Message from
Christopher Haslinger
Director of Education and Training

I believe the power of information fuels construction. In the field, we are seeing information shared in real time, and new technologies and processes are behind the success of this initiative. We have also witnessed new equipment and tools that are enabling our workforce to be more productive and to work safer. As a department, we pay close attention to these trends and act accordingly by offering a variety of new courses to support them each year.

Our industry is extremely competitive, and it’s changing rapidly. As a department, we are responsible for ensuring that the UA workforce is prepared and stays ahead of the curve when it comes to, not only apprenticeship training, but continuing education for our journeymen as well. This responsibility lies with all of our training centers, not just the Education and Training Department. One of our missions has to be to promote continuing education in every training center across the country.

Continuing education for our workforce is one of the most important attributes that we can offer a member. Oftentimes courses can be tied...
Women Are Shaking Up Leadership in Canada’s Trades

Submitted by Lawrence Slaney, Training Director/Canada

Canada’s trade careers are known for being mostly male dominated, but Alanna Marklund, guided by her own experience, is helping diversify them. Alanna Marklund has a passion for empowering others in the trades—especially other women. “It’s been the same demographic in the trades for so long,” she says. “If we want to keep up with the times and really embrace diversity in the workplace, we also have to embrace a diverse leadership.” As the National Manager of Youth, Diversity, and Indigenous Relations for UA Canada, Marklund’s job is to engage youth, women, and underrepresented groups within the trades.

Marklund’s start with the trades came in 2012 as a welding apprentice. By 2015, she was the first woman to ever make it to the UA International Apprentice Contest, where she won an award for excellence and leadership. She also received her Red Seal journeyman ticket that year.

In her new role with UA Canada, Marklund is able to help others achieve firsts in their industry. “I’m very proud to have taken on this role, because I feel I can make a difference,” she said.

Changing the Workplace

Marklund says recruiting women in the workplace and giving them the chance to lead is how things will change in her industry. She says one of the biggest benefits of having female leaders is the diversity of opinions they bring to the table. In addition, she adds, they become advocates and mentors to other women.

“Only a woman truly knows what it’s like to be a woman in the trades,” she says. Marklund says one of the biggest challenges they face is having to go the extra mile to prove themselves and challenge preconceptions. “As a woman coming in, you’re looked at longer to see if you know exactly what you’re doing,” she says. “You almost have to prove your work before it’s noticed, whereas if you’re a man in the trades, you might not get that.”

Seize Every Opportunity

Marklund’s advice to women who are passionate about their trade and the culture is simple. “Step up and apply for positions,” she says. “You’ve got to take that opportunity. You show women that you can climb that ladder.” Marklund says that there are opportunities within unions to run for elected officer positions or sit on committees. “I never imagined my trade would bring me to where I am today, but by keeping an open mind, a strong work ethic, and letting my work speak for itself, I have come farther than I would have ever imagined.”

Owners have become increasingly savvy about construction processes and delivery methods, and they have high expectations of the quality of a contractor’s team and that can often be part of the deciding factor in securing a job. As a department, it will be our mission to continually strengthen the skill-sets of our members, so that when our contractors are going after a job, they have the faith that the workforce we offer them is the most highly trained and relevant in the marketplace.
It is important to do the following when registering yourself or your instructors:

- Review a current transcript and ensure that course prerequisites have been met.
- If you need to obtain a current copy of a transcript, contact Tracey O’Leary at traceyo@uanet.org.
- Students enrolled in courses 1001-1003 must complete the reflective teaching assignments (RTAs) before moving on to the next course.
- Provide accurate profile information and an individual email address for each registrant.
- Complete the survey questions and make sure you select the appropriate box if graduating.
- Those eligible for an associate degree from Washtenaw Community College should contact Britany Tripp, Manager of UA Programs, at btripp@wccnet.edu or (734) 973-3685.
- Note the personal protective equipment requirements for each course.
- If you register on behalf of others, please share the brochure and course information with those individuals.

Is the Welder Ready to Take That Weld Test?

Submitted by James Pavesic, Assistant Director of the UA Education and Training Department

There have been some recent questions raised on the overall skill and experience levels of UA welders being qualified in accordance with the UA’s Welder Certification Program. In looking into these matters, it’s been found that in a number of cases the concerns raised are justifiable. What is of note was that inexperienced welders (e.g. apprentices, non-members) are being given weld tests that they are not ready to take. Some welders are being given the same weld tests three or four times in a row before actually passing the test. Welders should be able to consistently complete satisfactory pipe welds before being allowed to take one of our UA weld tests. The qualification and certification of a UA pipe welder is a serious and meaningful matter that welders take pride in attaining. They should not be used as a confidence builder or benchmark for evaluating an individual’s performance.

Inexperienced welders need to be challenged with tasks related to real-world welding applications that are relevant to the type of work they will encounter in the field. This not only challenges the individual, but provides the welding instructor with an ongoing evaluation of their skill set, ensuring the individual is instructed with the skills needed to produce sound welds, and they’re not just having individuals repeatedly practicing specific welding techniques in order to pass a particular UA weld test. It is the responsibility of the welding instructor to establish benchmarks in which the individual’s performance is tracked, and to ensure individuals are proficient in the welding process and can demonstrate consistent x-ray-quality welds prior to taking a UA weld test. The UA Welder Certification Program is a means of showing contractors and end-users alike that the person who holds a UA welder certification has a high level of qualification, which will support safety, quality, and economical construction of weldments for the piping industry.
To address this situation, we must take steps to focus on the issues at hand. As a first step, individuals who do not hold any current UA welding certification in the applicable process must undergo a “welding capability demonstration” before being permitted to take a UA weld test. The demonstration must be administered by the local welding instructor and found to be acceptable prior to being allowed to take a UA weld test. The type and size of the coupon used for the capability demonstration would be left up to the welding instructor (based on material availability).

This is an extremely serious matter and should not be underestimated by local unions. The future well-being of the UA Welder Certification Program is being put at risk and needs all of our assistance to turn matters around. It only takes a few incidents to bring discredit to any certification program. It’s up to all of us to ensure the integrity level and industry acceptance of our Welder Certification Program.

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**Autodesk Customer Success Story—Meet Eric Posey**

Submitted by Kenneth Schneider, UA Training Specialist

Recently one of our industry partners, Autodesk®, did a success story on a UA member from Local 440 Indianapolis, IN. Please take the time to read this great story about our Brother, Eric Posey.

Eric Posey spent the summer of 2002 as a trainee in the United Association’s (UA) Joint Apprenticeship Training Center at Local 440 in Indianapolis, representing Plumbers, Steamfitters, and HVAC Service Technicians before attending Indiana University–Purdue University Indianapolis on an academic scholarship to pursue a degree in computer engineering. But after a couple of semesters and a great deal of soul searching, Eric realized he wasn’t on the right path for his future, and he decided to leave college and return to UA Local 440 as a trainee.

With school on hold, Eric sat down with a detailer at UA Local 440 who showed him some mechanical rooms that had been modeled and spooled using 3D software. These room designs merged hands-on work, engineering skills, and technology, and Eric was hooked. He made a decision to pursue his desire to become a detailer and trainer.

While his friends at Purdue entered more-costly higher-education programs, Eric was accepted into the UA Local 440 apprenticeship program. He worked for Greiner Brothers Inc. mechanical contractors while attending skilled union trade classes, paid for by his union membership. “My only real expense was books, which cost about $150 per semester. Meanwhile, my friends were racking up huge college tuition debt,” Eric said.

The Director of Training Don Bough from Local 440, applied to the Autodesk® Membership Training Provider Program. The Program, which aims to support certified trade organizations in their efforts to train, test, and certify their student members, is a collaboration between Autodesk and the national leadership of major North American trade unions and personnel who manage their membership training programs.

The Program offers numerous benefits to union training centers, including a cost-effective annual subscription to Autodesk software products, access to Autodesk’s Instructor Development tools, the ability for union instructors to become Autodesk Certified Instructors, and much more. It also enhances Building Information Modeling (BIM) and CAD training at current sites, while offering enhanced training initiatives with Autodesk technology at a new location. With the support of Autodesk’s regional distributors, the program promotes training services and product certification to skilled trade organizations while encouraging the use of Autodesk’s learning resources. These resources include learning materials, services and technologies, as well as certification-prep exam courseware.

When Eric’s apprenticeship began in 2004, UA Local 440 only taught Introduction to AutoCAD Level 1, and that was only accessible to fifth-year apprentices and journeymen. In 2009, after completion of Level 1 at UA Local 440, where he excelled, Eric moved on to coursework in Level 2, and then Level 3 via the UA’s online course offerings.

He self-taught while working his day job in plumbing and HVACR. “I stayed close to my contractor’s ear about AutoCAD, because I wanted a shot at working with it. I could just see the benefits for me, for my job, and for my future.”

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because I wanted a shot at working with it. I could just see the benefits for me, for my job, and my future,” he said. With his CAD dreams on a back burner, Eric continued working on installations in mechanical and boiler rooms. He got a great opportunity to serve as an area foreman on the $754 million Eskenazi Hospital project in Indianapolis. “That hospital job was one of the first in our jurisdiction to have a strict BIM requirement,” Eric stated, “and my contractor chose to partially outsource it.” Although Eric was not detailing on that project, he learned the importance of BIM and could see that many in the field were not yet ready for 3D modeling. He found that outsourcing the detailing could be the cause of the slow adoption of 3D modeling around him. He added, “I was in the middle of the grumblings of the journeymen and foremen and realized why pipe trades journeymen should be detailing their own pipe!” After that job concluded, he was asked to detail, and within a few months he was the lead detailer. Greiner Brothers quickly went from outsourcing all BIM to an in-house mix of union and non-union detailers to phasing out non-union personnel altogether, moving to a complete Autodesk Revit® software workflow. “We decided at the beginning of 2015 that we were no longer going to renew our PD3D (Trimble® PipeDesigner 3D®) licenses,” said Eric. Although the transition from legacy systems to Revit was not without its challenges, Eric has never looked back.

Eric graduated from the UA's Instructor Training Program (ITP) in 2014, and in 2015, he got his shot designing the UA's brand-new Utilizing Jobsite Technology course at ITP, where he teaches skilled craftspeople how to interact with technology as they move from the office to the field. “If one of our members is handed an iPad on the jobsite,” he said, “we want them to have basic BIM 360 skills in reading digital blue prints, 3D models, layout points, and tracking punch lists and safety protocols.” Eric was also asked to help others learn to use Autodesk Revit. “I was happy to have the chance to help a fellow union member, Erik Lambrecht, create and teach the new Revit MEP course in 2016.” In 2017, Eric developed and taught the UA's new Advanced Autodesk Revit course at ITP.

Today, while continuing his full-time detailing job at Greiner Brothers, Eric trains UA technology trainers, as well as rank-and-file members, including a mix of students right out of high school, young college graduates, 50-year-olds looking for a career change, and everyone in between.

The union also assists with job placement. UA Local 440's goal is to make sure every student who comes through the training center is comfortable navigating a BIM model, extracting measurements and information from a model, and knowing what information they can ask their contractor's drafting department for in a pinch.

“Most of the students who take my courses are trying to add another skill to their arsenal and gain a better understanding of BIM,” Eric stated. The UA's large apprenticeship and BIM classes continue to rise in enrollment each year, preparing workers with an overview of the latest in technology on the jobsite— including fabrication, power tool technology, virtual and augmented reality, cloud and BIM 360 workflows, and jobsite gang boxes equipped for BIM.

According to Eric, the greatest return on the investment of his time and talent is his ability to help his fellow union members keep pace with technology, stay relevant in their careers, and, in some cases, retool themselves for new careers in the trades using Autodesk products.

Eric's journey took him from student to practitioner to teacher. What began as a summer job before college has become a lifelong career merging his passion for technology with hands-on and real-world experience. He plans to continue working for Greiner and teaching for the UA.

To see or use this article by Autodesk, use the link below.

SAFETY NOTICE — STOP USE
MSA Gravity® Welder Harness

This Safety Notice is issued to inform you that MSA received a field report from an end user regarding select MSA Gravity Welder Harnesses and that, as a result of MSA’s findings related to this report, you must take the actions outlined in their Safety Notice.

Upon investigation of the field report, MSA determined that the leg strap and chest strap used in select MSA Gravity Welder Harnesses are incompatible. Although the harness can be donned, in the event of a fall, the shoulder straps may extend and affect the protection offered by the harness.

An affected MSA Gravity Harness will have no buckle on the shoulder straps and an oval ring where the shoulder straps connect to the leg straps. See figure below.

MSA is advising all MSA Gravity Welder Harness customers to immediately stop use of affected MSA Gravity Welder Harnesses produced from July 2015 through and including January 2018. The harnesses are to be removed from service, marked “UNUSABLE” and destroyed.

To get all the details related to the MSA Gravity Welder Harness Safety Notice, click here.
The Road to AWS Accreditation

Submitted by Richard Cranker, Local Union 123

There are AWS accredited facilities already within the United Association, and we are more than willing to help in anyway—use us. In my opinion, the hard part has been done—writing your Quality Manual. Help one another to create a better-rounded and more-complete building trades organization in the process. Who could say no to that?

For us, that road started when a contractor from out of town—and working within our jurisdiction—came to us for help. One of their customers required all welds to be completed by welders with AWS certification. Since this customer was very big and was spending a lot of money, this contractor had to send our guys out of town and put them up in a hotel to administer an AWS test at their home facility. They came and asked if there was anything we could do, and this is where our journey began. We do, after all, have an interest in their success. It’s a “No brainer!”

The initial look into accreditation was pretty overwhelming at first.

- Where to begin?
- What information do you put in a Quality Manual?
- What does an AWS Quality Manual look like?
- Write a Quality Control Manual? The first thing that came to my mind was something the size of The Yellow Pages from the 1980s.

These are just a few of the questions that hit me right away. So, I did what anyone in the UA would do—I called Phillip Martin. Phillip directed me to Local 12 in Boston since Local 12 has been AWS accredited for a while now. I sent an email to Richard Carter, Training Director for Local 12 explaining my situation and told him that Phillip Martin suggested that I contact him for information. Then, within a day or two, I got an email back from Mr. Carter with a copy of his Quality Manual. Mr. Carter’s assistance was instrumental in having a great audit. To pay it forward, we will be happy to pass along our Quality Manual to any UA local union wanting to become AWS accredited. There is no need to reinvent the wheel through trial and error to write your manual by yourself. You would only need to edit our manual to fit your particular situation and most importantly—live by it.

The AWS website has a great deal of helpful information. First of all, there is a Quality Assurance Manual checklist. This list contains exactly what the auditor will be looking for during your initial audit. Go straight down the checklist. If there is anything on the checklist that you cannot find in your Quality Manual—then add it to your manual. In Part One, “Procedures of This Checklist,” where it asks you to write on a separate sheet of paper your procedure to ensure tractability of materials—DO NOT skip this step! Our auditor was retired from doing this, and he said that this was the third audit he had ever done where this step was actually completed, and he was very happy about that.

Among all the points on his checklist, the auditor will witness your test supervisor conduct a testing event. By the way, the test supervisor cannot test a welder who he has trained. Other than that, there is nothing different from what we are already used to doing. The only difference here is that it doesn’t matter if your guy passes or not. The auditor is grading the test supervisor, not the welder. He will be listening for the pre-test briefing to make sure you provided all the information that you are required to provide. It’s all in the checklist for you to download. We did ours the same way we conduct our UA weld test events, and that covered all the bases.

Just think of it this way, the audit checklist is nothing more than the concerns of the AWS. Your Quality Manual is your program, which tells the AWS how you plan to handle those concerns.

The auditor will want to physically see how you receive material, and make and store your test coupons and consumables with Material...
Test Reports (MTRs) and Certificates of Conformance.

Even though the AWS currently has no requirement for calibration of the thermometer in your rod oven, our auditor recommended that we keep a six-inch piece of flat bar steel inside the oven. Once a month, check the temperature in the oven by putting a 275-degree temp stick on the flat bar to verify the reading on your oven thermometer. The Certificate of Conformance for the Tempilstik® states that it is accurate to within +/- one degree of the stated temperature.

The auditor examined our welding equipment and corresponding calibration records. He also verified that we had all of the reference documents, which are all available for download from AWS’s website. He checked our AWS QC4-89, AWS QC7-93 + supplements C, F, & G, AWS QC1, ANSI Z49.1, and ANSI/AWS A5.01.

We all know what a difference a good auditor who has decades of experience can make. We were very fortunate to get the auditor we had. A few others made a big difference with our audit, as well. Lee Middleton, with his vast fab shop experience, didn’t mind me bouncing question after question off of him and letting me complete the Quality Manual at my own pace, and I can’t thank Richard Carter of Local 12 enough for his invaluable assistance.

Anyone considering AWS accreditation, please do not hesitate to contact me at richard.cranker@LU123.com.

Save the DATES

The following are important upcoming training events for 2018 - 2019.

Office Professional Seminar (OP)
August 6 - 8, 2018 • Ann Arbor, MI

Instructor Training Program (ITP)
August 11 - 17, 2018 • Ann Arbor, MI

Pipe Trades Training and Technology Conference
February 17 - 21, 2019 • San Diego, CA

Mark your Calendar!