

Thank you for the opportunity to speak with you today. My name is Laura Hopkins and I am the Executive Director of the Aerospace Joint Apprenticeship Committee, commonly known as AJAC.

Our organization was created in 2008 with funding from the State of Washington to address the aerospace and manufacturing sector workforce shortage issue. In the aerospace and manufacturing sector, employers have been looking at the reality of over 50% of their workforce being eligible to retire and a lack of younger generations getting trained in the skilled trades. Examples of the occupations we are talking about are Machinists, Aircraft Mechanics, Aircraft Interiors Technicians, and Composite Technicians.

One of the significant challenges brought on with retirements in the aerospace and manufacturing sectors is that these retiring tradespeople are crafts men and women who have honed their skills in the trade through years of experience. They are the employees who bring the greatest benefit to the employers by performing with the greatest amount of accuracy, efficiency and with the least amount of material waste and defective parts. They know more than how to push buttons; they understand why and when they would push certain buttons. They are capable of listening to the machines; know how to troubleshoot and adjust the equipment as needed. The deficiency brought on by these retirements is much more than just technical knowledge that can be easily taught. It involves the loss of the art of the trade itself.

It is imperative that employers have an avenue to capture the knowledge of the retiring tradespeople and pass that knowledge on to the next generation. We are short on time to do this as more and more people with the expertise of the trades are leaving a void that will be nearly impossible to recapture. It is with this sense of urgency that AJAC was created and has been working to address the needs of the aerospace and manufacturing sectors in Washington State.

Although AJAC was created for the aerospace industry we have been serving other manufacturing sectors as well. Because aerospace requires the highest level of precision machining, we can train people in other sectors such as medical devices and marine technology to the aerospace standards whereas we cannot do that the other way around.

So, how does our apprenticeship model work? Most of our apprenticeships are multi-employer programs. 93% of an apprenticeship program happens on the job. The apprentice goes to their respective job site for 40 hours a week and is connected with one or more mentors who transfer their knowledge to them. In this manner they learn the most relevant knowledge and are trained with state of the art equipment. Then one night a week the apprentices come together at school to learn the theory behind everything they are learning on the job. The beauty of a 21st century model apprenticeship program like AJAC is that it provides the connection between the experienced worker and the new person, as well as providing things such as veterans support services, interim certificates and college credit transferable to 4-year university programs.

In the aerospace and manufacturing sectors there is a skills gap. Employers need skilled workers and unemployed people need jobs. In order to address the skills gap we have partnered with local workforce agencies to create something called the Manufacturing Academy. This pre-employment training academy is an intensive, full time, eight week program where students are

introduced to the manufacturing sector and learn the basics of safety, hand tools and mechanical skills. Fundamental to the whole program is that the students are introduced to a new career path and they get to learn and practice the skills that will help them get jobs in manufacturing. Employers are behind the idea from the beginning and are ready to hire graduates of the program into entry level jobs, who then progress into an apprenticeship to further their education and training.

Apprenticeships are not just about giving someone some training. Apprenticeships are a vital connection between education, workforce development and economic development. The cost for State and Federal agencies to run apprenticeships is much less than traditional educational programs because employers assist in covering the cost of the education. When people become apprentices they are full time employees who earn a wage, which increases to a family wage level as the apprentice becomes more productive. They receive medical and other benefits and no longer need to rely on state or federal agencies for assistance. This gives them the ability to stimulate the economy by putting their income back into their communities. People who build and maintain aircraft generally are not purchasing their own product. They may not be able afford to buy a plane; however, they may be able to afford an airplane ticket, and eat at the restaurant in the airport and buy a trinket at a tourist destination – again stimulating the economy.

I want to leave you with this thought; Apprenticeships are not just about giving someone an education. Apprenticeships are a vital connection between education, workforce development and economic development. Apprenticeships are about empowering people to be autonomous and giving them education and career pathways in good solid family wage jobs.