



**Aerospace Joint Apprenticeship Committee**  
Your key to a loyal, productive and trained workforce

## ACCOMPLISHMENTS AND OUTCOMES REPORT

### **AJAC Vision**

Produce the most highly skilled and trained aerospace and manufacturing craftspeople in the world ensuring the art of the skilled trades is not lost and bringing value to Washington State employers and residents by keeping the aerospace industry alive and thriving thus revealing Washington as the world leader of extraordinary and cutting edge aerospace training.

# Apprenticeships and AJAC

## Apprenticeships Bring People to Jobs



In 2008, the Washington State Legislature recognized that there was a looming shortfall of aerospace workers. Funds were allocated to establish the Aerospace Joint Apprenticeship Committee (AJAC) charged with designing, developing and implementing apprenticeship programs for multiple aerospace occupations.

Apprenticeships are not just about providing training; they are a vital connection between education, workforce development and economic development.

### Apprenticeships are important, because they:

- Facilitate the direct transfer of knowledge from the master tradesperson to the apprentice
- Create sustainable career pathways by combining supervised on-the-job training experience (93%) with classroom instruction (7%), allowing a student worker to earn a living wage while achieving continued growth in their occupation
- Make it possible for apprentices to spend their earnings in their communities and help stimulate the economy. This provides relief to the State's unemployment insurance pool and social services.
- Secure solid return on investment (ROI) for employers and continue to provide the most highly skilled workers
- Enable financial and social independence by providing a career path that can start in high school, lead to gainful employment, and can continue through a Bachelors degree
- Provide opportunity for apprentices to earn journey-level status, earn a living wage and look forward to the possibility of career advancement
- Bring about a significant and lasting impact on the prosperity of Washington State

## Who is AJAC

### AJAC is:

- A state-funded, non-profit aerospace and manufacturing apprenticeship training program
- A State Registered Apprenticeship Program that is subject to Standards and compliance with the Washington State Apprenticeship and Training Council
- Committed to creating jobs that lead to sustainable futures and provide the vital connections between employer and employee
- Working with employers to develop and operate apprenticeships across Washington State
- Developing and implementing approved programs for 10 apprenticeship occupations

# Employers and AJAC

## AJAC — A Cut Above the Rest

### AJAC is unique, because it:

- Offers a comprehensive apprentice recruitment program that includes attracting and supporting underrepresented people
- Creates a pool of pre-screened and qualified applicants for employers by assessing the applicant's skills, qualifications and aptitude for aerospace and manufacturing trades
- Enables apprentices to earn a two year degree and articulate into a four year degree
- Implements innovative training models with employers, community and technical colleges and other partners across Washington State that establish career pathways from K-12 through master craftspeople
- Assists veterans transitioning from active duty directly into the pool of qualified apprenticeship candidates
- Incorporates clean technology, safety practices and Equal Employment Opportunity (EEO) into all curriculum
- Partners with the FAA and other certifying agencies to enable apprentices to achieve multiple certifications
- Collaborates with stakeholders and affiliates to implement best practices and real world applications



## Employers are a Vital Component of the AJAC Programs

Industry employers are the driving force behind successful apprenticeship training.

### Employers:

- Connect apprentices with opportunities for job training and career advancement
- Contribute expertise to mentor programs, curriculum development and technology
- Provide needed equipment and subject matter experts for training programs
- Participate on advisory and curriculum review committees

## Employer Benefits

### Advantages for employers participating in apprenticeship programs:

- Captures and transfers knowledge and skills of the top craftspeople
- Low cost training program with sound return on investment (ROI)
- Formally train your employees in your facility, on your equipment and in your environment
- Training programs are developed with industry input and emerging practices
- Fosters loyalty and productivity
- Increase your ability to create, recruit, and retain a highly skilled workforce

Please visit [www.ajactraining.org](http://www.ajactraining.org), call 206-764-7940 or e-mail [info@ajactraining.org](mailto:info@ajactraining.org)

# AJAC's Legacy and Future

## What are AJAC's Accomplishments?

- Creates multiple apprenticeship programs throughout Washington State through the support of numerous employers
- Develops and maintains common curriculum with multiple educational institutions to establish consistent standards and enable ease of credit transfer
  - ⇒ AJAC developed a common Aircraft Maintenance Technician (AMT) school curriculum with five statewide community and technical colleges
- Leads the charge on designing and implementing innovative training practices in order to serve apprentices and employers across Washington State
  - ⇒ AJAC spearheaded the creation and coordinated the launch of the Aerospace Inspection and Manufacturing Mobile Training Unit (AIM-MTU).
- Affects change in the aerospace and manufacturing industries by creating training opportunities through partnerships with school districts, workforce development agencies, employers, Center of Excellence for Aerospace and Advanced Materials Manufacturing and others
- Designed and Implemented Career Takeoff outreach program to educate job seekers on aerospace occupations, apprenticeship and opportunities within industry
- Devised Instructor Mentorship Program to establish standards of excellence by providing a curriculum and trainer to new apprenticeship instructors
- Joins with other organizations to guide veterans, women, minorities, people with disabilities and other underrepresented groups in finding jobs that will make them the most successful
- Provides resources and opportunities to potential applicants in order to help them meet the minimum qualifications and become part of an applicant pool available to employers
- Maintains high visibility by presenting at outreach and education events to inform, educate and promote aerospace occupations



## Where is AJAC Heading?

AJAC strives to create a circle of learning that establishes solid training and careers in aerospace and manufacturing. This leads a young person (K-12) from introduction to aerospace and manufacturing to pre-apprenticeship, internship, apprenticeship, mentorship and finally trades instruction.

In order for Washington State to be the leader in producing the most highly skilled and trained aerospace and manufacturing craftspeople, the Aerospace Joint Apprenticeship Committee asks for your ongoing support with employer incentives and advocacy.

# Aerospace Joint Apprenticeship Committee (AJAC) Programs

## AJAC's Responsive Training:

### **Advanced Inspection and Manufacturing Mobile Training Unit (AIM-MTU)**

In spring 2011, AJAC will unveil the AIM-MTU, offering modularized training throughout the entire machining process. This 53' classroom on wheels will travel across Washington State to train the next generation of trades people at employer worksites and community/technical colleges. The AIM-MTU will provide state-of-the-art manufacturing and inspection equipment and highly skilled instructors.

### **Employer Incentives**

AJAC is working with the state to offer employers participating in a registered apprenticeship program a \$5,000 (per apprentice) tax credit. The purpose of this employer incentive is to reduce Unemployment Insurance (UI) spending and increase jobs through apprenticeship, sustaining the Washington State economy.

## AJAC's Contribution to Training, Coordination, Articulation and Growth:

### **Fighting 147s AMTS Program**

The Fighting 147s is the Washington State Aviation Maintenance Technicians Schools (AMTS) Development Force. The purpose of this project is to create one common integrated curriculum in order to increase transferability and accessibility at the five AMT community and technical colleges in Washington State.

### **Instructor Mentor Program**

AJAC instructors receive coaching and training from an experienced trainer in technical education.

### **Teach Tech—Professional Technical Teacher Education Program**

AJAC is preparing to offer trades people and technical education instructors the opportunity to upgrade their two year technical degree to a bachelor's degree in teaching. In order to qualify for the program, students must have two to five years of technical work experience and a technical associates degree or equivalent.

### **FAA 8610**

AJAC is working with the FAA to allow students the opportunity to utilize prior work experience for learning credits.

### **Veterans in Aerospace**

AJAC is creating a streamlined process to recruit veterans into the AJAC apprenticeship program and provide support, which includes helping veterans access G.I. Bill funds and use those funds for training education. AJAC is working with the Higher Education Coordinating Board (HECB) to ensure that its apprenticeship program meets minimum quality standards and complies with all federal and state laws and regulations.

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It is the mission of the Aerospace Joint Apprenticeship Committee (AJAC) that the training of apprentices shall be without discrimination based on race, sex, color, religion, national origin, age, disability, sexual orientation, veteran status or as otherwise specified by law.



# Aerospace Joint Apprenticeship Committee (AJAC) Programs

## AJAC is Addressing an Aging Workforce:

### Statewide Multi-Trade Apprenticeship Programs

AJAC is developing, implementing and maintaining approved apprenticeship programs for 10 high demand, aerospace and advanced manufacturing occupations that will be offered throughout Washington State, such as Machinist, Aircraft Interiors Assembly Mechanic, Composite Manufacturing Specialist, Aviation Maintenance Technician, etc.

### Train the Trainer Program

AJAC provides a program to train mentors on best practices for transferring their knowledge to the apprentice during on-the-job training.

### Presenting at Outreach and Educational Events

AJAC exhibits at numerous events throughout the year reaching 1,500+ young people and adults from diverse backgrounds in order to promote the benefits of aerospace and advanced manufacturing apprenticeships. We are dedicated to providing an Equal Employment Opportunity (EEO) to all people regardless of race, sex, color, religion, national origin, age, disability, sexual orientation, veteran status or as otherwise specified by law.

## AJAC is Boosting Student Interest:

### Pre-Apprenticeship—GreenLight Project

AJAC is partnering with the Manufacturing Industrial Council, South Seattle Community College, the Asian Counseling and Referral Service, the Workforce Development Council of Seattle-King County and number of other community agencies to develop and implement GreenLight. This 10 week pre-employment training program offers adults certifications and internship experience in Green Manufacturing. Training includes:

- Orientation to green jobs and green manufacturing
- Employment skills: resume building, interview techniques, and communication skills
- Certifications in First Aid/CPR, OSHA 10, MSDS, flagging, and forklifts
- Manufacturing related training and applied manufacturing principles, including safety training
- Lean and Green training
- Connection to apprenticeship and employment opportunities in manufacturing

### Career Takeoff Outreach Program

AJAC invites candidates to visit employer job sites for a day in order to introduce and educate job seekers on aerospace and advanced manufacturing occupations, apprenticeship and opportunities within industry.

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# *Opportunity In Motion*





Aerospace Joint Apprenticeship Committee



## The Advanced Inspection and Manufacturing Mobile Training Unit (AIM-MTU)

In spring 2011, AJAC will unveil the AIM-MTU. This 53' classroom on wheels will travel across Washington State to train the next generation of trades people at employer worksites and community/technical colleges.

- **Training throughout the entire machining process:**

- Product Designing
- Machining
- Programming
- Inspection
- Testing
- Reporting
- Setup

- **State-of-the-art machining and inspection equipment and technology:**

- Computerized training stations – CAD, CAM, CNC
- HAAS Simulators
- Advanced Metrology Lab
- 3-D Prototype Technology
- CMM
- And more!

- **Highly skilled instructors and cutting edge curriculum**

- **A rental program for employers:**

- The AIM-MTU trailer can accommodate a large group or just one or two employees

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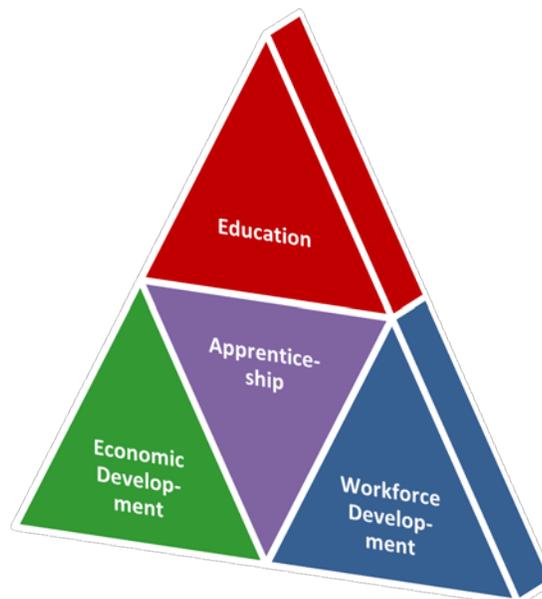
Mail Panel

**Please contact AJAC at [info@ajactraining.org](mailto:info@ajactraining.org) or 206-764-5832  
to learn how you can be involved.**

# Financial Support for Employers + Apprentice Recruitment (AJAC) = JOBS

*Apprenticeships combine supervised on the job training experience with classroom instruction allowing an apprentice to get trained while:*

- *Earning a living wage and reinvest those \$\$\$ in their local economies*
- *Getting health and other benefits from their employer and not through the State*
- *Getting an education and a sustainable career pathway*
- *Being a part of the workforce solution for industry*



## What Do Each of the Segments Above Represent?



**Education** - Apprenticeships combine on the job training with classroom instruction, allowing a student worker to earn a living wage while achieving continued growth in their occupation. Top-notch strategies have been developed to address shortages of instructors and state of the art training facilities – reinforcing the connection to higher education. Those who engage in these programs can earn credit toward an Associate's Degree, providing them with education opportunities otherwise not available.



**Economic Development** - With wages earned, apprentices can spend their earnings in their communities, stimulating the economy, and providing relief to the State's unemployment insurance pool and social services. Apprentices also receive health and other benefits from their employer and are no longer dependent on the State for those items. They may not be able to afford the aircrafts they build parts for, but they can purchase tickets on them, eat in the airport facilities and shop at their terminals.



**Workforce Development** - Collaboration is key. Businesses make a powerful statement taking on apprentices and training the next generation of aerospace workforce in WA State. Nearly half of all workforce vacancies in the next decade are likely to demand serious occupational skills acquired with a combination of postsecondary courses and learning on the job.



**Apprenticeship** - The Aerospace Joint Apprenticeship Committee (AJAC) connects employers and work seekers in WA State to create jobs that lead to sustainable futures. Additional business incentives provided to employers could help AJAC and other apprenticeship programs in Washington state increase the number of jobs made available through their programs.

## **ROI for Washington State**

In an effort to reduce dependence on WA State's Unemployment Insurance (UI) spending and shift resources to creating jobs, investment in a Business Tax Credit incentive makes sense.

- **EARNING A WAGE:** The immediate effect of the tax credit is to place a current UI enrollee into a working apprenticeship position. This means they are earning a wage and no longer collecting UI.
- **HEALTHCARE BENEFITS:** Through their employer, apprentices receive healthcare benefits
- **RETRAINING COSTS:** A Business tax credit incentive removes the burden of retraining costs from the State

## **ROI for the Employer\***

In Canada, for every \$1 spent on apprenticeship training, an employer receives a benefit, on average, of \$1.47 or a net return of \$0.47. The revenue generated by an apprentice also far exceeds the total training costs to the employer.

## **Employers are willing to hire apprentices\***

- 31% of respondents said they would hire apprentices if there were more financial support for employers doing so, such as tax credit incentives
- 30% of employers, without apprentices, indicate that they would hire apprentices if they could find them, suggesting that employers may be having difficulty getting access to apprentices

**To explore a Washington State business tax credit for existing apprenticeship programs, please contact Laura Hopkins from the Aerospace Joint Apprenticeship Committee (AJAC) at 206-768-6629 or [lhopkins@ajactraining.org](mailto:lhopkins@ajactraining.org).**

\*(Source: June 2009, Canadian Apprenticeship Forum survey)

# Save Washington State \$\$\$

## Reduce Unemployment Insurance (UI) Spending & Increase Jobs by Apprenticeship

Apprenticeships are the vital connection between education, workforce and economic development. The Return On Investment (ROI) for aerospace and manufacturing training is strong for the employee, the employer and the STATE OF WASHINGTON.

Currently 15+ states have joined other countries in offering tax credits and/or reimbursements to businesses utilizing apprenticeship programs.

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Hourly Wage <i>Pre-Unemployment Wage</i>	Annual Unemployment Benefit <i>Cost to State in UI benefits</i>	Annual Premium <i>The amount employer pays into UI fund for each employee</i>	Savings to Unemployment Insurance <i>Amount State is saving when a person is employed at \$12-\$18/hr instead of drawing UI</i>	Tax Credit Incentive per Apprentice <i>Amount of 1x tax credit paid to business per apprentice</i>	Net Savings <i>Difference between \$5,000 paid out in tax incentives to employer and \$12,000+ dollars state is paying into UI</i>
\$12.00 (Entry-Level)	\$12,492.48	\$594.04	\$13,086.53	\$5,000.00	\$8,086.528
\$18.00 (Mid-Level)	\$18,738.72	\$891.07	\$19,629.79	\$5,000.00	\$14,629.79

\*<http://www.esd.wa.gov/uibenefits/benefitcheck/how-much.php> — Standard Calculation applied

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# It's Washington's Turn

## Reduce Unemployment Insurance (UI) Spending & Increase Jobs by Apprenticeship

Currently, 15 US states (and counting) plus Canada, are offering tax credits to businesses with apprenticeship programs.

- Alaska
- Arkansas
- California
- Connecticut
- Louisiana
- Maine
- Michigan
- Missouri
- Montana
- New Jersey
- New Mexico
- Rhode Island
- South Carolina
- Virginia
- West Virginia

### How do other states deem a business eligible for a tax credit?

In most cases, tax credits for businesses are limited to qualified programs with apprenticeship periods between 4,000 hours (2 years) to 8,000 hours (4 years). The business must be enrolled and registered under the terms of a qualified apprenticeship program and meet legal standards.

### It's Washington's Turn:

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