Message from Chris Haslinger  
Director of Education and Training

This will be our last newsletter before year-end, and I wanted to take this opportunity to thank everyone for their tremendous effort and hard work that has been portrayed all year long. We had an extremely successful Instructor Training Program (ITP) and International Apprentice Contest (INAC) this year. As you’re all aware, we had 1,835 instructors take part in the ITP, with 406 attending as first-time instructors. We had 143 graduates, with 11 instructors receiving their associate degrees as well. In the program’s 28th year at Washtenaw Community College, we had 35 graduates who received their coordinator certificates. We received a great deal of positive feedback on our revamped and brand new classes. I could not be more proud of the way this department has responded to the challenges put before us.

We had a very well-received 2017 Pipe Trades Training and Technology Conference where we showcased just how forward-thinking our department is, and we successfully took that show on the road through our virtual...
al design and construction events held in Washington, D.C.; Chicago, IL; and Phoenix, AZ. It’s safe to say that everyone enjoyed and benefited from those events, and the hands-on new technology conference was an overwhelming success. Our objective was to broaden everyone’s knowledge in regard to the UA’s training applications and technologies, and I think we helped everyone with ways to grow their apprenticeship programs.

I am really excited that our UA Online Learning Resource (UAOLR) has now reached over 10,000 users, and we are already over 550,000 page views this year, which is almost double what we experienced last year. It’s obvious that more and more people are taking advantage of this resource, which just underlines the importance of us continuing to add material to the site. We’ve seen an increase in apprentice usage, and I think if we continue to encourage them, that number will rise significantly. This is a resource that will prove to be invaluable in the future.

As we look toward 2018, it will be our mission to continue to look at new initiatives that will help our membership remain competitive. As new technologies are becoming commonplace out in the field, it will be our responsibility to decipher which technologies and initiatives to concentrate on. Training continues and always will have a significant role in helping to secure work for our membership. Your roles as directors/coordinators, instructors, and as training specialists and the department’s office professionals have a direct impact on the well-being of the United Association. All of the training that you do—from specialty site-specific training to accelerated programs to support training to the UA Apprenticeship Program—has a direct influence on how prepared the UA workforce is out in the field. That’s a tremendous responsibility, and I think you’ve responded to the charge of having the best training in the industry two times over. For that, I will always be grateful.

**Newly Offered Regional Training Courses**

by Phillip F. Martin, UA Special Representative

The popularity of regional training courses provided by the UA has risen significantly over the past few years. To address this, and in an effort to improve the accessibility and cost effectiveness of providing these exceptional training courses, General President McManus has committed the necessary resources to be able to provide additional training courses to the regional schedule of classes. The classes will continue to be taught by the same dedicated and experienced instructors, as in past years.

Classes will be available throughout the year at the various districts in the United States and at the UA’s Great Lakes Regional Training Center at Washtenaw Community College in Ann Arbor, Michigan. Holding the classes at the regional level will allow a greater number of students to attend with significant savings on travel time and expenses and will alleviate the need to offer the courses during the annual Instructor Training Program. As always, these regional classes are offered to any current UA member looking to upgrade his or her skills. The class sizes are limited, and most classes require a minimum number of students in attendance to warrant holding the class. The future 2018 Regional Training Course Catalog will provide details of class schedules and locations.

It’s important to remember that when members participate in one or more of these classes, they are eligible to receive college credit for the courses, which in turn can lead to an associate or bachelor’s degree. The following is a description of the training courses that will be added to the roster of future regional training classes.

**Course 2154: OSHA 7110 Safe Bolting Practices**

This course is designed to provide participants with the knowledge and skills to safely and properly assemble bolted flange joints and includes both classroom lecture and practical hands-on lab. The attendee will learn how to inspect, assemble, and tighten bolted joint connections utilizing the industry required controlled bolting procedures, including pressure boundary flanged joint assembly practices, terminology, power torqueing and tensioning, tooling, and related technical areas. Participants will receive an OSHA 7110 Certificate, which will provide them with the ability to conduct bolted joint training at the local level.
Course 5023: Clamping, Reforming, and Aligning Pipe
This course is designed to provide participants with the necessary skills and knowledge on the different types of clamping devices used in the fabrication and installation of piping systems. Class exercises will focus on the application and proper selection of clamping equipment in order to perform piping joint assembly and fit-up. Hands-on shop exercises will focus on the proper use of pipe clamps, clamp setup, joint fit-up verification, and maintenance of the equipment.

Course 8004: Piping Codes for Industrial Work
This course will provide participants with knowledge in the history of piping codes, piping metallurgy, material selection, installation, welding requirements, testing, inspection, and code stamping as required by the American Society of Mechanical Engineers Codes on Power and Process Piping. Classroom examples will be demonstrated on the fundamentals of applicable code sections, standards, materials, design, and quality control verification of code compliance.

Course 8011: Radiographic Film Interpretation
This course covers the basic skills and techniques required when viewing and interpreting radiographic films. The course will involve theory and hands-on practical labs interpreting x-ray films of piping welds. The course instructors are highly experienced in radiographic examination. It is recommended attendees hold the AWS CWI® credential.

Course 8015: ASME Section IX Welding Code
This course is designed to provide participants with an understanding of welding procedure specifications and welder qualifications in accordance with Section IX of the ASME Code. Participants will be able to apply the rules of Section IX as they pertain to the development of welding procedure specifications and the qualification of welders.

Course 8022: Basic Non-Destructive Testing
This course covers the basic Non-Destructive Examination (NDE) methods of Liquid Penetrate (PT), using the solvent removable visible dye technique, and Magnetic Particle (MT), using the dry particle electromagnetic yoke technique. The course will involve theory and hands-on practical application of both the PT and MT methods. It is recommended class attendees hold the AWS CWI® credential. A certification will be issued upon completing and passing of the exams given at the end of this course.

Course 8036: Phased Array Ultrasonic Testing (PAUT)
The course is designed to familiarize the participants in the basic principles behind Phased Array Ultrasonic Testing with a goal to become familiar with the displayed information and approaches to analyze test results for determining the location, size, and characterization of weld defects. In addition, the course will address the key steps to passing PAUT weld inspections. The course curriculum includes presentations, resources, and hands-on demonstrations of the PAUT equipment.

We are proud to report that three UA HVACR apprentices swept the PHCC HVACR contest. In first place was Sean Dobbs, Local 486, Baltimore, MD; in second place was Marshall Brahman, Local 601, Milwaukee, WI; and in third place was Allen Maslo, Local 597, Chicago, IL. It was reported that this was no easy task, and it was the first time that the UA took the top three spots in the HVACR category. In the Plumbing category, the UA International Apprentice Contest winner, Donald B. Adams III, Local 322, Southern NJ, placed very high as well.

Congratulations to our UA contestants and to the UA Instructors who taught them!
No-Cost Recruitment Resources

by Laura Biggie, UA Training Specialist

There are several ways your JATC can conduct outreach and recruitment using free materials offered and completely paid for by the International Training Fund.

Wouldn’t it be nice to take the guess work out of planning and creating recruitment videos and brochures? The Education and Training Department has put the following toolkit together to assist your training center in creating customizable outreach materials that present your message to parents, counselors, and students at career fairs and other outreach events. If you need any assistance in requesting these materials, do not hesitate to contact Laura Biggie lbiggie@uanet.org or Kiva Straser kivas@uanet.org.

It may sound too good to be true, but you heard it correctly—the Education and Training Department has developed customizable recruitment brochures and commercials available at no cost to your training center!

No-Cost Customizable Brochures

Training coordinators can begin creating customizable brochures for their JATCs by registering as a new user at the following web address: www.UAJOIN.org. Once the account request is approved, users will have access to create and customize a variety of templates, including Standard, Women, and Spanish language brochures and push cards. The full name of the JATC must be used when requesting free brochures.

These UA Join brochures are available in both Spanish & English versions.

“You See More” brochures and executive summaries are also available at no cost. These are non-customizable and specifically highlight HVACR, sprinklerfitter, and plumbing sectors.

No-Cost Customizable Videos

Now you can order customizable videos for several titles, including Alumni Earn and Learn for Free, Apprenticeship the Other Four-Year Degree, and I AM: Women in Piping. To view your options, visit the Careers in Piping Playlist: Playlist Customizable Video Examples for JATCs.

After choosing one of the four available video templates, your video will be customized to include your training center’s name, phone number, and website address at the end.

Visit the Careers in Piping Playlist to view these commercial options, then complete the request form. Customizable videos may be requested by completing the form at the following website: www.uajoin.com/commercial.

Recruitment Videos Available for Outreach and Career Fairs

Subscribe to the Education and Training’s Recruitment Channel, “Careers in the Piping Industry” https://goo.gl/2Ki9R1 to receive notification when new videos are uploaded for your use. Several playlists have been created to assist you in your outreach efforts including:

- HVACR Service Technician Careers
- Pipefitting and Steamfitting Careers
- Plumbing Careers
- Sprinklerfitting Careers
- Welding Careers
- Careers for Veterans

These videos explain the varied career paths to economic security through the skilled trades, and explain the benefits to parents, counselors, and potential recruits.

Newer videos include:

- “I AM” Women of the UA
- Spanish Language Video “Careers in the Piping Industry (Carreras en la industria de tuberías)

More information can be found under the e-Resource Training Guide under the “Recruitment” tab located here: http://uaolr.org/img/e-Resource-Training-Guide.pdf

What’s New on the Online Learning Resources?

by Lauren Friedman, Online Learning Resource Coordinator

What Is The OLR?

The UA Online Learning Resource (UAOLR) is made up of two parts—the Instructor Resource Library (IRL) and the Student Resource Library (SRL).

Each IRL contains material such as PowerPoints, outlines, and assessments, which can be used in conjunction with UA textbooks and other code manuals. The SRLs contain tools to help students, such as quizzes for self-assessment, flash cards, and multimedia presentations. All resourc-
Instructors can sign up for an OLR account by going to www.uaolr.org and clicking “request an account,” which will trigger an email to their training coordinator for approval. Students must be given accounts by their training coordinators or a delegate.

More Information
For questions or help with the OLR, please contact Lauren Friedman, Online Learning Resource Coordinator, at lfriedman@uanet.org or 410-269-2000.

The UA VIP Program’s Continued Success

by Micheal Hazard, UA Training Specialist

In 2008, the United Association created the Veterans in Piping program for two specific reasons—to extend a helping hand to our U.S. military service members returning to the civilian workforce and to help fill the critical shortage of skilled UA craftsmen. Little did we know at the time of its inception, that the VIP program would change the lives of so many deserving military service members. Nor could we have ever predicted the impact and change that the VIP program would have on our U.S. military service members.

The success of the UA VIP program has signified the commonalities amongst military and UA leadership. Military officers swear under oath to uphold one of the most important duties, which is to return their service members to society as productive citizens—better citizens than they were when they enlisted to serve our country. The same important duty, which is to take care of and show respect for those that work or serve under them. There is no other organization in the United States that has had more of an impact on the number of civilian career opportunities transitioning service members have today than the United Association. Every UA member should be proud in knowing that the work and training we provide on a daily basis is also providing great career opportunities for our military women and men.

The UA VIP program is currently operating nine programs on eight military installations, serving all branches of the military. The UA Accelerated Welder Training Program is offered at Joint Base Lewis-McChord, Washington State; Fort Carson, Colorado; Fort Hood, Texas; Fort Campbell, Kentucky; and Camp Lejeune, North Carolina. The UA Accelerated HVACR Training Program is offered at Joint Base Lewis-McChord, Washington State and at Naval Station Norfolk, Virginia. Lastly, the UA Accelerated Fire Sprinkler Fitter Training Program is offered at Fort Sill, Oklahoma.

The UA VIP program, which provides free training to ensure service men and women experience a seamless transition back into the civilian workforce and are able to continue a productive, successful, and meaningful lifestyle. Military and UA leadership also acknowledge the men and women who serve our country as our most-valuable assets. Both have demonstrated the true mark of leadership, which is to take care of and show respect for those that work or serve under them. There is no other organization in the United States that has had more of an impact on the number of civilian career opportunities transitioning service members have today than the United Association.
The World Belongs to Those Who Show Up—The UA is Part of National Codes and Standards

by Roger Thein, St. Paul Pipefitters Joint Apprentice Training Program and submitted by Phillip F. Martin, UA Special Representative

United Association members show up in many places where interest and expertise intersect—at the UA International Training Program, regional training centers, local apprenticeship and training programs, and at state legislatures and city governments, and working with jurisdictional authorities and national codes and standards. National codes and standards are documents used as a rule or guideline developed by committees composed of experts representing various interests and parties affected. That structure of varied interests and parties comprised of volunteers makes consensus organizations well-rounded. Those well-rounded consensus mechanical codes are enforced by public authorities and set requirements for important aspects of construction, such as materials, piping, fabrication and testing. The UA must show up and contribute their time and money in the maintenance of national codes, such as American Society of Mechanical Engineers Power Piping Code and Process Piping Code; International Association of Plumbing and Mechanical Officials Uniform Mechanical Code and Uniform Plumbing Code; and American Welding Society Standard for AWS Certification of Welding Inspectors.

Benefits of showing up are professional development and remaining current on industry trends. Many jurisdictions and governing bodies have instituted mandatory continuing education and professional development hours in regard to codes to maintain licenses, competencies and certifications. Quality control, accreditation and conformity assessment are also prescribed by codes. Examples are Certified Welding Inspectors and ASME Stamp Certificates of Authorization. Most importantly, our work is defined and directed by the scope, design, fabrication, assembly, erection, inspection, examination and testing rules in those code documents. It is our working world.

Participation is showing up. For the UA member, it is a commitment of one’s time and knowledge. For the training organization, union, professional group or contractor, it is an investment of money sponsoring the UA member’s time and talent for travel to meetings. One shows up at a standard committee and lends their expertise to the discussion impacting our working world.

What is the purpose of all codes? The answer is safety. The U.S. Department of Labor’s Occupational Safety and Health Administration (OSHA) relies on national consensus standards to help execute its mission. The ASME B31.1 Power Piping Code and B31.3 Process Piping Code are two examples of codes inferred by reference (IBR) in the OSHA regulations.

The UA must show up at code and standards organizations to contribute our time, expertise and experience to the maintenance of rules that govern and safely protect our working world.

AWS/CWI Program Update

by Robert Wiswesser, UA NDT Level III submitted by Phillip F. Martin, UA Special Representative

After recently attending the AWS Qualification and Certification Committee meeting, I thought an update on changes in the CWI program would be worthwhile to all interested members. According to the AWS timeline, in January 2018, all CWI Part A (fundamental), and Part C (open Code Book) exams will only be provided through Prometric testing centers. The Part A exams will be closed book. No notes or training material will be permitted in the computer testing area during that exam. The Part C exam will be “open book.” Candidates will only be permitted to take their Code Book into the testing area. Code Books may have margin tabs and brief written margin notes, but no loose paper notes will be permitted. For those people who are comfortable with computer-based electronic documents, there will also be an electronic copy of the Code Book available with a subject word search feature. It may
be helpful in locating test question “key words” in the Code that would otherwise require a time consuming hard copy index search to verify the answer. The Part B (practical) exam will still currently be administered at the CWI seminar training site, normally scheduled the day after the seminar has been completed. AWS test supervisors will still oversee the Part B exam.

In addition to these changes, all current written exams for Code Book endorsements are now only provided through Prometric testing centers. This is important for all CWIs who may want to complete their nine-year recertification process by taking a Code Book endorsement exam. This optional method of meeting nine-year recertification requirements may be satisfied by passing one of the Code Book endorsement exams at any time during your certification cycle, but prior to your expiration date. The newly offered AWS MT (Magnetic Particle Testing) and PT (Liquid Penetrant Testing) endorsement exams also meet nine-year recertification requirements. UA members who are currently certified in accordance with the UA’s SNT-TC-1A Written Practice for MT and PT may want to consider these exams as a means of completing their nine-year CWI recertification.

**UA-ITF and Matterport**

by Kenneth Schneider, UA Training Specialist

We are pleased to announce a deal with Matterport where local training centers can purchase a camera at educational-use pricing. The UA-ITF has purchased the software, which will enable you to create a virtual tour of your training centers. The software gives you the ability to tag equipment and add descriptions, as well as video and website links. The virtual tour is only the beginning of what you can do with this technology. Your only limit is your imagination!

The UA Mobile Welding Trainer was scanned at ITP this year using a Matterport camera. Please take a moment to tour the UA Mobile Welding Trainer so you can see the possibilities the camera offers. Click on this link [https://my.matterport.com/show/?m=D3pwU2oMoHY](https://my.matterport.com/show/?m=D3pwU2oMoHY) and you will be taken to the trailer you see below. Once you are in the web browser, you can spin 360° and see what is around you. This is best done on an iPad or using your phone. You will see the other training trailers at ITP and a very focused training specialist and his assistant from Matterport. Notice the walking person in the lower, left-hand corner. By tapping on that person, you will enter the trailer and begin your virtual tour. You will notice round targets known as MatterTags. If you tap the MatterTags you will discover more information.

The symbol you see in the picture above on the lower, right-hand side is a VR (virtual reality) viewer. To use this, you must first download the free app, Matterport VR, on your phone and tap on the type of VR equipment you are using (ex. iPhone, Google Cardboard). Once you have downloaded the app, go back to the web browser in the middle column on the same device that the app is downloaded on. Tap on the VR viewer on the lower, right-hand side and you will see Google Cardboard (iPhone) come up with instructions. Put your phone into your VR headset. You will see the training trailer with a hexagon on it. In the “glasses” there is a tiny circle. Manipulate your headset so the tiny circle falls over the hexagon. Let it load, and then you will be in the trailer. Move your headset around and you will be moved around the training trailer space.

The Matterport camera is easy to use with an iPad or Android tablet. You just need two free apps—Matterport 3D Showcase and Matterport Capture. A virtual tour is only the beginning of what you can do with this technology. Please contact Ken Schneider at kens@uanet.org for more information on how to get this technology in your training center.
EPA 608 Technician Certification Update

by Richard Benkowski, UA Training Specialist

The EPA has been working over the last several years to revise the Section 608 Refrigerant Management Program to better reflect today’s industry. New regulations impacting the way refrigerants are handled and sold went into effect on January 1, 2017. Additional regulatory changes will be phased in over the next two years. The net result is a revised Section 608 EPA Certification Exam to take effect January 1, 2018. It should be noted that currently certified Section 608 technicians do not need to be recertified.

In recent months, the EPA 608 test bank of questions has been revised. The EPA coordinated the review initiative with the ESCO Group, and all major stakeholders were included on the committee. Representing the UA International Training Fund on the EPA 608 committee were Dana Shanower, Training Director for LU 94, and retired UA Instructor Don Howerter. Their hard work and efforts to support the EPA are appreciated.

In conjunction with the new criteria for compliance with the EPA 608 final rule, the Conservation and Safe Handling Manual will be revised and updated. The ESCO Group will provide the compliance language for the text. The new manual will be available in the UA Bookstore in early 2018.

To promote a better understanding of the new EPA regulations and test procedures, a twenty-hour course will be offered for UA local instructors at the Great Lakes Regional Training Center on the WCC campus in February 2018. Further details, including a course description, will be released in the Regional Training Course Catalog.