

Every Pipe, Every System, Every Building, Every City

by Rich Benkowski, UA Department of Education and Training Consultant

We are the high-performance infrastructure solution. The United Association, together with the Mechanical Contractors Association of America (MCAA) and signatory partners, have one product. It is purchased one project at a time, one service call at a time, or one hour at a time. Intrinsicly, this hour is the safest and most productive in the piping industry. By modernizing and facilitating the training needs of our members and signatory contractors, we maximize their business model and prepare them for our ever-advancing industry.



Today, there are three new apprentice categories to own the market share for every infrastructure project—mechanical drafter, welder, and residential/light commercial service technician.



Is your local interested in putting UA members to work before the project is designed or awarded? Can your local dispatch a certified welder to the next semiconductor project? Installing a heat pump water heater (HPWH) requires a chlorofluorocarbon certification (CFC) license and a plumbing license. Are UA members ready to install HPWHs? Are UA pipefitters prepared to convey perpetual BTUs through a thermal energy network? Answering yes to all of these questions is easy, because that is the everyday work of UA craftsmen and women who work for a signatory contractor.

High-performance infrastructure demands a highly skilled workforce with reliable and repeatable skillsets. To prepare for the latest technology in the built environment, unorganized competition now speaks of upskilling. This term confirms their inability to compete with UA-trained labor provided by MCAA contractors.

Until now, four apprentice paths to journeyman have been available at UA local training centers—plumber, pipefitter/welder, HVAC technician, and sprinkler fitter. Today, there are three new apprentice categories to own the market share for every infrastructure project—mechanical drafter, welder, and residential/light commercial service technician.

Rick Gopffarth, MCAA President and Senior Vice President of Preconstruction Services, Dynamic Systems, Inc., is encouraged by the revised standards. He said, “The evolution of the built environment, particularly with the growing emphasis on clean energy, advanced technologies, and sustainable infrastructure, has significantly impacted market share. As projects become more complex and specialized, the demand for highly skilled labor has increased. This shift presents a tremendous opportunity for MCAA contractors and UA-trained workers to capture more market share by meeting these evolving needs.

“The introduction of new apprenticeship categories, such as mechanical drafters, welders, and residential/light commercial service technicians, will undoubtedly increase market share in today’s built environment. These roles align directly with the demands of high-performance infrastructure projects, positioning our contractors to lead in emerging sectors such as clean energy, thermal energy networks, and advanced building systems. By equipping our workforce with these specialized skills, we not only address industry needs but also create a competitive edge that differentiates MCAA contractors from others in the marketplace.”



Inside the Revision Process

In the fall of 2022, the U.S. Department of Labor approved new apprentice standards for the United Association. The newly approved standards will modernize the business model and manage the liability of recruiting new candidates into UA apprenticeship programs. To be sure, at the national level, the language is offered as a guideline for every local to submit to their state to register their local apprenticeship program. The apprentice standards have not been updated since 2012. The new version offers guidance for validating the interview and selection process and expands the registered crafts from four to seven. International Training Fund (ITF) Consultant Tony Swoope provided insight to the ITF team as they navigated the restructuring of this important document.

According to Tony, "The International Pipe Trades Joint Training Committee recognizes the need for structured training programs to maintain the high level of skill and competence demanded in the piping industry. The National Guideline Standards establish the direction and strategies for the piping industry through the apprenticeship system. The input from labor and management establishes the competencies, growth, and strategies needed for the industry's future. Registered apprenticeship provides the most practical and sound method to meet the need to prepare individuals to be skilled craftworkers and to ensure the industry has an

adequate supply of skilled workers."

This guidance document truly modernizes the UA delivery system for training. It gives all of our locals the best opportunity to compete for today's market share regardless of the size of your local membership. Every component is available for download online at UANet.org under the "Training" tab. The core elements will look familiar, reflecting the essential structure suggestions the states require to register an apprenticeship program.

This edition of the National Apprentice Standards promotes a uniform procedure for interviewing and selecting candidates for membership. Included are procedures specifically developed to withstand the scrutiny of a modern workforce looking for a rewarding career. The process started with the hiring of an independent firm to collect data and survey locals about their recruiting criteria and selection format. UA Director of Education and Training Ray Boyd led the internal discussions surrounding these vital topics. Director Boyd also provided additional training for members of Joint Apprentice and Training Committees (JATCs) who were willing to update their local interview and selection procedures. Unbiased uniformity while choosing the next generation is the key to



*Retired UA Registrar Cathy Merkel and
UA Director of Education and Training
Ray Boyd*



ITF Consultant Tony Swoope

International Training Fund Consultant Tony Swoope offers the next steps for engagement at the local level.

The following is a recommended process for updating your local apprenticeship standards with the registration agency:

1. Review the IPTJTC National Guideline Apprenticeship Standards.
2. Inform your local registration agency of your intent to update your local standards.
3. Meet and discuss the National Guideline Apprenticeship Standards with your JATC for input and direction.
4. Develop a draft guideline for apprenticeship standards, including an affirmative action plan and selection procedures.
5. Meet with the local registration agency representative to review the draft for input direction.
6. Work to register the revised program and continue to strive for excellence in your program.
7. Review the program, and if changes are needed to improve the selection or operation of your program, revise the process with the registration agency. Include direct entry language with provisions covering our VIP (Veterans in Piping) programs.



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- Cathy Merkel,
Retired UA Registrar

minimizing legal exposure for all UA locals and signatory contractors.

Former UA Director of Education and Training James Pavesic, current UA Director of Education and Training Ray Boyd, and Assistant Director of Education and Training Michael Galfano formed seven curriculum committees to review the UA Bookstore manuals, align curriculum with ITP (Instructor Training Program) courses, and modernize the five-year training experience for new apprentices. Cathy Merkel, retired UA Registrar, monitored the progress of the curriculum committees to maintain the integrity of all seven trades. The added crafts are mechanical drafter, welder, and residential/light commercial service technician.

Cathy Merkel reminds everyone who admin-

istrates a local training program, “The apprenticeship standards are the foundation of who we are and what we do. The expectations of what your UA local union tradesmen and women have been trained to do are outlined in the standards.” The local JATCs should follow the registered standards as written. This paper trail (the standards and selection procedures) will prepare the JATCs for any upcoming apprenticeship audits or compliance reviews of their programs.

The approved documents have not fundamentally changed, but the format has been homogenously aligned to advance UA labor initiatives safely. For example, the International Pipe Trades Joint Training Committee (IPTJTC) recommends local JATCs. Fillable boilerplates are included for uniform submissions to state labor agencies.



Expanding the UA Brand

All seven categories contain harmonized versions of terms of apprenticeship, wage schedules, work process schedules, and related training outlines. Appendix A lays out the five-year trajectory for becoming a journeyworker. As a reminder, the national standard template is designed to offer suggestions for locals to satisfy their local markets and collective bargaining agreements.

We must all understand that these new lanes are too big to ignore. Preparation for the current challenges began in 2017. UA Director of Plumbing Services Tom Bigley asked the ITF (International Training Fund) one question, “Can we offer an EPA 608 Chlorofluorocarbon (CFC) Certification License to UA plumbers?” Director Bigley identified the gap in services needed to advance the electrification of our cities. Accelerated training modules were offered to fill the void. This initiative has led policy and regulatory bodies to partner with the UA to incentivize heat pump water heaters.

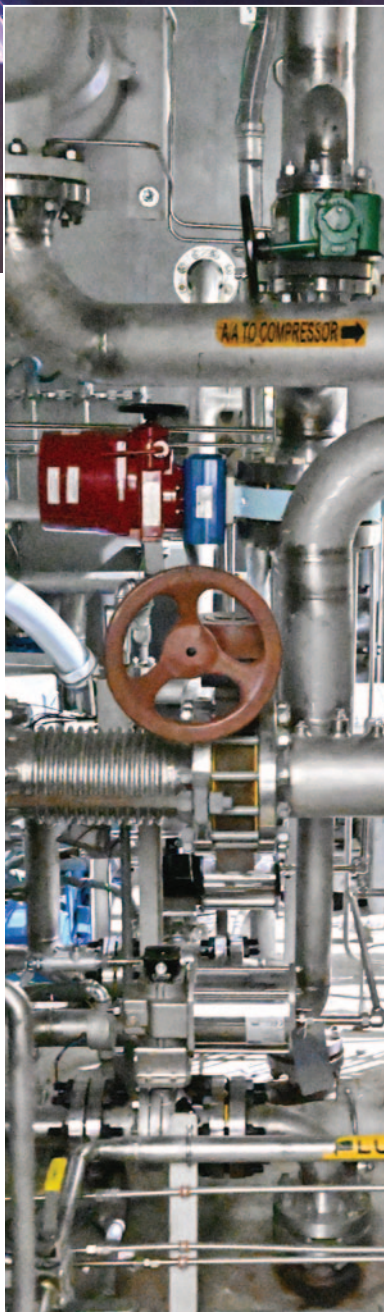
Federal and state regulators seek a new standard of labor engagement. State energy commissions and federal agencies need assurance that labor will support clean energy proposals. ITF Training Specialists Robert Vilches and Joe Fernandez are creating training for electrification programs approved by the DOE (U.S. Department of Energy). Special Representative Laura Ceja has contributed by working with the

DOE to prepare plumbing and mechanical inspectors for high-performance infrastructure projects. On the jobsite, Sister Ceja’s efforts will ensure a clean labor dispatch for the contractors to utilize the UA’s advanced skillsets.

Many members may be surprised by the addition of a “welder” path to journeyworker. The UA offers more than 100 weld certifications to satisfy any and every way to join various types of pipe materials. In simple terms, we must stamp “UA welder” into the semiconductor project vocabulary. Training Specialists Randy Gandy and Robert Derby have continually strengthened the UA position to win these projects. According to Training Specialist Derby, “Welding has evolved technically, so we must use the technology to our advantage.” New courses targeting semiconductor work are now available—*Semiconductor Orbital Tube Welding*, *Semiconductor Plastic Fitter*, *Infrared Fusion*, and *Semiconductor Stainless Steel Fitter*.

Training Specialist Ken Schneider has been developing a mechanical drafter five-year curriculum to capture positions for UA members during the design phase and for data capture of performance post-project. Brother Schneider offers these tips for local planners to consider, stating, “We know that installation hours are decreasing, and design hours are increasing. This mechanical drafter apprenticeship allows UA locals to capture these hours. The mechanical

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drafter apprenticeship for years one through three mirrors the plumber, pipefitter, and sprinkler fitter crafts, allowing local JATCs to combine these apprenticeships into a single class. This also gives the apprentices another path forward when they decide the field is not

the best fit, or worse, are injured and unable to do physical labor. If you are ready to update your apprenticeship standards, this would be a great time to add the mechanical drafter to your standards. Virtual installation is real, and we know how to best install piping systems on the physical jobsite and virtual jobsite!"

Meet the Challenge Where You Live

Shine a bright light on the UA brand to increase membership to meet the demands of high-performance infrastructure projects. Whether it is dispatching welders to install thermal energy piping on a semiconductor site, or service technicians to pipe, start, and commission heat pump water heaters, the UA is the only scalable solution to these manhour challenges. The UA brand, with a highly skilled labor force, is setting a new standard for the piping industry. The 2022 National Apprentice Standards offer a true bid-day separation for all our UA contracting partners. This investment of time and treasure by the UA/MCAA provides the best opportunity to install every pipe in every system in every building in every city!

