teamwork in an Empowered Workforce
- Total Quality Management (TQM):
  - Audit Planning
  - Basic Quality Tools
  - Benchmarking
  - Business Process Improvement Change Process
  - Continuous Improvement
  - Creative Problem Solving/Innovation
  - Creative/Innovative Thinking
  - Developing TQM
  - Evaluating TQM
  - Implementing TQM
  - Organizing for TQM
  - Quality Concepts
  - TQM Strategies
- Train-the-Trainer
- Value Stream Mapping
- Variation/Process Control

### **HAZARDOUS MATERIALS**

- Explosive Materials Handling and Disposal

### **MANUFACTURING SKILLS**

- Composite Structural Bonding:
  - Composite Repair
  - Precision Hole Drilling in Composite Materials
  - Federal Aviation Administration Designated Airworthiness Rep
  - Structural Composite Part Inspection
  - Structural Composite Bonding Inspection
  - Non-Structural Adhesive Bonding Inspection
  - Non-Destructive Inspection
- Assembly Operations
- Automated Equipment
- Blueprint Reading
- Computer Numeric Control

- Cellular Manufacturing
- Cycle Time Reduction
- Electronics
- Electronic Assembly Workmanship
- Equipment Operations
- Equipment/Preventive Maintenance
- Ergonomics
- Facilities Management
- 5S Principles
- Inventory Control
- International Standards Organization Certification
- Kaizen Principles
- Kanban Principles
- Layout
- Lean Manufacturing Principles
- Machining
- Machine Tool Technology
- Introduction to Hand Tools
- Manufacturing Processes
- Metrology/Geometric Dimensioning & Tolerances
- Mounts
- Optimal Operating Methods
- Production Techniques
- Programmable Logic Controllers
- Quality
- Root Cause Analysis
- Set-Up Reduction
- Shipping/Receiving
- Shop Skills -- Drawing, Measurement and Instrumentation
- Special Machines/Inspections
- Statistics Skills for Operations
- Technical Training
- Total Productive Manufacturing
- Total Quality Management
- Understanding Product Specs/Drawings
- Value Stream Mapping
- Warehousing Operations/Distribution
- Work Measurement
- Workflow
- World Class Manufacturing Principles

**Productive Lab Hours**

0-60

**MANUFACTURING SKILLS (Ratio 1:3)**

- Carbon Fiber Sanding
- Carbon Fiber Spray Painting
- Verification of Special Processes
- Foreign Object Detection
- Personal Protective Equipment Spraying/Blending Techniques
- Personal Protective Equipment Bonding Techniques - Carbon Fibers

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