

### In This Issue...

AJAC to Launch Pilot Program for Youth Apprenticeship

<u>Manufacturing Needs Women, So</u> <u>Let's Train Them</u>

AJAC Speaks at 2016 BABC Aerospace Conference

Manufacturing Day Opens Doors for the Next Generation

<u>Meet Justin, Pioneer's New AJAC</u> <u>Apprentice</u>

Welcome AJAC's New Training Agents

<u>What's New: A Distillation of</u> <u>Industry News</u>

Upcoming AJAC Events



### AJAC to Launch Pilot Program for Youth Apprenticeships



Over the last two years, the Aerospace Joint Apprenticeship Committee, Washington State Department of Labor and Industries, the Tacoma School District and Bates Technical College have worked on a comprehensive plan to launch youth apprenticeship programs in Washington State for high-demand, high-growth industries. For manufacturing, nearly 3.5 million jobs will need to be filled due to the skills gap, an aging workforce and new technologies requiring more talent in new fields of study.

On November 1, 2016, Washington State Governor Jay Inslee announced at the first-annual Governor's Youth Apprenticeship Summit that Washington will become one of the few states in the country to offer registered apprenticeship programs for high school students and young adults. The summit's purpose was to advance the Governor's work based learning initiatives for youth and provide a comprehensive approach to understanding how youth apprenticeships will increase graduation rates, replace the aging workforce and prepare the next generation of skilled workers.



The Aerospace Joint Apprenticeship Committee, in partnership with the YWCA and South Seattle College hosted the first-ever Women in Manufacturing Symposium at South Seattle College – Georgetown Campus, highlighting the training and career opportunities available to women in advanced manufacturing.



The symposium was led by a panel of women who are involved or currently work in manufacturing, including career navigators, apprenticeships and industry managers. The panel fielded questions regarding the role of women in advanced manufacturing and how AJAC's pre-apprenticeship program, the Manufacturing Academy (MA), can boost their confidence and provide job-ready skills for a rewarding career. AJAC's MA utilizes a comprehensive approach to retraining workers through 10 weeks of hands-on learning, soft skills training, insight into the industry, and applied mathematics.

#### Advocacy for women in manufacturing is key to creating a more diversified and well-balanced workforce

The panelists debunked every myth in manufacturing, from the "dark and dirty" shop floor to the applied shop math. The most frequent question asked during the symposium rested on the presumption that manufacturing poses barriers to women including their lack of transferable skills, "you have to get in there and take the extra step," said Donna Raz, a Manufacturing Academy instructor. The days of mindless heavy-lifting have been replaced by innovative techniques and state-of-the-art technology which some say, women are a better fit for. "Women have better hand-eye coordination and attention to detail," said one panelist. These skills are ideal for many careers in manufacturing such as Quality Assurance and Maintenance Technicians.



Nevertheless, a booming industry requires a well-trained workforce, but how can an industry that is historically represented by men challenge the status-quo that women can play a role in manufacturing?

For starters, the industry needs to focus on empowering women to try something new and bold that takes them out of their comfort zone. It's no secret, local manufacturers want to hire more women, but very few apply.



Advocacy for women in manufacturing is key to creating a more diversified and well-balanced workforce. Through conversation and encouragement, manufacturing has a strong chance to continue its reign as America's backbone. Take on the challenge of building something new every day and as one panelist said "women welcome back to manufacturing." AJAC's Executive Director, Lynn Strickland recently spoke at the 2016 British-American Business Council (BABC) Aerospace Conference at Seattle's Museum of Flight to highlight the importance of apprenticeships and its role in harnessing the next generation of aerospace and advanced manufacturing employees.

The current aerospace and advanced manufacturing workforce continues to age at a staggering rate – over 60% of the workers are 45 years or older and filling the vacancies left behind from machinists, CNC programmers, assemblers and engineers. In our global economy, competition is fierce and the rapidly changing technology has widened our skills gap.



AJAC's Executive Director, Lynn Strickland speaking at the 2016 BABC Aerospace Conference at Seattle's Museum of Flight. Photo courtesy of Alec Miller, AlecMillerArts.com

Throughout her speech, Lynn emphasized the need for our workforce to be continually skilled. If we want to meet the growing demand for precision parts, we need to provide our employers with an option to grow their own while meeting production goals and their bottom line. As Lynn alluded to, AJAC's apprenticeship programs are designed with an emphasis on structured on-the-job training and classroom instruction.

The career opportunities and pathways for apprentices is impressive, from wage progressions and college credits to mentorship and problem-solving skills. Not only do AJAC's apprentices walk away with zero college debt, but an opportunity to complete an Associate Degree and access to a sustainable career and educational pathways.

The 2016 BABC Aerospace Conference provided AJAC with an opportunity to highlight the growing movement among industries to adopt apprenticeships as a means for closing the skills gap, and retaining productive, lifelong learns within the company. Thank you to everyone at the BABC allowing AJAC to highlight the progress we have made in continuing Washington State's legacy as a leader in aerospace manufacturing.

About the BABC:

The BABC Pacific Northwest is an active member of the British American Business Council, the largest transatlantic business network, with 25 chapters and 2,500 member companies, including many of the world's largest multinationals, based in major business centers throughout North America and the United Kingdom.

Our members can take advantage of our participation in the BABC to extend their own business network, and connect directly with the members of all its other chapters, and by participating in the events run by other BABC chapters at the local member rate, and in the BABC Annual Transatlantic Business Conferences.

### **Manufacturing Day Opens Door for the Next Generation**



Students from local Kent high schools show their newly manufactured airplanes made from sheet metal.

The Aerospace Joint Apprenticeship Committee partnered with Training Agent Buyken Metal Products for the third annual Manufacturing Day in Kent, Washington. Over 40 students from Kentridge High School and Kent Phoenix Academy were ushered into one of Kent's longest-standing manufacturing facilities. The students were provided a hands-on tour of Buyken's shop floor to better understand the entire manufacturing process, from concept to production to quality control. Each student built a miniature metal airplane and learned first-hand how all of Buyken's state-of-the-art equipment is utilized on a daily basis.

The next stop on the tour was a presentation of AJAC's advanced manufacturing apprenticeship programs including interactive videos to better help the students develop a well-rounded perspective on career-based training. Buyken also provided a presentation of their company highlighting their suppliers and how all of the moving parts within the facility work seamlessly together.



Lastly, the students participated in the Marshmallow Challenge – an activity which teaches individuals team work, planning, and execution.

Manufacturing Day is a growing grassroots movement of manufacturers dedicated to overcoming the shares challenges facing manufacturers today. It provides an opportunity to raise and address several issue by simply exhibiting what they to do visitors curious about manufacturing. Through this collective effort, Manufacturing Day draws public attention to manufacturing's present-day reality and encourages job seekers to develop the skill they need to qualify for long-term careers in this secure and growing sector of the economy.



Check out more photos from AJAC's Manufacturing Day event on our <u>Flickr</u> or <u>Facebook</u> Pages.



## Meet Justin, Pioneer's New AJAC Apprentice



**J** ustin comes from a big family on Beacon Hill. He has ten sisters and brothers and learned how to fend for himself at an early age. His mom worked days and his father worked nights so he didn't have a lot of adult supervision growing up. By third grade he was already getting into fights at school to fit into a racially diverse student population.

By his freshman year he was involved in gangs, drinking and drugs and was kicked out of school. Justin decided not to go back to school and started working at a car garage. Unfortunately, he fell deeper into drugs and a criminal life to support his lifestyle. At 19 years old he went to prison with a 14-year sentence that was challenged and reduced to four years.

Upon Justin's release he was sent to a work release in Seattle operated by Pioneer. He had a change of heart in work release and really wanted to get a job and straighten his life out but no one was hiring him. Then one day the corrections officer at the work release announced over the P.A. system that Pioneer Industries was hiring for positions in manufacturing. He immediately applied, was hired and started in an entry level position deburring aerospace parts.

"At Pioneer, I realized I had the opportunity to really apply myself on the manufacturing floor and learn every machine and tool. They were giving me a chance to succeed and I was using every minute to refine my skills." Justin was like a sponge that couldn't soak up information fast enough and his skill set grew over the following months. Finally his efforts and skills were noticed and he was promoted to a lead position.

However, one night his friends talked him into going to a bar where a fight broke out and he was stabbed. Justin was looking at facing the possibility of a 10+-year sentence in prison. Instead, his supervisor at Pioneer fought for him with his corrections officer and he was sent back to live in work release for a violation. He was able to stay employed at Pioneer and he was ordered to get engaged in recovery meetings. "I had a real defining moment in my life when I was about to be sent back to prison. I realized I almost threw my life away when I knew I could succeed if I was given the option to continue my work

AJAC was granted permission from Pioneer Human Services to publish this article. To read it in its entirety, <u>please visit Pioneer's website</u>.

# What AJAC Apprentices Are Saying:

"I chose the AJAC apprenticeship because it seemed like the best way to work and learn at the same time. The AJAC program has helped me become more self-reliant and financially selfsufficient..."

#### Miley Johnson - Sheet Metal Technician - Orion

"From being in the apprenticeship, I was able to learn beside machinists that came from vastly different backgrounds, as a result I was able to grow as a team player and also learn a little from everybody. In the end, I was able to learn more about lathes and become more patient..."

#### Beau Squire, Machinist, Tech Mahindra

The skills I've gained in the AJAC program through manufacturing basics and lean manufacturing has helped me improve my efficiency and problem solving abilities during production..."

#### Dan Porter - Machinist Seattle Lighthouse for the Blind, Inc.

"It's been a good program to help me better my career and help my family. It definitely makes living a lot easier having the steady paychecks and a lot better pay than most jobs would to start out with..."

> Jeremy Moreland - Machinist, Damar Aerosystems



## What's New: A Distillation of Industry News



#### National Apprenticeship Week 2016

National Apprenticeship Week 2016 runs from November 14th - 20th. Join our apprenticeship movement and tell us how #ApprenticeshipWorks for you.

Read More...



#### Aerospace program lifts off at all district high schools

It's just another day in the Aerospace and Manufacturing class, a program that's designed to give students practical, hands-on understanding of basic manufacturing process, as well as prepare them for careers in aircraft design and construction right after high school.

Read More...



#### **Boeing invests \$6M in local STEM education**

Boeing is putting \$6 million into local STEM education to create new generations of qualified employees. One million of it adds to investments already made at the college level.

Watch...



#### Where the jobs are: The new blue collar

The loss of blue-collar jobs — accelerated by the recent recession — has resulted in the "hollowing out of the middle," which has left behind either low-paying jobs or higher-paying jobs that require significant skills say some economists.

Watch...



Aerospace and related jobs continue to grow in Washington and Pierce County, a newly released report shows.

Read More...



#### A Faster Way To Make an Airplane

It takes 5 to 10 years to develop a new plane. To reduce that, Boeing is using high-speed modeling and virtual meetings to get its hundreds of offices and 20,000+ suppliers to design and collaborate in real time.

Watch...

## Welcome Our New Training Agents!





PRECISION

MACHINING





**B&C** Custom Manufacturing Production and Prototype Machining

**Aerospace Joint Apprenticeship Committee** 

AJAC's continuing effort to skill-up Washington's manufacturers expanded this summer with four new companies signing on as Training Agents. Please welcome JM Eagle, Pexco Aerospace, Alpha Precision Machining, Inc., B&C Custom Manufacturing and Machine & Fabrication Industries, Inc. These companies have hand-selected employees to enroll in one of AJAC's six apprenticeship programs. Learn how your company become an AJAC Training Agent today.



What AJAC Employers Are Saying:



"The Machinist Apprenticeship program is not only our preferred choice, but our <u>only</u> path to developing a skilled workforce."

Cadence Aerospace - PMW Operations Puyallup, WA

"The apprenticeship program has provided a robust education for our apprentices, and gives our company much more well-rounded employees, capable of filling any void that comes up...It's a real solid path to better pay."

> Machinists, Inc. Seattle, WA

*"It has been a challenge for us to get young people coming out of school interested in a manufacturing career... We are happy to now offer a path for young people to get the training needed through our partnership with AJAC."* 

Buyken Metal Products, Inc. Kent, WA

### **Upcoming AJAC Events**

AJAC invests hundreds of hours each guarter to encourage, inspire and educate the next generation of aerospace and advanced manufacturing workers.

> November 17, 2016 **Pierce County Career Day** Washington State Fair Grounds

November 17, 2016 Granite Fall Career Night Granite Falls High School

February 9, 2017 **Enumclaw STEM Expo** Enumclaw Expo Center



EARN While You LEARN





**Launch Your Career in Aerospace as an Apprentice!** 

Soon!

#### BECOME A:

 Machinist
Maintenance Technician Precision Metal Fabricator

ajactraining.org/getting-started

#### **The AJAC Mission**

AJAC's mission is to provide exceptional and responsive apprenticeships, innovative supporting signature training programs with cutting-edge curriculum and highly effective trades trainers.

AJAC offers a method for transferring the breadth and depth of knowledge and skills between generations of the workforce, thus promoting the value of contributing to the next generation.

AJAC brings about a significant and lasting impact on the prosperity of Washington State, empowering its diverse population of residents to thrive as craftspeople and attain secure family wage iobs through:

- Dynamic career and educational pathways
- Corresponding wrap-around support services
- Smooth pipelines connecting employers with the next generation of workers and where preschool and *K-12 students and their influencer's* see aerospace opportunities as viable career path options
- Advocating for recognition and financial support of training in aerospace and advanced manufacturing
- Expanding the diversity of people entering the trades
- Exploring opportunities for growth and collaborating with partners to form comprehensive solutions.