MARCH/APRIL 2024

The Technology Evolution

MEP Innovation Conference drives collaboration to help solve the industry's challenges.



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CEO UPDATE Aaron Hilger

SMACNA and Its Members Can Accomplish Great Things By Working Together

SMACNA always has a busy first guarter. We hold many committee meetings, labor relations meetings and educational programs. This year, I attended a few programs I did not participate in when I was a Chapter Executive. Mutual Gains Bargaining and Collective Bargaining Orientation are excellent programs with immediately helpful content. I encourage you to attend in 2025, especially if your collective bargaining agreement is expiring. I should have done so when I ran my chapters.

Carol Duncan talks extensively in her column about one of our best meetings — Partners in Progress. I am excited that this was one of the most widely attended Partners meetings ever. There aren't any secrets to a robust labor-management relationship. President Duncan gives you a few easy steps to follow, which I have done throughout my career. General President Coleman and I share many of the same passions and goals. We all hope that our example helps you solve problems and address challenges productively at the local level. Both SMACNA and SMART's national staffs are also available to help. Labor management relationships take work and constant nurturing. They are never free from conflict and are not defined by conflict. Instead, they are defined by



what we share and our ability to work toward solutions.

As I read Carol's column, I was reminded of the tenants of serving leadership. My friend John Stahl-Wert taught me long ago to upend the pyramid — to put the base at the top. A leader's main job is ensuring his or her team has the things necessary to succeed. Leaders also do what is required to blaze the trail and remove obstacles from their employees' paths. We build a culture of accountability by raising the bar and ensuring our teams have the skills to perform





FROM THE PRESIDENT

Carol Duncan

at a high level. We focus on building on strengths like labor, technical services and government relations work. Finally, we run to a great purpose: to advocate for our members and meet the challenges presented in our evolving industry. The best labor and association convention registration opens April 23rd. We expect a sellout in Palm Desert and have made some exciting updates to the program. Monday will feature a new after-party with live music. This event has replaced PAC night, but don't worry; there will be many

Labor management relationships take work and constant nurturing. They are defined by what we share and our ability to work toward solutions."

leaders I have worked with operated as serving leaders, even if they did not know they were. I see so much of the same commitment in our daily work with our partners. Like Carol, I am excited to see what we can accomplish together.

Like all membership organizations, SMACNA is evolving around our strategic plan. During the first part of the year, we resourced our education department with additional staff and organized it under Linda Jennings. We are excited about growing programming for you and welcome your thoughts and ideas. Other significant projects include our ongoing AMS system update and new website update.

Finally, it seems almost too early to write about it ... but

opportunities to support the PAC throughout the convention. So, plan a great dinner with friends on Monday, but be back in time to have fun with your fellow members. Based on your overwhelming feedback, we have also added breakfast for the days that did not have it in the program. These enhancements will make the convention even more fun than last year.

I am looking forward to seeing you there.

Aaron Hilger is CEO of SMACNA, bringing more than two decades of executive association leadership to this role. Hilger is focused on building a stronger, more competitive environment for all SMACNA contractors.

Embracing Shared Goals and Prioritizing Mutual Interests

I had the first-hand opportunity to witness the SMACNA/SMART labor management partnership at work. I was honored to join General President Mike Coleman on the stage at the 2024 Partners in Progress conference, where we highlighted our strong relationship with labor and how we value collaboration, not confrontation.

How do we maintain this positive momentum?

From my experience, everything starts with a core set of fundamental agreements that everyone in the labor/management paradigm adheres to. First, **always presume good intentions**. Instead of assuming that one's objectives are not in everyone's self-interest, take stock of a simple truth: We're all in this together. Management cannot thrive without a high-skilled workforce. And labor cannot succeed without the opportunity and infrastructure provided by contractors. Instead of walking into talks in a defensive posture, be open-minded and ready to heed suggestions.

This ties into the subsequent core agreement, where we **embrace shared goals**. To ensure that we are moving our industry toward prosperity, we must align ourselves to objectives that benefit all of us, not just some of us. One example of this is the work that SMACNA's Labor Relations and Government Affairs departments have done to revise prevailing wage rules and expand the use of project labor agreements. Union contractors are now open to more opportunities, labor is witnessing the opportunity to leverage their highly-skilled workforce on critical projects, and our public sector clients are seeing their projects regularly delivered on time, on budget, and at the absolute highest quality. This outcome was only accomplished because our joint goals were in alignment.

Finally, we must continue to **prioritize our mutual interests.** In any labor/management relationship, there will be issues where we fundamentally disagree. However, we can't allow the 10% of things that we disagree on to override the 90% of things that we agree on. Does that mean that we stop working on those 10% of things? Absolutely not. There's always room for improvement, which means that instead of getting frustrated about any perceived lack of progress, we leverage the numerous joint wins we have to continue fostering teamwork and collaboration. Allowing one issue to impact a spirit of overall cooperation negatively will yield much more harm than any benefit obtained by prevailing on a singular issue.

We must come together collaboratively as true partners in progress and work jointly to advance this industry. \checkmark

Carol Duncan, SMACNA President

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Infinitely Memorable

Denver contractor Scherer Metals created a sculpture celebrating aluminum's unlimited recycling ability for Ball Corp., an aluminum packaging supplier. It sits outside Denver's Ball Arena.

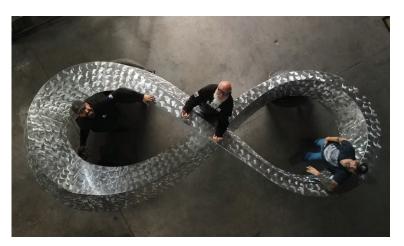


new player a team got in a trade nor a revamped concessions area with dozens of food and drink choices.

The latest addition to the Ball Arena experience is a 19-foot-tall metal sculpture of the infinity symbol on the arena grounds.

Why erect a monument that looks like a cursive No. 8 outside the arena? Because Ball Arena — named after Ball Corp. — has been involved in reusing and recycling containers for more than 100 years. From mason jars and canning supplies a century ago to aluminum containers of all sizes today, Ball is working to reduce waste around the world.

And unlike many other materials that have a limit on how many times they can be recycled — if any — aluminum can be recycled forever. The infinity monument, without a beginning or end, symbolizes this unique ability.





T.J. Pagliasotti (left), J.T. Terrill and Duane Alex look up from the infinity monument ready to be installed at Denver's Ball Arena (top). Duane Alex wears a face mask as he assembles the monument at Sherer Metals' sheet metal shop (bottom left). Scherer Metals employee J.T. Terrill assembles the infinity sculpture that will be installed outside Ball Arena in Denver (bottom right).

A 128-YEAR-OLD CONTRACTOR GETS THE PROJECT

The job of creating this symbolic sculpture was awarded to Scherer Metals, an architectural sheet metal contractor that has been fabricating and installing custom metalwork in and around Denver for more than 128 years. From antique-style light fixtures to building facades, handrails and ornamental touches, there are many examples of its work throughout the state and region.

"We have full metal capacities," explains Mark Pagliasotti, an Estimator who has been with Scherer for 16 years. "We do anything from small brackets to high-end office buildings, tenant finishes and decorative additions — like the sculpture itself."

Pagliasotti was Scherer's lead on the Ball Arena sculpture project. He says the general contractor, Facilities Contracting Inc., awarded Scherer the sculpture contract in August 2023 based on a recommendation from another large company in the region.

While the sculpture is designed to represent something that goes on forever, the deadline included with the \$150,000 contract wasn't quite that long. Scherer would only have about three months to create the sculpture along with a perimeter railing, and then get it all to the arena in time for a Nov. 15, 2023, ceremony on America Recycles Day — a.k.a. National Recycling Day.

"It was tight," Pagliasotti says. "I would say that's a tight fit for anybody, really."

A SMALL CHANGE IN DESIGN

As a corporation dedicated to aluminum and recycling, Ball originally wanted the sculpture to be made from aluminum. But Pagliasotti recommended against that.

"Outside conditions are not good for aluminum," he says. "It collects a lot of pollution and soot and stuff that's in the air."

The finish Ball wanted for the sculpture would have made it difficult to keep clean. It would have also been more difficult to put together, Pagliasotti adds.

"It's a lot harder to weld because you have to go with thicker material and a lot hotter weld," he says. "Because if you're grinding the welds, you want to make sure that you've got welds left once you grind it to a radius."

So Ball went with Pagliasotti's suggestion of ½-inch type 316 stainless steel, which would offer the appearance and durability Ball was looking for. And like aluminum, stainless steel is 100% recyclable.

Once those details were decided, "They gave us the run of it," Pagliasotti says. "They showed us the rendering of what they wanted. We came up with sizes together, and we pretty much put it together from there."

The 1,700 pounds of metal the sculpture needed was delivered by semi truck in 4-by-10 sheets.

"Our programmer at our shop took it from there," Pagliasotti says. "He programmed everything, laid it all out. He got a couple models of it prior to fabrication to make sure we were on the right track and then programmed it into life size."

The sheets were cut by water jet, which is ideal when working with temperature-sensitive materials like stainless steel. The water jet also cut down on waste, since the computer numeric controlled (CNC) cutting tip was very accurate.

Then the sheets were assembled by Scherer sheet metal workers. They assembled the sculpture in the shop, laying it flat, then added welds where needed.

"We had really good guys working on the project who were very excited and very diligent with it," he says. "It was intimidating at first, but I think all the forethought on how to do it and getting our plan together made the difference."

Additional Scherer employees who worked on the infinity monument included:

- T.J. Pagliasotti (designer, water jet operator, fabricator, installer)
- Duane Alex (welder, fabricator, installer)

Sculpture facts

- Fabricated using ¹/₈-inch type 316 stainless steel.
- Supported by a 2-inch-by-2-inch by 3/16-inch stainless steel tube inner frame.
- Fully welded with a custom swirl finish on exposed surfaces.
- 19 feet tall, 8 feet wide, 4 feet deep at the base.
- Tapers to 1 foot, 6 inches at the top.
- Cantilevers at 22.5 degrees.
- Weighs 1,700 pounds.
- J.T. Terrill (polisher, installer)
- William Bourne (installer)
- Frank Lynn (installer)
- Mike James (installer)

THE UNVEILING

An unveiling ceremony was held at the arena Nov. 15 to coincide with National Recycling Day.

Ball Arena is home to the NBA's Denver Nuggets, the NHL's Colorado Avalanche and the pro lacrosse team the Colorado Mammoth.

From 1999 through 2020, the arena was known as the Pepsi Center. Since purchasing the naming rights, Ball Corp. has worked to expand recycling in the 21,000-seat facility. All plastic cups, bottles and clean paper are processed through single-stream recycling, eliminating the need to sort materials. The packaging company's Ball aluminum cup, a sustainable plastic-alternative drink holder, is used at the arena.

As for the sculpture, which has been featured in local news coverage and on social media, Pagliasotti says he's proud of the work Scherer and his team did.

"It went as smooth as it could possibly go," he says. "We were very happy with the way it went."

Peter Bolan, the President of Scherer Metals, says he was proud of the monument and the work of his employees on it.

"Our employees are artists in their own profession as fabricators," he says. "People come to us for the hard projects because they know we can (do them)."

Bolan pointed out that Scherer, like Ball, is a company dedicated to working with metal. Recycling is also important to Scherer, he adds. The company was honored to have had a role in bringing the infinity monument to Ball Arena.

"Our goal is to make peoples' vision become a reality," Bolan says. "Whether it's drawn on a napkin, a piece of paper or on a set of drawings from an architect, we want to see it come to life." ▼



Managing Risk

Industry expert shares tips on how SMANCA contractors can avoid commercial HVAC contract risks.

MACNA contractors make decisions every day about risk in their personal and business lives. Risk — in simple terms — is looking at the possibility that something bad can happen on a commercial HVAC job. And potential risks can run the gamut from contract issues

to jobsite accidents. With risk, suffering a bad outcome can even mean the

difference between staying in business or not.

This is why looking at risks in a more proactive way is better than reacting to situations as they occur, according to Guy Gast, retired Past President of The Waldinger Corp. — Iowa Division, a premier Midwestern MEP and truck-based service provider.

Gast shared his risk prevention strategies with SMAC-NA contractors at the 2023 SMACNA Annual Convention in Phoenix, Arizona.

UNDERSTANDING TYPES OF RISK

There are two types of risk: controllable and uncontrollable, Gast explains.

Predictable and controllable risks that are actively managed by processes and procedures include things like workers' compensation, automobile accidents, rework and payments.

Unpredictable and uncontrollable risks are those that must be managed by risk transfer. Some examples include the negligence of others, consequential damages and catastrophic loss.

You typically have the following actions to take when faced with risk:

- 1. You can accept risks for things you can control.
- 2. You can reject risks for things you can't control.
- You can transfer the risk.
 Your goal is to balance risk and reward, Gast advises, pointing out the two most important questions to ask
- yourself when faced with risk:
- What is the worst thing that could happen?
- Can we accept the consequence?

BIG CONTRACT RISKS AND HOW TO MANAGE THEM

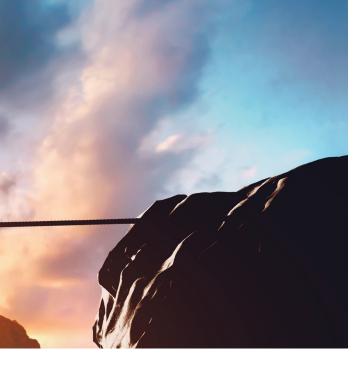
Gast reviewed some examples of risks commercial HVAC contractors face, offering solutions to help prevent them.

PAYMENT CLAUSES

These include contractor terms, such as "Pay when," which says a general contractor can delay payment until he or she has received payment from the owner. This does not excuse the general contractor from paying a SMACNA contractor.

A "Pay if" clause is when a general contractor can delay payment until he has received payment from the owner. This, unfortunately, does excuse the general contractor from paying a SMACNA contractor, Gast says, adding that language used is typically "condition precedent" or something similar.

- HOW TO CONTROL THIS RISK:
- Avoid clauses that restrict ultimate rights of payment, regardless of nature. Both "if" and "when" clauses tie ultimate payment to that of another party.
- Negotiate a clause that requires payment after a



reasonable period; avoid language that allows for delay tactics.

- An owner should be responsible for determining if unfair payment terms are acceptable.
- Never accept a "Pay if" clause.

AIA AND AGC PAYMENT TERMS

In these contract terms, language will look similar to the following:

- AIA A401 (subcontract): "....or the Contractor does not receive payment for any cause which is not the fault of the Subcontractor, the Contractor shall pay the Subcontractor, on demand, a progress payment...."
- ACG ConcensusDocs 750 (subcontract): "If payment from the Owner for such Subcontract Work is not received by the Contractor, through no fault of the Subcontractor, the Contractor will make payment to the Subcontractor within a reasonable time....." HOW TO CONTROL THIS RISK:
- If you receive a contract with unacceptable payment terms, consider adding the following language at the end of the payment clause or contract: "Except for deficiencies in performance by Subcontractor, payment shall be made promptly, regardless of whether the Purchaser has been paid by its lender or others."

INDEMNIFICATION CLAUSES

Indemnification clauses should be in every contract in the construction industry. An indemnification clause is a legally binding agreement between two parties specifying that one party (the indemnifying party) will compensate the other party (the indemnified party) for any losses or damages that may arise from a particular event or circumstance.

There are three types of indemnification clauses: broad form, intermediate form, and limited/narrow form.

HOW TO CONTROL THIS RISK:

With indemnity, you're looking for:

- Fair risk for the reward.
- · Responsibility for our own mistakes.

Avoid surprises. Call the other party and ask questions about the contract terms. The worst that can happen is you don't get an answer." – GUY GAST

- · Controllable risks.
- No more than intermediate indemnity clauses.
- What you don't want:
- Consequential damages.
- Sole negligence of others.
- To become a property/casualty insurer.
- Responsibility for design errors/omissions.
- Broad form indemnity clauses.

MISMANAGING CONTRACTS CAN BRING BIG RISKS

When it comes to contracts, Gast says there are numerous risks that can crop up. The goal: "Avoid surprises," he says. "Call the other party and ask questions about the contract terms. The worst that can happen is you don't get an answer."

Stick to some best practices, he suggests. Start by reaching out to discuss the contract terms. Then after talking through it, put it in writing and explain the whys. "Remember to walk in their shoes as you're reviewing contract terms to ensure you're being fair," Gast advises.

The biggest mistakes that happen with negotiating contracts include:

- Failure to act in a timely manner.
- Lack of a plan for navigating the negotiation.
- Inability to explain why you want a change in terms.
- Failure to consider the customer's interests.
- Failure to be patient.
- Failure to identify the risks/qualify the bid during the bidding process.
- Failure to accept fair risk.
- Failure to obtain and review all the documents.
- Failure to identify coverage for your work.
- Failure to restrict exposure to consequential damages.
- Not asking yourself: What's the worst that can happen? Can we accept the consequences?

OTHER FREQUENT RISKS

In addition to contract issues, the most frequent risks Gast says SMACNA contractors should watch for on commercial HVAC jobs include:

- Estimating errors or judgments.
- Failure to succeed on change orders.
- Rework.
- Schedule-related damages.
- Labor overruns and mismanagement.

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Taking Flight

Brandt shares its work on American Airlines new catering facility at the Dallas-Fort Worth International Airport.

randt, a Southland Industries Co. based in Dallas, Texas, helped boost the efficiency of American Airlines flight catering through its work on its new 214,000-square-foot catering facility at the Dallas-Fort Worth International Airport. The project, which provided the client with an exclusive, expanded facility to support its existing food and beverage operations, involved full mechanical, electrical and plumbing (MEP) and building information modeling (BIM), as well as linking more than 300 pieces of kitchen equipment — all while working with the Federal Aviation Association (FAA) to get approval to use cranes and helicopters during specific project phases.

And for their efforts on this project, Brandt won a Texas and Louisiana Regional Best Project Award from the *Engineering News-Record*.

INSIDE AA'S NW CATERING FACILITY

The new \$100-million American Airlines catering facility at the Dallas-Fort Worth International Airport is the largest airline catering kitchen in the country at more than three times the size of a football field.

During peak travel season, the facility prepares nearly 15,000 fresh meals a day. The kitchen operates around the clock, housing various functions such as a food preparation, food and beverage processing and assembly areas, a dishwashing section, inbound and outbound docks, and warehouse and freezer storage spaces.

Brandt was responsible for the MEP scope of work, and internal coordination was vital to ensuring compatibility between trades. Early integration of MEP BIM coordination set the stage for successful prefabrication and field installation, resulting in numerous cost and schedule savings.



The project's complex MEP installations included chilled water, hot water, ice melt system, condensate drains, refrigerant piping, fire alarm systems and lightning protection.

Brandt was also responsible for installing site and exterior lighting and switchgear, including redundant 4000A utility services, power distribution to HVAC equipment, MEP connections for commercial kitchen equipment and MEP within multiple large coolers and freezers for food preparation and storage.

Since this was an industrial food and beverage facility, stainless steel ducts were required for areas that regularly deal with temperature extremes and water exposure. This is to limit corrosion. Brandt fabricates all of the ducts it installs in its projects, including this one.

OVERCOMING PROJECT CHALLENGES

Brandt's design and construction team faced various challenges during the project. To keep the project on schedule, Brandt worked closely with Holt Construction (the general contractor) and gained partial access to completed areas in stages. They also employed prefabricated systems to expedite onsite installation, ultimately reducing schedule impacts.

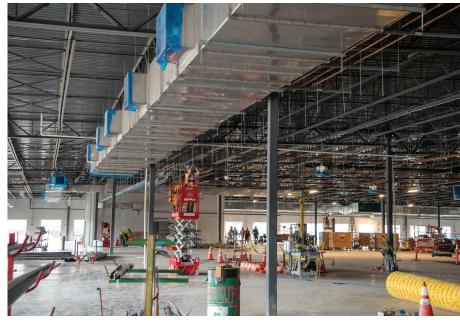
Due to the project's proximity to the airport and the presence of flight paths, lifting equipment had to comply with strict regulations. Brandt directly coordinated with the Federal Aviation Administration up to six months in advance to utilize helicopters and smaller cranes for lifts within its weight capacity to place rooftop units like chillers, air handlers and exhaust fans.

Brandt is also proud of its Live It[™] program, which it ingrains in its daily work processes, including on this project that began in 2019 and was completed in 2023. The program ensures safety on every project is visible from everyone in the company, that hazard assessment and mitigation take place daily, and that safety milestones are celebrated. On this job, Brandt worked more than 113,000 hours safely.

For its work on the project, Brandt won an award from the *Engineering News-Record*, which provides engineering and construction news and reports on the top construction companies. Three separate judging panels collectively reviewed more than 100 award entries, examining factors such as safety, innovation, craft quality and industry benefit to determine the award winners. Brandt won the award in the specialty construction category. ▼







Stainless steel ducts were important to use at this food and beverage facility to better handle temperature extremes and water exposure.





Technically Tailored, Creatively Executed

Skyline Heating and Cooling deployed a stealth team to problem-solve a complex, expansive residential project in Castle Pines, Colorado.

uring a walk-through with the general contractor of a roughly 9,000-square-foot residence undergoing widespread renovations, Ernie Tricarico initially figured the accompanying HVAC overhaul would be "not too intrusive of a project."

But this scenario shifted with aesthetic expectations to maintain the 10-foot ceiling height, calling for custom soffits and the homeowner's desire for a multi-zone system upstairs that required six dedicated thermostats ducted to a new roof-mounted RTU unit. Not to mention, there was the overriding challenge of figuring out how to supply adequate air throughout living spaces on the main and lower levels.

Pines, roject
 Tricarico, Owner of Skyline Heating and Cooling in
 Denver, Colorado, is a "hands-on guy." After 46 years
 of performing installs, he exercised a good amount of
 technical and artistic wizardry with an experienced "trick
 orew" he credits for a specialty in "artistic thinking" and
 problem-solving in the field — skills to adapt, innovate
 and execute.

The home in Castle Pines overlooks a golf course and is set into the mountains. Before Tricarico and the team's installation, there were two boilers, baseboard heat and mini split heat pump systems.

With numerous logistical challenges to manage, the team was charged with maximizing a limited area for ductwork to deliver an adequate amount of air to satisfy the living space. And how the system "looks" was equally important to the general contractor, especially the homeowner. "She wanted the soffits to fit in well with the design, so some fittings had to be designed for transitional soffits so they would be unnoticeable and maintain the aesthetic of the living areas," Tricarico says.

A quick snapshot of the project's complexity: branch ducts measuring up to 150 feet long, with some rooms requiring three to six branch duct runs and others requiring up to 15. Add limited soffits and crawl spaces, confined spaces and more.

"It was necessary to react on a daily basis, and the crew grew accustomed to daily situations, figuring out resolutions and continuing forward with minimal delays

This Castle Pines, Colorado, project required numerous renovations. The team had to conquer numerous logistical challenges to deliver an adequate amount of air to satisfy a large living space. toward project completion," Tricarico says, crediting the team for the "magic" they performed, knowing each day's impending challenges.

CONQUERING THE COMPLEXITIES

Daily communication and coordination with the design team, general contractor and field installers was essential for success. Skyline determined a system to fit the project requirements best, and Tricarico says there were options.

Ultimately, the decision was to install 40 supply branch duct runouts with many turns and bends and up to 150 feet of ductwork runs to produce 50 CFM each. Tricarico says the design team had concerns during the early stages. "But once the system was air balanced, the report reflected an astonishing 110% total airflow outcome," he says.

Many system components were customized to achieve the homeowner's desire to hide the system and keep the home's generous headroom. These included custom-fabricated manifold plenums, duct hangers and supports, register boxes, and continuous floor register plenums.

Tricarico calls attention to the continuous supply floor slot diffuser with flagstone flooring in the great room. The solution: A custom continuous floor plenum that runs parallel within floor joists and connected 4-inch round branch supply ducts spaced every 6 feet into the plenum.

"We finished it with a continuous Titus bar slot floor grille that's approximately 80 feet long along the inside of the exterior wall of the great room," Tricarico says.

Skyline specified 4-inch welded-seam pipe in 10-foot lengths that require fewer joint connections to eliminate airflow restrictions. "No flex duct was used due to the long duct runs," Tricarico explains.

In many ways, the project was Whack-A-Mole. For instance, stealthy sealing skills were required to install the constant volume duct system while working in confined spaces, allowing for 45- and 90-degree bends throughout. "Sealing duct joint connections were critical to maintaining a minimal duct leakage system," Tricarico says. Supply branch duct runs were designed to flow parallel — along with over and under each other — to fit inside custom soffits.

Thoughtful planning and layout preceded the routing and installation of 40 4-inch duct runouts. "That included a detailed field labeled drawing of each takeoff collar to its designated floor register boot to allow for proper airflow balance of the duct system," Tricarico says.

Foreman Anthony B. Drake Garcia, Business Representative/FST, allowed the third-year apprentice, Philip Brandenstein, to manage the detailed drawings. "It had an excellent outcome that the air balancer greatly appreciated," Tricarico says.

"We're proud that we designed a system that required precise field measurements, putting into practice the knowledge of how systems work to ensure that the homeowner would be satisfied," Garcia says. Proper planning along with very detailed coordination and communication with the general contractor helped keep the project on schedule."

- ANTHONY B. DRAKE GARCIA

"Proper planning along with very detailed coordination and communication with the general contractor helped keep the project on schedule," Garcia adds. "It required a combined effort from the entire crew of knowledgeable and skilled workers to make such a project come together."

ARTFUL THINKING

Overall, the system includes a rooftop 5-ton system with six duct runs, so every upper-level room has its temperature controls. A 5-ton system accommodates the main level, with a 2.5-ton system for the lower level.

Tricarico adds that the project involved next-gen, energy-saving technology to win the homeowner's tax credits and utilities discounts. "There was a big push for electrification incentives," he says. "At first, we tried to devise a system to reuse the existing boilers and use new hydronic fan coils. But we decided to go for electric reheat coils and a backup in the fan coil."

This aspect of the project introduced Brandenstein to residential field innovations. "I got exposure to the future of the furnace/heat pump systems in the residential field, getting hands-on experience with the new fan coil with electric heat backup and heat pump systems for the main and lower levels of the house," he relates.

Also, the collaborative project between Skyline Heating and Cooling and the general contractor — involving a hands-on perspective from the homeowner — provided an uncommon opportunity to interact as a team, Garcia adds. "That's incredibly rare in commercial sheet metal," he says.

Not to mention, there was extensive planning but no formal blueprints.

"Using a rough hand-sketched drawing information showing a general idea of ductwork routing and locations allowed me the opportunity to design the duct run, routing myself as I performed the install," Brandenstein says.

Aesthetic requirements also required concealing rooftop ductwork so homes with views above the mountain would not notice mechanicals. Because the flat rooftop is white, the unit was painted upon completion to blend into the roofline, Tricarico says. "If you are on the golf course below, you cannot see it from ground level," he says.

"All three systems satisfied the design team, system design, and customer's wants, resulting in maintaining the residents' comfort levels," Tricarico says. ▼











Technology Evolution

MEP Innovation Conference drives collaboration to help solve the industry's challenges.

Collaboration and innovation are most effective when connected with one another. These concepts feed off of each other to create new ideas and move an industry forward. Collaboration enables the free flow of ideas that breed innovation, while the excitement of innovation helps nourish an atmosphere where opportunities for cooperation are rampant.







MEP attendees engaged in various teambuilding activities to open lines of communication and build trust (top). Attendees participated in an exercise as a part of a presentation by Project Give-A-Hand to build artificial limbs for those in need (center). The visits to several Orlando-area MEP contractor sites were an important part of the program (bottom).

There are fewer places where this is evident than in the mechanical, electrical and plumbing trades. Technology within these individual spaces is evolving at a breakneck pace, with contractors having to keep their heads on a swivel to understand, much less successfully employ all the new tools and technology potentially at their disposal. At the same time, there is an incredible opportunity to utilize these tools successfully, and it's not hard for contractors to be overwhelmed by the sheer volume of assets at their disposal. When you factor in that business owners and technology managers must also juggle the reality of dayto-day operations, maximizing the potential of innovation becomes challenging. This apparent reality could leave contractors in a spot where they see themselves leapfrogged by their competitors, harming their ability to compete long-term.

With the express goal of bridging these knowledge gaps, SMACNA annually conducts the MEP Innovation Conference in cooperation with the Mechanical Contractors Association of America (MCAA) and the National Electrical Contractors Association (NECA). The conference offers several critical and unique opportunities for all MEP contractors to grow their knowledge base on how technology is evolving within our space.

Travis Voss, SMACNA's Director of Innovative Technology and Fabrication, outlined the core goals of the MEP Innovation Conference: "We are all trying to solve the same or similar problems across the MEP space. The MEP Innovation Conference highlights those struggles and challenges. It allows our memberships the opportunity to collaborate on how to address them. A great deal of care goes into building the educational sessions around those issues and then pairing members from each association giving real-world examples of contractors attacking them."

The general sessions let attendees hear about broad themes impacting the MEP sector from industry pacesetters. One of these instances featured the national presidents of the three organizations, including SMACNA President Carol Duncan. This panel talked about how the industry has changed during their time as business leaders. This conversation was thought-provoking for all attendees as it painted an incredibly accurate picture of how quickly the tides of innovation are indeed changing.

Additional general sessions included similar content designed to illustrate the forces currently in play within the MEP trade from a macro level. Concepts such as how cross-border and cross-cultural interactions and relationships can prove pivotal in addressing international challenges within the sector. SMACNA Premier Partner Procore's Sasha Reed delivered general session remarks on how data can help contractors relieve the financial stress caused by inevitable delays and how technology can be deployed to maximize the bottom line.

In addition, breakout sessions occurred throughout the event. These sessions tackle a variety of essential topics for those in attendance. They ranged from the impact that technology has on recruiting and talent development, how to successfully take technology from the drawing board and implement it throughout your corporate structure, and learning some of the best practices in building an overall culture that is one where innovation is encouraged from top leadership all the way down to the apprentice level. SMACNA participated in several of these sessions, including a safety session where Justin Crandol, SMACNA's Director of Safety, served as a panelist along with his counterparts from the other associations.

Linda Jennings, SMACNA's Executive Director of Innovation, Integration and Learning, talked about the importance of safety and the work of the three associations in improving overall industry awareness of this critical topic. "Justin, along with the safety directors from all three associations, has been tasked with innovating a vital part of the industry. Safety is no longer just about machine guarding but includes the health and well-being of the people running those machines. To be a successful MEP contractor, we must advocate for our employees' mental and physical health, and our innovation efforts have focused on that very issue."

The 2024 edition of the conference, held in Orlando, Florida, served as an avenue for learning about the available state-of-the-art solutions and providing a unique opportunity for contractors across the MEP trades to network with their peers. This type of face-to-face engagement can go a long way in helping contractors better understand the best practices that their colleagues are employing within their own shops. By talking to individuals who have encountered similar challenges, MEP attendees can discuss challenges and develop peer-sourced solutions that can positively impact their

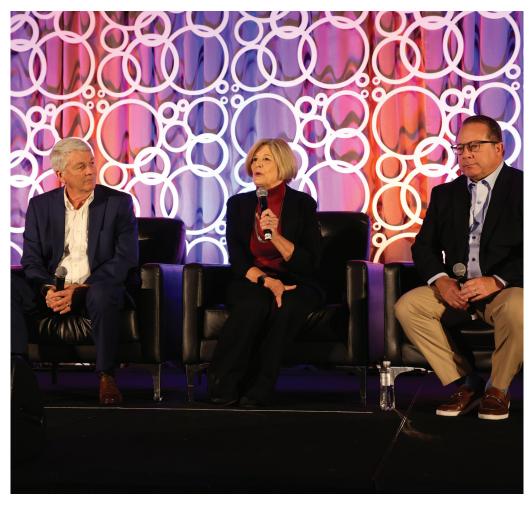
"Safety is no longer just about machine guarding but includes the health and wellbeing of the people running those machines.

— LINDA JENNINGS



Poynter Sheet Metal President Joesph Lansdell addresses the audience during an MEP general session meeting.

Chris Hronek, application engineer at Tweet/Garot Mechanical, was named SMACNA's 2024 Innovator of the Year.



SMACNA President Carol Duncan joins her counterparts from MCAA and NECA to talk about the impact that technology has had on their businesses.

businesses. This combination of cooperation and innovation is at the core of what the MEP Innovation Conference tries to accomplish, and the 2024 edition was no exception.

Voss expanded on these opportunities, stating, "The theme around this conference has always been sharing. Attendees truly embrace this, which is apparent in the sessions and the breaks between. The discussions are powerful and refreshing."

In addition to the programming within the convention venue, there were opportunities to tour three leading Orlando-based MEP contractors: Carter Electric, Maddox Electric and Miller Electric. Attendees had the chance to travel to their respective shops and learn more about the specifics of their operations, ranging from human resources and talent development to how they specifically work with clients to deliver high-intensity projects. This taught attendees more about how each company utilizes emerging technology, such as virtual reality, to provide the highest quality end-product at the highest possible value to the client. Tour attendees often had the opportunity to interact with these tools, ask questions and brainstorm some potential applications within their own shops.

The event also served as a moment for contractors to use their technical skills and teamwork to assist those in need. Attendees participated in an exercise led by Project Give A Hand, a charity that works to provide artificial limbs to those who have lost them due to disease or accidents. After a presentation about the organization's mission, conference attendees came together in teams to help build some of the limbs that will be distributed by Project Give A Hand to those who are in the greatest need. The groups worked collaboratively to assemble these critical tools while learning more about those needing this aid.

In addition to learning and networking, the conference served as an opportunity to recognize achievement in the MEP space. Each of the three associations recognizes an Innovator of the Year, an individual who sets the pace for embracing and incorporating new technology not only within their shop but also serves as an enthusiastic industry champion for encouraging their peers to push the envelope. Chris Hronek, Application Engineer with Tweet/Garot Mechanical based in De Pere, Wisconsin, was named SMACNA's 2024 Innovator of the Year. Hronek has earned a reputation for being a solutions-oriented individual who not only encourages his team to open themselves up to new ways of doing things but also serves as a mentor to his team and works with them to maximize how they interact with new tools. One of Hronek's passion projects at Tweet/ Garot has been integrating digitized systems into the company's day-to-day operations. By encouraging his peers to adopt new methods of project planning, management and execution through further adoption of digital tools, Hronek has been a tireless advocate. Hronek's work is not limited to his work within Tweet/Garot. He is known as someone who works with other contractors in developing solutions to emerging challenges across the space and provides feedback to others in a collaborative manner. Finally, Hronek's work extends to the labor/management partnership as a member

of SMART, where he works to find solutions to challenges beyond what might happen in the technology realm.

Registration

The lessons learned at the MEP Innovation Conference will prove crucial as the trades strive to remain state-of-theart in their processes and adoption of technology. As technology changes and evolves, the industry must do so as well.

Jennings elaborated on where she thinks the MEP trades are going, "The construction industry does not stand still. Just as duct, pipe and wires can be walled in during the construction process without proper planning, contractors too can be left behind without collaborating and innovating their processes - whether it's in the design phase, in their back-office procedures, in the fabrication shop, or on the job site. The **MEP Innovation Conference** provides attendees hands-on opportunities to collaborate, innovate and grow within the changing construction landscape."



Registration



Staff assists attendees with registration (top). SMACNA, NECA and MCAA members used the session to engage and network with each other to build relationships (center). An attendee visits the booth of SMACNA Premier Partner Milwaukee Tool during the MEP Innovation Conference's product show (bottom).



FEATURE STORY

THE FUTURE IS NOUN Partners in Progress Conference brings

SMACNA and SMART members together to improve businesses and drive future growth.

> The 2024 Partners in Progress Conference brought local union leaders, SMACNA member contractors, chapter executives, training coordinators and future leaders together Feb. 26 to 28 in Orlando, Florida, to provide opportunities to strengthen existing relationships and discover innovative strategies to shape more prosperous futures.

This joint venture between SMACNA contractors and SMART members reinforces the mutual goal of delivering quality workmanship for sheet metal applications and heating, ventilating and air conditioning systems to ensure accepted industry standards are used and work is performed in a productive, efficient and environmentally conscious manner. The SMACNA-SMART partnership is more than 75 years strong.

During the conference, attendees heard from SMACNA President Carol Duncan and SMART General President Mike Coleman on the importance of how better labor-management collaboration can shape the industry's future. They also learned ways to address future workforce needs, improve leadership and communication, address mental health concerns and use unconventional thinking to solve problems. \checkmark

Risk Forward to Become a Better Leader

Keynote speaker teaches performance arts tools contractors can use to improve communication.

ow do you move forward in times when your goals aren't clear, your plan is still unfolding or you can't quite see the path ahead?

It can become a time of uncertainty.

When you stop and look around and see other people are busy and you see what they're doing, you start to panic and think if you don't keep up, you're going to lose out," according to Partners in Progress Keynote Speaker Victoria Labalme during her session, "Risk Forward."

"We fall into this trap of compare and despair or a period of self-doubt," she says. "We start to pack our days with to-dos, and it can feel like a conveyor belt of activity. You get sucked into a hypnosis of hyperactivity."

What you need to do is "risk forward," Labalme encourages.

Risk forward is a term Labalme learned from legendary mime Marcel Marceau. This is a movement he taught Labalme and other actors where one's weight is forward onto one foot and the body is a little off balance but the heart is open. "I've come to think of this as a philosophy for life and work and how we can move forward into the unknown," she says.

Labalme had this experience herself after moving to New York to pursue her acting career. She was on her own conveyor belt trying to keep up and get noticed. Then, one morning she woke up and looked outside of her bedroom window to see smoke coming out of the World Trade Center. It was Sept. 11, 2001, and she lived so close to Ground Zero that she couldn't get into her apartment for weeks without showing identification. Two days later, her mother was diagnosed with pancreatic cancer.

Fame suddenly didn't seem so important. Her life focus shifted from recognition to contribution. She kept looking for ways she could help others. She had to trust that inner current and risk forward to pursue a new path. The result was her becoming a speaker to offer communication tips she learned while studying acting.

She shared the following tools she developed through her performing arts training to bring out the best in oneself by risking forward:

- Lead with a throughline. A throughline is a driving force of a character's behavior something that propels their actions. "Think of yourself like the lead character in an action movie," Labalme says. "What's the throughline propelling you through the action of the play of your life? What drives you at work when you're at your best? When I work with a tech company, I help them realize they aren't about tech; they are about human connection. When I work with a diet and nutrition company, I tell them they aren't in health; they are helping people live their best lives. Ask yourself, 'What's the nobility behind the sheet metal and HVAC industry?""
- Use the right tool for the job. To be an effective communicator as a leader, you have multiple tools you can use: talk in person, video conference, phone call, email or message. Often, Labalme says, "we use the wrong tool for the job. Many

times, we use a Sharpie to communicate when we really should've used a pencil." When other people's input is important, "don't be a Sharpie leader; be a pencil leader," she encourages.

- Clarify your K-D-F. In communicating, always ask yourself: What is the knowledge I need to share? What do I need others to do as a result? How do I want others to feel when they walk away from that interaction?
- Craft your first and final moments. No play or movie begins or ends randomly. "So often in business communications, we blow these moments," Labalme says. "This meeting isn't going to take much time' is a terrible beginning. Also, you never want to end on a Q&A. You can make time for Q&A, but make sure you have a chance to make a final impression afterward with a story or image."
- Lead through possibility. To foster a work environment of collaboration, you want to always look for what is possible versus what isn't. This means encouraging people to share by not squashing ideas. Even what starts out as the wrong idea can lead to the right idea when it is listened to with an open mind and nurtured with collaboration, Labalme says.
- Take micro risks. Don't go too big by expecting your employees to step outside of their comfort zones in a big way, or they won't. Micro risks are easier to adopt and embrace and they help you move forward in a stable and positive way.





Carol Duncan and Mike Coleman welcoming the Partners in Progress attendees (top). Victoria Labalme (bottom).

The Partners in Progress Leadership Forum

Industry leaders share meaningful insights into current industry challenges and priorities.

t Partners in Progress, Moderator Dushaw Hockett, Founder and Executive Director of SPACEs, got to sit down with a panel of industry leaders to ask some burning questions from the industry and the audience during the session titled, "Fireside Chat with SMART/SMACNA Leadership: A Q&A Session."

The panel consisted of Carol Duncan, SMACNA President; Aaron Hilger, SMACNA CEO; Mike Coleman, SMART General President; and Joseph Powell, SMART General Secretary-Treasurer.

Here are some of the highlights from this insightful Q&A.

Q. What priorities do you have for our industry?

Coleman: Getting workforce to these big megaprojects and getting workforce to the areas that have megaprojects, so those companies are able to keep and secure their core work. Organizing is our biggest priority right now. The second part of that is addressing issues that come with this new workforce, which is made up of more minorities and females. For instance, maternity leave is becoming more of an issue, and childcare has been an issue, but the needs for both are growing. We want to help solve the problem of affordable childcare for our members and employees.

Duncan: We want to make sure that everyone is aware of the tools and best practices available as far as recruiting and retention are concerned, so people know how to attract and keep employees. Q. This is concerning the theme of partnerships. It's nice to have such a great national management partnership, but how can we replicate that at the local level? What advice do you suggest on building strong labor management partnerships at the local level?

Hilger: it's easy and hard. I have relationships with all of the basic trades and work with them on a daily basis. We work on boards together, and every week we solve problems together. We could have spent all of our time fighting about those 5% to 10% of the things we didn't agree on, but we deliberately chose to focus on the things we did agree on so we could make progress.

Coleman: When I first came into labor management, the relationship wasn't great. But I capitalized on this opportunity to get a fresh start. Some things we did were fun, such as helping out at charities together or working on common goals. We engaged politicians, and we did it together. The things we did together weren't always about contract negotiations or issues within the industry; sometimes we got together just to have a beer or go to ball game. This made a huge different in our relationship, how we addressed issues and talked to each other, and how we built mutual respect. Also remember the stress you're experiencing; your counterpart is under the same stress. You'll never accomplish by yourself more than you'll accomplish together.

Hilger: if you are a chapter executive or business manager, take a good look at your job. If you look at each other's jobs, you'll find they are a lot more alike than you think they are.

Q. The workforce shortage is a recurring theme. What are we doing to address the workforce shortage and what can we do to recruit and retain more workers?

Powell: In our efforts to help incentivize people from other areas to travel to locations with megaprojects, we created a travel incentive program. If you are from a "Stabilization Agreement for the Sheet Metal Industry (SASMI) local, you have the opportunity to apply for an additional benefit through SASMI to assist you with your traveling expenses. You will need to work with your local office to fill out the appropriate paperwork.

Hilger: We are recruiting in areas where union density is very low and facilities to recruit and train are small. We're recreating a whole new structure as we do this and bringing in individuals who many have never found our industry.

Duncan: We have built strategic alliances with contractors in various states where contractors have reached out to us to help manufacture and get equipment to job sites. Those are alliances that can work for us long term. If you are able to reach out to another contractor and create a partnership, that has proven to be a good strategy.

Coleman: Something else we've done is increase staff for the purpose of organizing. We've added staff the last year



From right to left: Dushaw Hockett, Carol Duncan, Mike Coleman, Aaron Hilger and Joseph Powell.

and created a team that goes into locals where they have an increased need for workforce based on megaprojects or a series of large projects. They go in and analyze and figure out what we can do to address any problems. Some answers come out of these meetings. For instance, we've been increasing swift training through ITI, so people are able to learn the basics or whatever skills they need to get in on a project. For years, people would give us a hard time for letting retirees come back into the workforce, but we have 11 locals right now that have met the criteria for allowing retirees back into the workforce for a period of time, and they are taking advantage of that. We're doing everything we can to address this issue.

We're always looking for other things we can be doing.

Q. Knowing what you know today, what would you say to your past self to get yourself to join a local union or get into this industry?

Coleman: If you join our organization or our industry, you have a chance at good middle class life with great benefits and great retirement and a chance to be part of a brotherhood and sisterhood that can help you with any problem you have.

Duncan: Join SMACNA sooner. I joined 15 years after I started in the industry. The knowledge I gained and the generosity of the people in the industry helped my business grow, so I'd have joined sooner. Hilger: You can make an impact.

Powell: It's not a job, it's a career.

Q. There are unions and contractors out there expanding market share. What are they doing right that the rest of us could learn from?

Duncan: This takes making an investment as a contractor. You have to be willing to invest resources long term to see success in those markets. You won't get success overnight. Stay the course. Make sure you have the right people. If you don't have the right people or the right champion in place, it doesn't work. I've been fortunate I've had champions and markets to run with, but that's how you build market share and expand markets over the long term. ▼

How to Attract & Retain Generation Z Workers

Learn what the newest members of the workforce value most in their career choices.



rying to attract the younger generation into your sheet metal or HVAC business?

Understanding what motivates them can help, shares Clark Ellis, Principal and Cofounder, Continuum Advisory Group, during his Partners in Progress session, "Values Alignment — The New Paradigm for Recruitment and Retention."

He began by comparing some qualities each generation embodies.

• **Baby Boomers:** Optimistic, enjoy mentoring, strong work ethic. They seek a loyal employer, hierarchical culture, chances to mentor others and respect.

- Generation X: Independent, innovative, strong communicators. They seek a trustworthy employer, autonomy, problem-solving opportunities and competent colleagues.
- Millennials: Tech-savvy, collaborative, focused on the greater good. They seek empathetic employers, meaningful work, training for new skills and flexibility.
- Generation Z: Digitally fluent, practical, diverse and flourish in diverse workforces. They

seek a culturally competent employer, competitive wages, mentorship and stability.

Then he focused on what drives Generation Z employees and pointed out some characteristics from New Horizons Foundation research that showcases who makes up this generation and what they want in jobs.

Generation Z is the most diverse generation with more than 49% of people being non-white. They generally have fewer physical skills and experience than people from other generations. They are also more focused on maintaining a balance between personal and career development priorities, making them more motivated by time off versus overtime.

When weighing career opportunities, Generation Z workers value:

- Training and development opportunities.
- Technology integration into their work.
- A voice in workplace decisions.
- Mental health support.
- Companies with Diversity, Equity and Inclusion and Environmental, Social and Governance programs.
- Fair compensation. A lower portion of Generation Z believe they are fairly compensated (69%) compared to Generation X or Millennials.
- Information about the job and training delivered in as-need-ed, bite-sized portions.
- Mentors who can help them get integrated quickly as they start their jobs, as well as others who may be able to help them choose areas of focus or visualize next steps. ▼

The Hero Effect

Keynote speaker encourages Partners in Progress attendees to become everyday heroes to their customers.

hat does a hero look like?" This is a question Partners in Progress Keynote Speaker Kevin Brown asked the audience during his session, "The Hero Effect: Transforming Ordinary People into Extraordinary Heroes."

"Many define heroes as ordinary people doing extraordinary things," explains the author of "The Hero Effect" and "Unleashing Your Hero." "But I don't think we were ever ordinary in the first place.

"We were all born extraordinary," Brown insists. "As we grow, we just learn to stop believing that. When we were kids, we played games inside of large boxes, creating imaginary worlds. Now we are told to think outside of the box, but the real game is played inside of the box."

He told the story of his son, Josh, who was told at 5 years old that he was autistic and would have a tough road ahead. Instead of taking the storyline life gave him, he worked hard to earn his high school diploma. A big fan of Disney, his parents took him there for the first time at 9 years old. Since he had a very special diet, they were concerned about food choices. A Disney chef listened to their concerns and though she couldn't make what he wanted on that first day, she made such a positive impression on Josh that he wanted to return the next day for breakfast. The chef had gone out of her way to buy the special ingredients necessary to make Josh's favorite breakfast: apple pancakes. Josh

and the chef kept in touch. After graduation, Josh and his parents returned to Disney to find out that this chef built an entire special menu for kids like Josh that Disney didn't have prior to his first visit. In 2016, they served over 1 million kids just like Josh with this special menu — all inspired by this one 9-year-old kid with autism.

"A hero doesn't have to be about grandiose, lifechanging things," Brown says, encouraging the audience members to think about how they can leave legacies they can be remembered for in their work. "More often than not, a hero is made through small, everyday things and collaboration and innovation.

"Heroes are people who choose not to be ordinary," Brown adds. "Heroes are the people who solve problems and make life better for the people in front of them every day. In the end, you can never go wrong by doing the right thing." ▼





FEATURE STORY

SMACNA Speaker Profile: John Murdough

SMACNA educator receives CFMA's Construction Executive of the Year award.



John Murdough received the 2024 Wink Ames Memorial Award for Pioneer in Construction from the Construction Financial Management Association (CFMA).

Murdough, CPA, MBA, is Partner Emeritus at Baker Tilly U.S., where he is a member of the firm's construction practice, specializing in audit and accounting, tax issues, business and management consulting, business problem solving, and transition and strategic planning.

CFMA gave Murdough the Pioneer in Construction award to honor his passion and dedication to positively impacting construction companies during his long tenure serving the industry.

Murdough has taught seminars for more than 30 years, including national and local classes for the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA). In fact, he recently spoke about financial management at the 2024 Business Management University March 10 to 14. His session included the two basic financial statements and what they should tell you, calculating percentage of completion and interpreting the results, as well as dealing with day-to-day project accounting challenges.

He also co-authored the book "Managing the Profitable Construction Business," and taught at Arizona State University's graduate construction school for 10 years. Murdough was instrumental in developing the nationally recognized Leadership Develop Program (LDF) for the Arizona Builder Alliance, graduating over 800 individuals in the past 28 years. He developed and taught a graduate course in the Del E. Webb School of Construction for 10 years, receiving the Plus 1 award for excellence in teaching.

"My work mission is the construction industry," Murdough says. "It's one of the last unconsolidated industries in America. My goal has been to help the people running these companies, so that we can keep this as a family-owned industry. I've spent a lot of time working on this mission, and I believe in it passionately."

Outside of work, Murdough enjoys spending time with his three children and is a fan of the outdoors, painting and photography **T**



Government Affairs Update and Honors for Stan Kolbe

The 118th Congress is now over half over and just seven months of activity remains before the election. Although seemingly endless political debate and issue activity has produced few new bills or laws passed to show for all the tension, dysfunction and inter party warfare, we remain heavily engaged in legislative, political and regulatory activity to build on the progress of the last Congress.

This includes filing detailed and consequential regulatory comments, as well as increasing policy meetings with the administration to help shape consequential new laws resulting from historic wins in the legislative arena. In addition, we are aggressively advocating and advancing key policy priorities and initiatives as part of our regulatory comments for the new programs funded by the landmark infrastructure, tax and CHIPS and Science laws. Contentious party politics may distract most commentators, but we have identified key legislative opportunities for SMACNA on the Hill agenda for the first half of 2024.

The House GOP majority has nearly disappeared since last year with the Senate majority even closer. Nevertheless, we have focused upon the members working in the middle of the field as they will control the destiny of our key bills and amendments, and those are the members of Congress we are generally closest to and support with our PAC efforts. Fracturing in the House majority along regional and ideological lines actually plays into our issue agenda with reasonable and moderate members of both parties — on both sides of Capitol Hill eager to address our issues.

As you recall, by agreeing to a SMAC-NA endorsed spending deal last fall, the government did something it has rarely done this year: enact a bill or resolution. There have been only 14 bills and resolutions that have become law since the start of this Congress last January, prior to this stopgap measure to keep the government open. If that strikes you as a small number even for a dysfunctional House, it is. Since 1973, an average of about 70 bills or resolutions have been enacted through October 1st. Even in a Congress in which the House and presidency are controlled by different parties, this is the fewest in nearly a century.

The deeply split and often distracted GOP majority has attempted to repeal many of our gains from the 117th Congress in tax reforms, infrastructure, CHIPS projects and much more. In most cases, we have skillfully battled misguided attempts by bitter partisans to repeal trillions of dollars of construction incentives and infrastructure grants. Without question, our high-level political engagement and legislative strategies have been key to holding key gains and building on them.

Additionally, Stan Kolbe, SMACNA's Executive Director of Legislative and Political

Affairs, was named as one of ACHR's 2023 Newsmakers by the *Air Conditioning Heating Refrigeration (ACHR) News*. Kolbe was also named one of *The Hill's* top lobbyists in Washington, D.C. for 2023.

In talking about his honors, Kolbe was quick to recognize the work done by all of





SMACNA. "Our challenges and hours are often difficult," he says, "but without us sharing our policy experience and brainpower every day, it would not be possible for SMACNA (and me) to be viewed in such a positive way across the government and business sectors." ▼



CULTURE OF RESPECT

Dushaw Hockett

Finding Happiness at Work

ulture of Respect - formerly BE4ALL (Belonging and Excellence for All) — launched in December 2021. The initiative envisions a diverse, inclusive and unionized sheet metal industry that is welcoming and fosters belonging for all. This work includes a human side, where individuals take pride in the work they do and value the contributions. It also includes a business side, where workers and contractors work together to achieve the highest standards of performance and excellence in their technical skills and crafts. When SMACNA, SMART and ITI (International Training Institute) launched this effort, they wanted it to be more than just words on a piece of paper. It was important that the initiative be backed by research and best practices. Here, we explore how social connections and building meaningful relationships at work make us happier and more successful.

THE SCIENCE OF WELL-BEING

Dr. Laurie Santos is a professor at Yale teaching the most popular class on campus. It's called "The Science of Well-Being" and explores ways that everyone can increase their own happiness and build productive habits. In a recent article by Reneé Onque, published by CNBC's Health and Wellness, Dr. Santos says that the No. 1 thing people can do to feel happier is to engage in social connection. She recommends the following tips:

- 1. Intentionally make time to develop the relationships in your life.
- 2. Be open to connecting with strangers: "We kind of assume that connecting with a stranger will feel awkward or vulnerable or weird. But the data really suggests that reaching out to people who we don't know and starting new connections will feel better than we expect."
- 3. Aim to ask deeper questions during conversations to learn other people's values and truly connect.

LEADERSHIP AND HAPPINESS

A recent interview published by the *Harvard Business Review* is with Arthur C. Brooks, a Harvard professor who teaches a class called "Leadership and Happiness" that explores the question of how people find satisfaction at work. Brooks says that the people who are happiest at work are those who feel like they are creating something of value, are recognized for their accomplishments, and feel needed in the work that they do.

Wherever possible, Managers should remove constraints to socialization and create an atmosphere where employees feel free and encouraged to connect and show support."

HAPPINESS IS GOOD FOR OUR HEALTH AND FOR EMPLOYEE RETENTION

Robert Waldinger is director of the Harvard Study of Adult Development and author of the book "The Good Life: Lessons from the World's Longest Scientific Study of Happiness." In a recent interview for the Harvard Business Review, Waldinger says that the people who "have the warmest relationships and the people who are most connected to other people in their lives" are healthier and live longer.

In his interview, Waldinger mentions a Gallup survey of 15 million workers that asks, "Do you have a best friend at work?" Three in 10 workers said that they do have a best friend at work, which makes them want to come to work each day. This stresses the importance of connections among employees.

GET TO KNOW YOUR COWORKERS

An article by Gallup Workplace explores the importance of building and maintaining respectful, trusting and friendly relationships in the workplace. Employees who feel that they have friends at work are more likely to recommend their workplace to others and have greater overall satisfaction with their job. The article recommends that "employees at all levels" make an effort to get to know their coworkers and to maintain friendships. This could be by video chat, having lunch together or holding a walking meeting. "Just as important, managers are responsible for promoting a local team atmosphere that encourages trust and collaboration. Wherever possible, managers should remove constraints to socialization and create an atmosphere where employees feel free and encouraged to connect and show support."

For Culture of Respect Toolbox Talks, visit www.smacna.org.

FINANCIAL STEWARDSHIP

Ronald J. Eagar

Infrastructure Bill Update: Seizing Opportunities in 2024

t has been more than two years since Congress passed the bipartisan infrastructure deal (*Infrastructure Investment and Jobs Act*). As predicted, the \$1.2 trillion dollar investment into U.S. infrastructure has been slow to reach actual job sites and construction companies' wallets.

However, over the past few months we have learned more about the scope, nature and timeline of many approved projects. As of this writing, the infrastructure bill has launched a total of \$400 billion of work across 40,000 projects throughout 50 states.

Among the most notable areas of opportunity for the SMACNA community are:

Clean Energy — The infrastructure deal includes the largest investment in clean energy in U.S. history. In addition to upgrading the power infrastructure and strengthening the energy grid, funding will also go to new programs that support cutting-edge clean energy technologies and the transition to a zero-emission economy.

Airports — The deal also allocated \$15 billion to airport infrastructure funding. According to the Federal Aviation Administration (FAA), nearly \$9 billion has been made available to airports across the country. Visit the FAA website to find projects that are planned or underway in your area. These projects are aimed at improving the supply chain by addressing repair and maintenance backlogs, reducing congestion and emissions, and driving electrification and other low-carbon technologies.

Resilience — In response to the exorbitant amount of funding spent on weather-related and other disasters over the last decade, the deal dedicates over \$50 billion to protect the nation's infrastructure from physical, climate and cybersecurity-related threats. To date, the deal has funded more than 2,300 resilience-related projects.

GET READY TO BE PART OF THE ACTION

While there will be plenty of infrastructure projects to choose from, getting your bid selected among steep competition will require a strategic and thoughtful approach.

Use industry benchmark reports to compare your business's performance to your peers and find areas of improvement."

Now is the time to start planning for your wins by taking proactive steps, such as:

- Stay on top of emerging opportunities on the Build. gov website.
- 2. Speak with your lenders about your banking facility and ability to borrow.
- 3. Consultant with your surety regarding your bonding capacity.
- 4. Revisit your prequalification process to ensure it is as competitive as possible.
- 5. Work with your CPA to plan and generate the highest quality balance sheet.
- 6. Get updated financials from your subcontractors to identify any new areas of risk.
- Identify any skill deficiencies or talent gaps you will need to correct in your labor force.
- 8. Use industry benchmark reports to compare your business performance to your peers and determine areas for improvement.

Of course, an important part of this planning process will be sustaining your business's financial health while you wait for additional projects to be funded and jobs to materialize. This can be accomplished through benchmarking reports, cash flow projections, operational reviews and other tools to help position your company for optimal results.

For more information on the infrastructure bill and planning to seize the right opportunities for your business, please contact Ronald Eagar, partner and chief operating officer at Grassi.

For more information, please contact Ronald J. Eagar, CPA, CCIFP Partner at Grassi, at reagar@grassiadvisors.com or 516.336.2460.

LEGAL Grant Collins

Contractors Beware: Bonuses and Incentive Payments May Create Overtime Headaches

hile SMACNA contractors are familiar with the concept of "overtime" — that is, paying employees time and one-half for certain hours worked — few contractors understand how overtime paid pursuant to their collective bargaining agreement (or "CBA") intersects with statutory overtime required by the federal Fair Labor Standards Act (or "FLSA").

What is more, worker shortages at large construction projects throughout the country have complicated matters further because some contractors are using bonuses and incentive payments to attract workers to these jobsites. These payments likely need to be included in the "regular rate" for purposes of calculating statutory overtime under the FLSA. Failing to include these payments in the overtime calculation can cause contractors big headaches — and a lot of money. As outlined below, however, SMACNA contractors should be aware of these issues and also understand how contractual overtime paid under their CBA may offer some protection against claims for statutory overtime.

STATUTORY OVERTIME VS. CONTRACTUAL OVERTIME

Statutory overtime is required by federal law. The federal FLSA requires employers to pay overtime to non-exempt employees only if the employee works more than 40 hours in a workweek. Many states, such as Illinois, Massachusetts, and Maryland, have state laws matching the federal 40-hour standard. Other states, such as Arizona and Florida, have no state overtime laws. Still other states, such as California and Colorado, mandate overtime after 40 hours in a week and 12 hours in a day.

Under the federal FLSA, employees must be paid overtime for all hours worked over 40 hours in a workweek "at a rate not less than one and one-half times the regular rate at which [the employee] is employed." The "regular rate" is further defined as "all remuneration for employment paid to, or on behalf of, the employee[.]" In contrast to statutory overtime, contractual overtime is premium pay that is required by the terms of an employment contract — such as a CBA. For example, Article 6, Section 1 of the Standard Form provides that contractors will pay employees time and one-half for hours worked in excess of eight hours each day and any hours worked on Saturday and Sunday. Local area agreements differ and some CBAs may require a higher premium — such as double-time — on certain days. Thus, to understand their obligation to pay contractual overtime, contractors should review their CBAs carefully.

CALCULATING THE "REGULAR RATE" UNDER THE FLSA

As noted above, the federal FLSA requires employers to pay their employees time and one-half their "regular rate" for all hours worked in excess of 40 each week.

For an employee who receives only an hourly wage, calculating the overtime rate is straight forward: simply multiply the hourly wage by 1.5 and multiply that number by the number of hours over 40. For example, an employee earning \$20 per hour in base wage would receive \$30 per hour ($$20 \times 1.5 = 30) for all hours worked in excess of 40 hours.

The problem, of course, is that most employees do not receive only an hourly wage. Instead, employees often receive additional compensation each week, including: shift differentials; per diem or reimbursed expenses; vacation pay, PTO or sick pay; overtime premiums; bonuses, such as attendance bonuses or safety bonuses; on-call pay; and fringe benefit contributions, such as pension and health and welfare contributions. In these instances, calculating overtime is more difficult. According to guidance from the Department of Labor ("DOL"), the "regular rate" may be calculated using the following formula:

Total compensation in the workweek (except for statutory exclusions) ÷ Total hours worked in the workweek = Regular Rate for the workweek

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After the "regular rate" is calculated, then the rate is multiplied by .5 (to get the premium rate) and then multiplied by the number of hours worked in excess of 40 in that workweek. Remember, statutory overtime is triggered only when an employee works more than 40 hours in a workweek.

In calculating the "regular rate," the FLSA requires employers to include "**all remuneration** for employment paid to, or on behalf of, the employee," <u>unless</u> it falls into one of the specific statutory exclusions set forth in Section 7(e) of the FLSA. The statutory exclusions include the following:

- Payments for occasional periods when no work is performed due to vacation, holidays, or illness;
- Reimbursable business expenses;
- Discretionary bonuses;
- Employer contributions to benefit plans; and
- Premium payments for non-FLSA overtime (i.e., contractual overtime).

Thus, unless the payment falls into one of these categories, the amounts must be included in the calculation of the "regular rate" under the formula set forth above. ▼

EDITOR'S NOTE: This is part one of a two-part column on this topic. Learn about how bonuses and incentive payments likely must be included in the "regular rate" under the FLSA and how contractual overtime may be offset against statutory overtime.

To assist contractors with FLSA questions and questions regarding statutory overtime and contractual overtime, SMACNA held an Incentive Pay webinar on April 23. View the webinar on the SMACNA website.

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SMACNA CALENDAR

MAY

May 6-8 CEA National Issues Conference Washington, D.C.

May 20-22

Financial Boot Camp *Tempe, Arizona*

JUNE

June 2-4 Council of Chapter Representatives Meeting *Beaver Creek, Colorado*

June 9-12

Project Managers Institute Ontario, Canada

SEPTEMBER

September 22-25 Project Managers Institute Des Moines, Iowa

September 27

Women in Construction Summit New Orleans, Louisiana

SEPTEMBER/OCTOBER

September 29 - October 2 Financial Boot Camp: Interpret, Navigate, Analyze! *Phoenix, Arizona*

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