SEPT/OCT 2020 VOLUME 54 NUMBER 5 VOLUME 55 NUMBER 5



GOING NUCLEAR

Three decades have passed since the last new nuclear power plant became operational in the United States. Work is well underway to change that officially in 2021.

If everything goes according to plan, units three and four of the Vogtle Electric Generating Plant — better known as Vogtle 3 and 4 — will open in Waynesboro, Ga., over the next two years. With an estimated price tag of around \$25 billion, it represents one of the most significant infrastructure projects in the country.

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FROM THE PRESIDENT

Smart Planning for the Future

I recently finished a year as SMACNA President and took some time to reflect on the past 12 months and evaluate some options for the future. The SMACNA year started with the wonderful convention in Austin, and I had the opportunity to visit several amazing chapter events. It was truly rewarding to share ideas with so many talented people, and I was looking forward to a full year of chapter visits where I could interact with many more.

Then the harsh realities of the pandemic hit us all, hard. We were forced to make tough decisions regarding our personal lives and businesses. Many of us had no alternative but to furlough or lay off valuable employees. Our plans and budgets were no longer applicable to the current changing regulations we had to comply with.

We had to rapidly formulate new plans, including several contingency strategies. There were more tough decisions to be made. Often the information

available was not complete for the situation. SMACNA helped with keeping us current on legislative and regulatory issues, and assisting us with the latest industry news. We had to exhibit leadership and make hard choices

Looking ahead, we still have concerns. We hope a vaccine will be developed to help people, but when? Many jobsites that were closed have restarted, and we have even seen an increase in manhours in some areas.

But, we also have had sudden shut-downs locally due to COVID-19 outbreaks. In the pages of this SMACNews and around the country, we see gigantic projects and small ones, new ones starting, and existing ones being completed. It appears our industry is getting busy with work. We hope 2021 will restore a vibrant economy, but we also need to prepare for the possibility that 2022 could be a challenge.

We have seen significant shifts in consumer preferences and work habits that add complexity to our planning. From 14-year high vacancy rates in New York City to dropping home prices in San Francisco, consumers' preferences are changing both in where they live and how they behave online.

My company is working on three versions of our fiscal year 2021 budget and discussing options and contingencies depending on what surprises we will have to face over the next few months. These budgets include plans to make hard decisions, if necessary. Being prepared in advance for some "what-ifs" helps us remain calm and care for others in difficult times.

Anticipating how shifting consumer demands will impact the built economy is something we all should pay attention to as it can lead to new opportunities as well as prevent miscues. Topics I keep an eye on are vaccine production and delivery, return-to-work, technology infrastructure, indoor air quality, sustainability, building efficiency and renewable energy.

SMACNA recently demonstrated its ability to help keep contractors informed on a wide range of trends and skills with the Edge Conference. We all could benefit from hearing leaders in our industry speak to us on economic trends and skills development. SMACNA even enabled us to connect with one another in roundtable sessions to get a pulse check with our peers on several different topics. Executive News Brief also remains a "go-to" source for daily news and trends.

SMACNA continues to offer a variety of educational opportunities online through webinars and insightful articles and information in their newsletters and magazines. Engage with SMACNA to keep current, and to anticipate important trends as we ride into the future together.

Please stay positive, safe and healthy.

Sincerely,

Angie Simon, SMACNA President



CAPITOL HILL UPDATE

Pensions in Legislative Limbo

We now know that the House, White House and Senate could not work out a second COVID stimulus bill before the Presidential election. Pension relief and Composite Plans were in previous House-passed bills and Composites were included in the Grassley-Alexander pension proposal, so there had been high expectations pensions and Composite Plans would be included in a negotiated stimulus package.

Now SMACNA will look to the Lame Duck session for our next opportunity. Unfortunately, it is just not clear what the political incentives will be for COVID relief or pensions in a Lame Duck session for either party, win or lose. Composite Plans have been part of comprehensive pension reform since SMACNA began efforts to get the new plan design authorized, yet nothing has changed. Composite Plans, as outlined in the GROW Act in 2018, were included in both Housepassed stimulus bills as part of relief for failing plans.

Composite Plans are also included the Senate Republican Grassley-Alexander pension proposal. SMACNA efforts remain focused on keeping Composite Plans as part of any pension relief legislation considered this session.

Contact Your Congressional Delegation

Because Congress is unpredictable, contacting your Congressional Delegation remains important. Congress may well act on pension relief and reform, and we want that reform to include Composite Plans. Continuing to sound the alarm is imperative.

Composite Plan adversaries are gaining ground in vocal opposition to Composites. Their strategy takes advantage of union disagreements on the issue of Composites, and urges members of Congress to pass only what everyone can agree on — to include pension relief for failing plans and shoring up the Pension Benefit Guaranty Corporation (PBGC).

Opponents use grassroots efforts in their fight
to take GROW out of
pension reform. However,
grassroots works both
ways. Employers must do
their part on both sides
of the aisle and in both
the Senate and House to
ensure Composites stay in
any pension relief effort.

The time to speak out on the pension reform is now, while your legislators are home for campaigning and before they return for the Lame Duck session.

Contact Republican and Democratic Congressional delegation members in the House and the Senate,

FEATURE STORY



From Windstorms to Hurricanes and Wildfires, Contractors Battle Mother Nature to Keep Business Going

Is Cedar Rapids, Iowa, cursed? In June 2008, the Cedar River overflowed, flooding 10 square miles of the city,

Twelve years and two months later, a windstorm hit the city on August 10, 2020. Known as a "derecho," the event caused torrential rain, large hail, and numerous small tornadoes in eastern lowa and into northern Illinois. Some reports say almost every structure in the city sustained some damage.

including much of its central business district.

Welcome to 2020, a year where swirling hurricanes have competed with searing wildfires and powerful windstorms for the public's attention in the midst of the worst global pandemic in a century. SMACNA members in states such as lowa, California and Oregon have battled everything from inland gale-force winds to air so thick with smoke that it creates a perpetual twilight.

'Derecho'

The derecho that hit Cedar Rapids toppled 100-year-old trees with 100-mph winds, knocked out power to homes and businesses throughout the region, including SMACNA members Novak Heating, Prull Mechanical Contracting, and D&S Sheetmetal. Flying debris crushed cars, dented air-conditioning compressors, and shattered windows.

City officials said thousands of structures in Cedar Rapids were damaged, many extensively. Some say the total destruction from the storm could eclipse the \$6 billion impact of the 2008 floods.

Living through the 2008 floods made Randy Novak, president of Novak Heating and Air Conditioning, a believer in the importance of insuring and planning for unexpected disasters. In that 2008 storm, the company suffered over \$700,000 in uninsured damages

when the shop was submerged in 10 feet of water.

But experiencing disaster once doesn't mean Novak was prepared mentally for this year's derecho and the damage it wreaked on Cedar Rapids.

"You do this long enough and you think you've seen it all," Novak said. "If you had told me that we're going to have this thing called a derecho, that I've never heard of before, that's best described as an inland hurricane, I'd have told you that you're crazy."

Unlike in 2008, he said, most people and businesses have insurance that covers the windstorm damage. The problem this time is reaching a settlement on the claims.

"I know of very, very few people who have settled with their insurance company," Novak said. "There's not enough adjusters. ... I think the insurance companies are overwhelmed, but more importantly, the local contractors are overwhelmed. There's not enough roofers and siding companies. There's not enough of them to get stuff done."

Novak's business was closed for over a week, with limited ability to communicate with employees or customers due to the storm knocking out landline, cellphone and internet service in much of the region.

"And then when we opened, we thought we'd go crazy and have all these man-hours," Novak said. "But the problem was that electricity came back very slowly. It was a slow ramp up until everybody in the city got power. And now we're as busy as I can remember."

At Prull Mechanical, 140-mph winds snapped a 40-foot-tall walnut tree on the company's property, sending it crashing through the roof of Prull's 11,000-square-foot sheet metal shop and knocking out power for six days.

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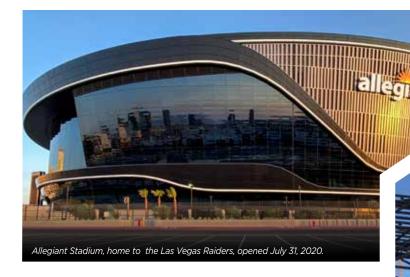
and ask them to support Composite Plans.

The future of the multiemployer system and the PBGC depends on the viability of contributing employers (that's you!). The future of contributing employers could depend on modernizing the system with a new option for plans.

What to Emphasize?

Emphasize your support of Composite Plan/GROW Act language using some of the following key points:

- Plans that aren't failing need help too. It is unreasonable to support use of federal money to shore-up failing plans headed to the PBGC while opposing a voluntary solution for plans not yet failing, where labor and management agree to transition to Composite Plans, which also would provide a lifetime pension benefit.
- the collective bargaining system. Employers and a strong core of the building trades unions endorse authorizing the use of Composite Plans. Stress that you believe in the bargaining process to build a strong, resilient industry that survives into the very distant future.
- The multiemployer system needs Composite
 Plans. This is necessary
 to prevent the employer
 continued on page 19



'A Pretty Good Win' Harris Leaves Nothing to Chance with Las Vegas Stadium

ven a global pandemic couldn't sideline the construction of Allegiant Stadium, the new \$2 billion home of the NFL Las Vegas Raiders and one of the most anticipated stadium projects in the Western United States.

While much of Nevada was closed during the spring - including the mega resorts and casinos on the Las Vegas Strip - the 65,000-seat stadium was considered an essential project and construction continued nearly around the clock to meet the summer 2020 deadline and the beginning of the NFL season.

For officials with Harris Company, a large mechanical contractor with 11 offices in eight states and more than 2,000 employees, that meant nothing could be left to chance on the project, even if it was taking place in America's gambling capital.

In 2018, Harris was awarded the \$140 million contract by a joint venture of general contractors Mortenson Construction and McCarthy Construction. The scope of work included tackling the stadium's HVAC systems, plumbing, piping, sheet metal, controls and mechanical insulation, as well as the PEX conduit that transports the draft beer and fountain soda from kegs and tanks to the concession stands and into the waiting cups of thirsty fans.

Harris has extensive experience in arena and stadium construction, having worked on U.S. Bank Stadium in Minneapolis, AT&T Center in San Antonio, and T-Mobile Arena, also in Las Vegas.

Taking Over

Coming in after another contractor had started work and failed to fulfill their obligations, Harris had quickly picked up the fumble and kept the project moving.

"The biggest challenge was just getting set up and getting the BIM built," Mickelson said. "Seven days after I got there, we had people working in the trenches. We were constantly modeling the job and building the job at the same time."

Harris had about 120 employees

on site at any given time.

One of the early improvements Harris made to the Allegiant Stadium's design was converting much of the ductwork, which had been specified as rectangular, to high-velocity spiral duct. The spiral duct was made onsite using a machine purchased by Harris specifically for the project.



High-velocity spiral duct up to 96 inches in diameter was used as part of Allegiant Stadium's HVAC system.

HARRIS www.harriscompany.com **MCCARTHY** www.mccarthy.com MORTENSON www.mortenson.com

Allegiant Stadium at a Glance

The new \$2 billion home of the NFL franchise Las Vegas Raiders has an extensive, elaborate HVAC system designed for the hot, dry southern Nevada climate. It uses:

- 1.3 million pounds of metal ductwork
- · 54 air-handling units
- 83 supply air and exhaust fans
- 453 fan coil units
- 28 pollution control units

Source: Harris Co.

"We were able to shrink the duct down," Mickelson said. "We were able to make it smaller and increase the air velocity."

Even though Harris Co.'s design shrunk the duct, it's still quite large, Mickelson pointed out. "We had some huge, round 96-inch duct and then it transitioned into two 72-inch diameter ducts that made up the oval ducts," he said.

In total, the project used almost 1.3 million pounds of sheet metal to fabricate the ducts.

Fabric Duct a Critical Element

The design also used fabric duct from DuctSox, which was put together at ground level in 18-foot sections and then raised into place. Mickelson said he believes it's the largest oval fabric duct ever built. The duct is near the roof and besides its use as part of the HVAC system, it's also an architectural design element that ties into the stadium's scoreboards.

Harris finished its work July 31, meeting the project's tight deadline. It wasn't easy, Mickelson said. "The schedule was a challenge. The concrete (work) finished late, the steel finished late, so that compressed our schedules to get all the mechanical systems up and functioning."

When asked what was most interesting to him about the project,



The Allegiant Stadium project required Harris Co. workers to be suspended up to185 feet in the air.

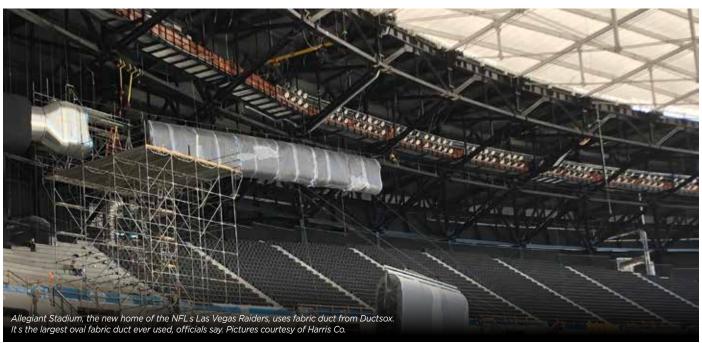
Mickelson didn't hesitate.

"The 'void," he said. "It's an area 185 feet in the air and some huge 120-inch-diameter ductwork ties into the exterior of the building at the louver plenums and then runs through the void areas until it gets to one of the floors."

Although Allegiant Stadium hosted its first NFL football game Sept. 21, fans will have to wait a while to check out the new structure. Games are currently taking place without fans in attendance due to COVID.

Even so, Mickelson is happy with how the stadium project turned out. "When you can finish the job on time, on budget, with zero punch list items, I think that's a pretty, pretty good win," he said.











Sacramento Contractors **Breathe New Life into** Sacramento Districts

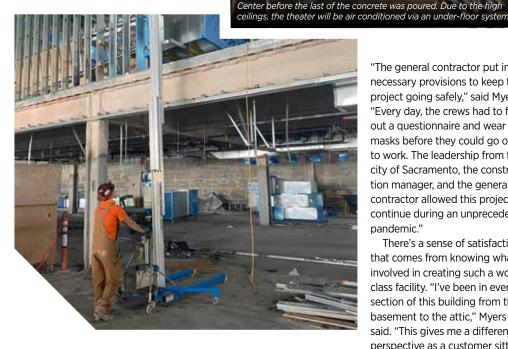
he City of Sacramento is currently renovating and expanding its downtown convention center and performing arts district, which includes the SAFE Credit Union Convention Center and the Community Center Theater.

expansion and renovation.

Intech Mechanical is doing the HVAC, plumbing and controls on the Community Center Theater. The project consists of six new air handlers and two new boilers, complete with new ductwork and piping. The chilled water is provided to the theater via an underground tunnel from the Convention Center.

A significant portion of Intech's work on the \$10 million contract was the much-needed upgrade and expansion of the restrooms and concessions. They've been on site at the Community Center Theater since September 2019, with final completion scheduled for spring 2021.

According to Intech Mechanical Vice President Gary Myers, the



Community Center Theater project has the typical remodel challenges that come with coordinating around existing structures and unforeseen conditions as areas of work are exposed. The original plan had been to reuse much of

the original ductwork, but during the discovery phase, the construction team and the city determined that all new ductwork was best for the longevity of the facility.

The team had to deal with COVID-19 protocols onsite, too. "The general contractor put in the necessary provisions to keep the project going safely," said Myers. "Every day, the crews had to fill out a questionnaire and wear masks before they could go onsite to work. The leadership from the city of Sacramento, the construction manager, and the general contractor allowed this project to continue during an unprecedented pandemic."

e chamber seating areas of the Sacramento P

There's a sense of satisfaction that comes from knowing what's involved in creating such a worldclass facility. "I've been in every section of this building from the basement to the attic," Myers said. "This gives me a different perspective as a customer sitting in a seat watching a show. This has been one of the most challenging projects of my career, but I can also say it will be one of the most rewarding. It was a fun job."

Lawson Mechanical has been working on the \$200 million



convention center project since the winter of 2019, handling the sheet metal, piping and plumbing, and self-performing the sheet metal and hydronic piping. Their project portion, which should be completed by the summer of 2021, comes in at \$25 million.

Despite COVID-19, the job never shut down. David Lawson, president of Lawson Mechanical notes, "Governor Newsom visited the job when he was contemplating how to handle construction in terms of keeping it open. He visited the site right before he finalized his mandate for how construction was to remain open. Fortunately, the job was a good example of good practices in the COVID age."

Lawson points out that installation of the exposed 44-inch double wall round ductwork in the ballroom has required problem-solving skills. "How do you get a piece of ductwork that weighs probably 300 or 400 pounds 35 feet up in the air securely and safely? That is a challenge. But once you figure it out, you follow the protocol and get it installed."

"It's nice to be on a project that's important to the city of Sacramento," says Lawson. "It is a big meeting space in town where a lot of things happen, so it's nice to be part of that."



INTECH MECHANICAL www.intech-mech.com LAWSON MECHANICAL www.lawsonmechanical.com

SMACNA 2020 Associate Members

PLATINUM







GOLD

















SILVER

SMACNA welcomes new Silver Associate Members AnswerForce, K-Flex and Ruskin.































































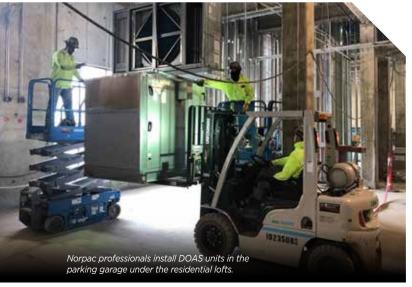




SMACNA's Associate Member program provides an opportunity for industry suppliers to build long-lasting relationships with SMACNA members, the industry's premier contractors.

To learn more about becoming an Associate Member, visit smacna.org or contact Scott Groves at smacna@naylor.com.







Contractor Takes HVAC Work to the Extreme

he Yellowstone Club ski resort in Big Sky, Mont., (elevation 7,218 ft.) is home to some of the wealthiest families in the world. Access to the exclusive members-only enclave is restricted to residents and members only, but a select team from Norpac Sheet Metal, Inc. in Billings (elevation 3,123 ft.) passes through the security checkpoints each workday. These professionals are installing HVAC systems in the resort's newest residential complex, Eglise Village at the Turn.

Team members do not discuss Yellowstone Club residents, who reportedly include Justin Timberlake and Bill Gates. "We signed confidentiality statements and every employee goes through a background check," explains Brooke Logan, Norpac project manager. "For security, all deliveries are pre-scheduled two weeks in advance on a matrix that must be approved by the Yellowstone Club.

If you don't plan ahead on this project, you just won't make it."

High security isn't the only issue; the location poses unique challenges. "It snowed in August," Logan says. "At that elevation, it snows more than six months a year. The goal right now is to get the structure up and enclosed so we can maintain temporary heat before severe weather comes."

Aside from extreme weather, the landscape leaves little room for construction. "The biggest struggle is going over the narrow bridge between our laydown yard and the site," says Stewart Brown, Norpac's vice president of estimating. "We leave our cars in the laydown yard and drive a quarter of a mile to our single parking spot onsite. If we need parts, we drive back to the laydown area across the single lane bridge and hope the bridge isn't blocked."

The laydown area is too small for storage, so the team takes equipment up each day. "Everything is

ident of operations. "If the roads are closed or icy, it might take four and a half hours to make the trip. It might sound ridiculous that we travel 200 miles one way to a job site, but in Montana we go where the jobs are."

To provide comfort at the high altitude, Norpac is installing a combination of 32 Dedicated Outdoor Air System (DOAS) units, fan coil units, humidifiers, and exhaust systems in the parking garage under the multi-level residential lofts. DOAS units recover more heat than conventional systems, bringing the residences into compliance with the International Energy Conservation Code.

"We bring in outside air through a heat exchanger before it provides ventilation for the building," says Brown. "On the other side, the exhaust goes through the heat exchange again and is routed out through a separate exhaust louver. This energy recovery tempers the outside air before we do mechanical heating and avoids burning any more gas than is absolutely necessary."

DOAS units have a higher initial

cost than conventional systems because they have specific ducts for ventilation. "You have a supply and an exhaust, and also an outside air with an exhaust tied to the outside air," says Brown. "I don't know that it doubles the amount of ductwork, but it requires significantly more than a conventional air handler with outside air, supply air, and an exhaust fan." Norpac is installing 101,000 pounds of metal for the 133,321 square foot building.

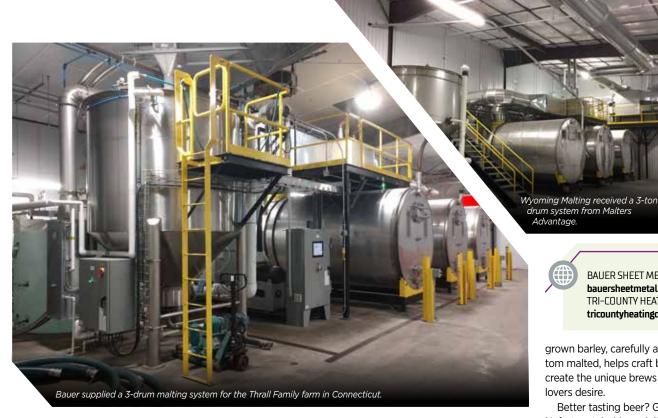
mascot for Eglise Village at the Turn, frequently visits the work site.

The extra complexity is worth the investment because it improves thermal comfort while saving energy. "It may be freezing cold outside, but DOAS keeps our clients toasty warm," Logan says.



NORPAC SHEET METAL norpacsheetmetal.com YELLOWSTONE CLUB yellowstoneclub.com





Contractors Taste Success with Craft **Malt Beer Brewers**

ext time you try a bottle of craft beer, or drink a glass at a local brew pub, be sure to toast a couple of your fellow SMACNA member companies.

Bauer Sheet Metal and Fabricating, Inc., based in Muskegon, Mich., and Tri-County Sheet Metal in Livingston, Mont., are establishing themselves as players in the craft malt industry.

Established in 1932, Bauer supplies specialty fabrications and equipment for fruit processing, food processing, conveying, marine, and general industry. It was about six years ago when entrepreneur engineer Wayne Moore approached Bauer with an innovative design for a small-scale, self-contained malting system.

"When Wayne came to us with his malting system design, the Bauer team reviewed the package and knew there would be no issues with the manufacturing of this equipment," said Bauer's Operation Manager Ron Sejat.

"This equipment takes barley and turns it into malt for the beer industry," Sejat explained. "This is very unique, and there are only a few companies that have equipment like ours in the world."

Moore's design features a variable steep tank and multiple germination-kiln vessels, equipped with a common air handler. In the steep tank, water is intermittently added to the grain, so that it will sprout. In the germinated seed, the malting process converts

starches to sugar — which is important for brewing. Combining the germination and kiln drying in the same vessel streamlines the malting process, and allows for custom malting, thanks to fully automated temperature and humidity controls.

"We start the growth of the seed, stop it, then dry it," Sejat explained.

"It's kind of a niche market, with less than a couple hundred craft malt houses in the U.S," said Moore, who is a partner in Bauer's malting system fabrication business line.

Moore learned about the growing craft malting market through his part ownership of a micro-brewery in Seattle. All malts, including barley, contribute to the flavor and color of beer. Locally

bauersheetmetal.com TRI-COUNTY HEATING AND COOLING tricountyheatingcoolingmt.com

grown barley, carefully and custom malted, helps craft brewers create the unique brews that beer lovers desire.

BAUER SHEET METAL

Better tasting beer? Great! Unfortunately, Moore initially had trouble finding someone to make his design a reality.

"I couldn't find anybody who could take on the whole project," Moore recalled. "Bauer was able do the whole thing, from tip to tail."

Sejat said the many years of experience and expertise is what puts the Bauer team on top of other sheet metal companies, something evident in their malting system fabrication.

"We actually use every aspect of the sheet metal trades in our malting systems," Sejat continued, "Structural steel, sheet metal, HVAC, piping, stainless steel, galvanized. The manufacturing of the main structure as well as the main drum body, for example, requires the intelligence and experience of

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Bauer Craft malt fabrication details

- Duct sizes: 10" to 48" almost all round
- Sheet metal gauges: 20 ga to 7 ga and heavier
- Heaters (indirect gas fired): 600,000 btu/hr up to 4.0 MM btu/hr +
- Blowers: 2 to 3 hp up to 100 hp





"CONTRACTORS. INCLUDING **OURSELVES, WE LIKE** TO JUMP IN WITH **BOTH FEET AND PUSH THROUGH."**

- TOM SZYMCZAK, SSM

and 4 has gone through multiple phases. First, the contractor worked with Westinghouse to facilitate the design process of the plant's "nuclear island" and containment building. The nuclear island houses the actual nuclear power system of a plant, including its reactor and steam generators. The containment building forms the shell around the nuclear reactor that prevents the release of radioactive material into the surrounding environment.

In the second phase, SSM provided all fans and dampers for Vogtle 3 and 4. Lastly, the company is responsible for constructing the ductwork and seismic supports of both units. SSM is currently

12 smacna.org

doing the fabrication of the HVAC ducts, supports, and connections for all equipment and devices. Each of the two new plants required more than 2 million pounds of ductwork.

system. All stainless is 12 gauge construction.

Not surprisingly, SSM is working alongside a slew of subcontractors that are responsible for electrical

work, fire prevention the power plant. They − 170 from SSM − are each day.

Turbine exhaust serves the annex and auxiliary buildings mechanical equipment rooms. Round exhaust duct that is a

vertical 48" round stack starts at the 160ft elevation to the 238ft elevation. Rectangular ductwork is 30X42 bolted and welded by means of positive attachments in 6X6 HSS stainless steel supports that connect to the 48" round exhaust

> and more aspects of include Richmond County Constructors, a subsidiary of Bechtel Corp. Overall, approximately 5,500 workers onsite at Vogtle 3 and 4



to fabrication and installation. The company has primarily supplied products and devices such as fans and dampeners to the sector in the past.

In terms of challenges, Szymczak notes that experience with the construction of nuclear power plants faded away in the three decades since the last one was built. At the same time, safety precautions and government oversight for such a project are rigorous.

Turbine building exhaust that serves the turbine and runs horizontally from inside to outside the building. It is 42" round 12 gauge stainless steel and terminates with a bird screen at a 45 degree angle. The galvanized shown pictured with Y fitting is tied to 2 exhaust fans and is the interior exhaust ducting to the outside 42" stainless exhaust system.





"And then that work package stands as kind of the gospel that the work was done to meet the full specification and safety criteria," Szymczak adds. "Those items are not normally done in the construction world, so it was a pretty big learning curve to educate our people about the severity of not doing the work correctly."

ed and approved.

Szymczak says SSM likely overestimated the amount of familiarity in the labor force with the process behind building a

working on a nuclear power plant proved especially tricky, according to Szymczak.

The COVID-19 pandemic has also impacted the timeline of the project. SSM has developed its own corporate safety policy and procedures to stem the spread of the coronavirus. They include measures such as mandatory mask usage and ensuring workers stay at least six feet apart on the job site. Szymczak says the moves reduced productivity on the project by roughly 20 percent.

For other sheet metal contrac-

tors looking to get involved with nuclear power plant construction, Szymczak advises that patience is a virtue.

"Contractors, including ourselves, we like to jump in with both feet and push through," he says. "There are so many levels of people that are involved in this process, from the NRC on down. Be prepared for a lot of challenges."



SSM installed rectangular ductwork throughout buildings on the site.

SSM INDUSTRIES, INC. www.ssmi.biz SOUTHERN NUCLEAR www.southerncompany.com GEORGIA POWER www.georgiapower.com

Contractors Battle Mother Nature to Keep Business Going

continued from page 3

Employees had to improvise to keep the company going. "We ran whatever we could off a generator," said company President Jamie Prull

As if the hole wasn't bad enough, the tree indirectly caused other damage, he added. "When it went through the roof, it actually hit our sprinkler main," Prull said. "It sprayed water on a lot of equipment."

Prull shut off the sprinklers and employees did what they could to remove the water and salvage the equipment. "We took some damage to our burn table," Prull said. (The tree) hit the touchscreen and ruined that. We have two Pittsburgh machines and both took substantial water. Our roller is ruined. We had a 4-foot stomp shear that got ruined."

Altogether, the damage is estimated at over \$400,000, Prull said, adding that "insurance may not cover everything," since he only carried \$250,000 worth of coverage.

It took about a week and a half to resume operations, Prull said, adding that most customers were understanding about the delays in getting crews back to work.

Fortunately, no employees were injured in the storm.

Storm-Related Injuries

The same couldn't be said at Ilten's Inc., a 128-year-old residential HVAC contractor that had a lot of service technicians on repair calls when the midday derecho hit.

President John Ilten said a service technician was caught when a wind gust blew into the house where he was working. "He was coming up some stairs and the door blew open and whacked him," Ilten said. "It hit him hard enough to knock him down the

stairs. He had some cracked ribs."

Apart from the injured employee, Ilten said his company was lucky it didn't sustain as much damage as other nearby businesses. But thanks to generators purchased after the 2008 Cedar River flood, and the fact that the building still had running water, they were able to resume operations within a few days - even though landline phone service hadn't yet been restored.

"We just started calling our answering service every five minutes for messages," Ilten said. "We got a lot of calls. And since then, we've been swamped with work."

With so many natural disasters,

well as hailstorms and tornadoes throughout the country. Our field claims team has been working tirelessly to help contractors and other business owners recover and rebuild following these devastating events."

There is no story here. Run this digitally as a sideboard story to the article summary online

Wildfires Amid a Pandemic

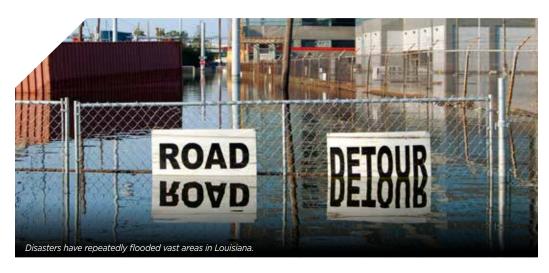
In Clackamas, Ore., a small community about 15 miles south of Portland, Carol Duncan's family has operated the 88-year-old mechanical and architectural specialty contractor General Sheet Metal (GSM) since 1972.

coming within 20 miles of the company's headquarters, severely impacting the area's air quality, GSM has been able to keep operations largely intact. They were never required to evacuate, even though the region was on standby.

People are working in the sheet metal shop, although they've been fitted with respirators. And outdoor job sites that were temporarily closed due to the smoky air have reopened.

It helped that many GSM employees were already working from home due to the coronavirus pandemic. However, that didn't prevent 36 of them from having to evacuate their residences. Unlike some companies, GSM had a business plan for emergencies, although Duncan acknowledged that that it's overdue for revision.

"We had planned to do some



it's been a busy year for insurance companies such as Federated Insurance, said Nathan Oland, a senior national account executive in the company's Owatonna, Minn., offices.

"Our clients have been impacted by a significant number of natural disasters and extreme weather events in 2020," Oland said. "This year, we have responded to claims arising from hurricanes along the Gulf and eastern coastlines, wildfires throughout the western United States, as

But nothing in the last 48 years prepared GSM for the challenges and changes caused by the fires that engulfed Clackamas and the state this summer.

"This is the first time in my lifetime that they've been this close," said Duncan, GSM's CEO. "Usually it's the central Oregon area that gets the wildfires."

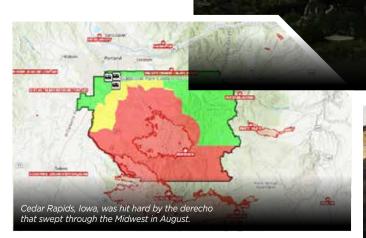
The 2020 wildfire season has been one of most devastating in the state's 161-year history.

Like Illten, in many ways, GSM has been fortunate. Despite fires serious contingency planning this year and then COVID hit," she said. The aim now is to "beef it up" as soon as they can.

Even with a dated contingency plan, the company was able to make emergency arrangements when needed. After Duncan and the rest of the executive staff found out that some employees had to leave their homes and others had lost power, they made sure employees had a comfortable place to stay including offering them a recreational vehicles provided by

to stay, including offering them recreational vehicles provided by GSM for and opening up the company's kitchen and showers to temporarily displaced workers."

"You go into protection mode to make sure that everyone is taken care of," she said.



Hurricanes and a Hurried Escape

The importance of having an emergency business and evacuation plan was made plainly clear to Steve Schrieffer when his company, Atlas Blowpipe & Sheet Metal Works Inc. in Metairie, La., was decimated by Hurricane Katrina in August 2005.

Schrieffer's company, which had never previously suffered major storm damage, had to send employees hundreds of miles away for safety while the Category 5 hurricane ravaged the region. After sheltering in Tennessee, Schrieffer returned to find his shop and all its equipment had been submerged in 4 and a half feet of water for over two weeks.

It took almost three months for the company to get back to full operations; reaching a settlement on the damage with his insurance company took about eight months.

"The final settlement was around \$600,000," Schrieffer said, adding that he thought his insurance company was fair in its dealings with him.

"We were woefully underinsured in flood (coverage), but we had good wind coverage and one of the walls in our shop blew down," he said. "So the wind coverage picked it up. We were very fortunate."

That fortune didn't extend to the company's business records, however. Schrieffer said that Atlas lost 20 years of shop drawings and other project details that were stored in filing cabinets in its firstfloor offices.

If there was an upside to the disaster, it was the fact that Atlas' services were in high demand for several years after as the city and region rebuilt.

"We were basically doing double our normal volume," Schrieffer said.

Having gone through one of the worst storms in the last century, he has some advice for SMACNA members in other states who may face disasters in the future. "Have a plan to evacuate and have a plan to return," Schrieffer said. Atlas didn't have either, and he regrets it.

Federated says planning is essential to ensuring your company isn't caught off guard if disaster strikes a business.



"We recommend developing a preparedness and recovery plan for each of the natural weather phenomena experienced in your region," Oland said. "Some critical elements of those plans include: clear goals, a plan coordinator or team, an assessment of the business's vulnerabilities, a written action plan, and action item checklists. A written action plan might include contact information for all employees, vendors, and customers; as well as evacuation and shelter procedures, technology and power outage processes, and backup sources for key supply chain items."

Those are some of the steps Novak Heating has taken since the 2008 flood. Since that incident, it has replaced the physical computer servers that contained the company's client list and records with cloud-based technology that can't be lost due to wind or water damage. And the company regularly updates its disaster plan.

It all gives Randy Novak some confidence that his company is better prepared for whatever might happen. But, he points out, there are limits. "I don't know how I can possibly prepare for stuff that I just don't know is out there," he said. "That's the tough thing about it."



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LEADERSHIP



The Hard Work

It's funny how a single word can be interpreted in so many different ways. If someone is talking about "fast dogs," for example, you might immediately picture your own pooch. If your dog happens to be a Greyhound, and another person's dog is a Yorkshire Terrier, there might be all kinds of opportunity for miscommunication.

The same goes for the word "leadership." For some people, it simply means "being the boss" and taking charge. Others think of leadership as directing people to accomplish an outcome. For a small business owner, leadership might mean actually taking the lead in doing the work, rather than simply directing it. As noted in previous columns, the ability to lead one's self is key to growing a healthy organization.

When we discuss leadership with our clients, we are most often talking about leading the enterprise — deliberately taking your company toward a preferable future. One reason we beat that drum is because it is so incredibly difficult to maintain a focus on the future while scrambling to survive in the present. This rings especially true amid this time of pandemic and social and political upheaval.

While I am not insensitive to the severity of our current situation, here's the reality: there will always be enough drama, urgency, and crisis to distract us from the strategic and important. Always. So as you prioritize how you will invest your time and energy in the days ahead, give focus and energy to each of the following cornerstones of enterprise leadership:

Culture. This can feel vague. We think of culture as "the way we do

things around here." Paying attention to culture is about examining the way we do things and asking, "Is it helping us or hurting us?" It's about the rules — both formal and informal — of working at your

"WHEN A COMPANY GROWS BEYOND THE CAPACITY FOR ONE PERSON TO MAKE ALL THE DECISIONS, ORGANIZATIONS MUST THEN CREATE A MODEL FOR DECISION-MAKING THROUGH ALIGNMENT WITH A SET OF CORE VALUES."

company. The problem here is that, as a senior leader, getting a clear picture of your company's culture is virtually impossible to do on your own. You'll need other eyes and ears to figure it out.

Talent. Finding, keeping, and developing great people are among the most substantial decisions any leader will ever make. But too

and your talent pipeline. (Hint: It's closely tied to culture.)

often we let the urgency of our

need lower our standard. Doing the

our organizations while discovering

why others fail is an uncomfortable

endeavor, so it's easy to put those

questions off for another day. Take

time to evaluate your organization

hard work of understanding why

certain types of people thrive in

Vision. In good times, a lot of companies can experience success with an opportunistic approach to finding and executing work. But over the long-haul, those companies that identify a preferable future and work toward it with relentless focus, taking detours when necessary, will

usually outperform their rivals.

Reputation. In the founding generation, a company's reputation is usually closely tied to the integrity of the owner and senior leaders. Every decision they make enhances or hinders that reputation. When a company grows beyond the capacity for one person to make all the decisions, organizations must then create a model for decision-making through alignment with a set of core values. Then the reputation is enhanced no matter who makes the decision.

None of these leadership cornerstones are easy to nurture, which is why most of us put these tough evaluations off until another day. Together, we will unpack each one in the months ahead. But for now, I leave you with two questions:

- If not now, then when?
- If not me, then who?

Ron Magnus, managing director of FMI's Center for Strategic Leadership, with Ed Rowell, CSL consultant.



BUSINESS STRATEGY



Exit Engineering 101: **Owner Readiness**, The COVID Reflection

One significant observation I've made over the last six months with business and among family is that people are reevaluating where they are right now — and where they want to be in 2021 and beyond.

Life is busy, and most people do not plan more than a few months ahead. COVID, though, has slowed everyone down. Personal relationships are strained, finding ways to recharge has become more challenging, stress levels are higher, and the ongoing uncertainty is uncomfortable and anxiety-ridden. As "range-free" entrepreneurs, we don't like being told what we can and cannot do with our businesses.

I have been hearing from more owners lately as they reflect on whether they want to continue the daily challenge of running their business, or walk away. It's a soul-searching process, with no easy answers.

If you ask a business owner when they took their last two-week vacation, or if they would let go control of the company, or who at their company they trust to keep the business safe, the answers (more often than not) will be: can't recall, no, and no one.

If you want to know the Achilles heel or kryptonite of a business owner, try broaching the subject of leaving their company. They all say they want to leave someday, with five years usually being the magical number, because it's far enough off to safely consider. However, ask them what they want to do next in life, and they'll come up short.

No matter how humble you are, success and pride of ownership massage your ego in ways you may not realize. Your name may be on the building. When you talk, people listen. Everyone respects your leadership.

It's a position of power that can be difficult to relinquish — not necessarily due to narcissism, but simply because it feels good to be the owner, the one (at least in your mind) responsible for creating opportunities and wealth for yourself and others. Some days you wish you didn't have that responsibility, but you also can't imagine living any other way.



must ask themselves is "If I'm not running the business, what will I do all day?" For example, a man well past retirement age recently called me to begin considering an exit

from the multi-million-dollar com-

"A SUCCESSFUL EXIT IS ONE IN WHICH A BUSINESS OWNER HAS A GOOD SENSE OF WHAT LIFE AFTER **WORK WILL BRING."**

Your business shields you from the monotony of everyday life, and possibly, from dealing with important relationships, personal finances, or your own health. If you exit, you've lost control over both the business and your life (or so you imagine). That is a scary thought

But the truth is, work does not need you; you need work. It's the reason you are successful. If you're not ready to leave. it simply won't work. And it is impossible to be ready if you don't know what's next

The most common and, oftentimes, perplexing question owners

pany that he built and continues to put in 60-hour weeks at. He said he would be ready as soon as we could find a buyer.

"What do you need to consider this a successful exit?" we asked. "Money?"

"Nope," he responded. "It's not about the money. I just need something to do."

Exiting Means Knowing What's Next

A successful exit is one in which a business owner has a good sense of what life after work will bring. Owners need to be reassured a fulfilling existence is in store once

they exit the business. The thought of doing nothing would be haunting if there weren't plenty of ways to contribute in the next phase of your career.

Help others start a new business or become a professional service provider, trainer, or trusted business advisor. Find a way to monetize a hobby. Look for volunteer opportunities. Organizations and business are looking for people with your life experience, expertise and connections to serve on their boards or committees.

If you don't want to stop working entirely, find a part-time opportunity at another business. There are countless ways to remain active and productive without having to be in total control.

Exit engineering is about finding a "winning scenario" that allows you to balance work and life in ways you likely haven't done for years, if not decades. That journey can begin only once you have answered the question, "What will I do next?"

John Ovrom is the founder and CEO of Exit Consulting Group.



Leveraging Tech to Combat COVID-19 Productivity Losses

It's been a tough year for construction margins. To bolster their chances of profitability, savvy contractors are leveraging software to meticulously document COVID-related delays, track productivity from the field, and automate COVID-related protocols wherever possible.

SMACNA contractors have experienced an average 17.9% decline in productivity since COVID-19 restrictions went into effect, according to a New Horizons Foundation (NHF) report. Social distancing, sanitization, materials handling, proper ingress and egress are all unavoidable challenges threatening contractors' profits. While contractors can't change this reality, they can track it, manage against it, and leverage automation.

Technology solutions help make higher productivity possible during challenging times like these. The strategies that follows apply to Procore users, but are valuable principles for all contractors pursuing profitability.

Track Productivity in the Field

When it comes to productivity, a couple of bad days could be the difference between making money or not. Your company needs to be able to capture and analyze productivity information quickly while keeping all stakeholders informed.

Field leaders should be given the ability to tightly track and manage productivity directly from the field. Specific cost codes, (some are outlined in Figure 10 in the NHF report) should be set up to track time in the field spent on the following:

• Safety & Training

- Distancing & Access Rules
- Cleaning & Disinfecting
- Administration

Specialty contractors can use software to build these codes directly into their budgets, then monitor labor costs against all their cost codes on a daily basis using field productivity tools. This allows leaders in the field to track time lost to COVID-specific activities and provide fast corrective guidance to their crows

Meanwhile, management automatically gets access to the data. Having this information in a connected platform allows entire companies to benchmark productivity across projects and cost codes without waiting for payroll.

Double Down on Daily Reporting

Receiving compensation for lost productivity due to COVID mitigation often depends on the interpretation of the CM or GC on the project. Quality field reports aligned with each day of work can help paint a clear story about delays and productivity losses. Use a daily log tool designed for phones and tablets, to make it easy for field staff to keep dailies updated without any software training.

Common productivity issues to track include shipping delays, crews having to offload a truck to limit exposure, setting up equipment with other divisions or subs while trying to distance, or running out of sanitizer onsite, your teams should be tracking these issues in a reportable daily log system.

Using the appropriate software, every delay across projects can

be reported on and compared with fluctuations in productivity. As a company, you can now identify your biggest indicators of

"TECHNOLOGY
SOLUTIONS HELP
MAKE HIGHER
PRODUCTIVITY
POSSIBLE DURING
CHALLENGING TIMES
LIKE THESE."

productivity losses and take corrective action —either by process improvements or change orders for compensation requests.

Automate Where Possible

As self-performing contractors, you have to document who you had on site each day and whether or not they were safe to be there. Here are a few ways to automate manual tasks and improve communication loops when it comes to tracking personnel.

- Health Surveys and Pre-Screening - Nyfty.Al, a workflow automation app. The health screening bot collects COVID-19 wellness checks from your employees and visitors via text message, analyzes the responses, and escalates any issues to you.
- Timecard Punches and PPE Scanning - SmartBarrel. For projects that demand large crews, SmartBarrel provides a

cost-effective kiosk that uses image recognition software to confirm worker identity and PPE to log timecard punches in seconds.

Labor Schedule Updates –
 LaborChart. Allows contractors
 to turn their resource schedule
 whiteboard into a communication hub, instantly updating the
 entire workforce on updates to
 schedules and project assignments, removing the confusion
 caused by phone calls and texts.

Shorten the Learning Curve

Solutions like these are designed to help your teams go faster. Adding net new processes does not make sense right now. Instead, think of your digital strategy as a way to better enable your people in their existing processes or to simplify or reduce the steps needed to complete a process.

Monterey Mechanical, an Oakland, Calif., mechanical contractor and SMACNA member specializing in industrial projects, has implemented productivity tracking in the field, as well as other digital documentation best practices. "The field teams aren't really used to technology, so we were worried they might struggle with it, but that wasn't the case at all. When we made it available to them, they latched onto it and ran with it," said Division Manager Ed Moore.

The way we work during COVID-19 is a learning curve like adapting to new regulations or figuring out how to survive an economic downturn. Great data will always help you get over the curve faster, with more money in your pocket and happier employees to boot.

Eric Tucker leads partner strategy for specialty contractors at Procore.



CAPITOL HILL UPDATE continued from page 3

base in the defined benefit (DB) system from further shrinkage. Both Labor and Management seek to modernize the multiemployer benefit system with a new, *voluntary* retirement vehicle. Right now, the only choice is between a DB plan and a defined contribution (DC) plan. Single employer plans have already moved away from • PBGC premiums. Would contin-DB plans. The multiemployer system needs Congress to authorize the new hybrid option of Composite Plans.

· Protections for workers are deeply embedded in Composite Plan design.

Composites would:

· Provide a lifetime annuity, not a lump-sum payout that workers outlive.

- Require conservative plan funding.
- · Include strict procedures that must be followed before changing core benefits in the event of severe economic distress.
- Protect "Legacy Plan" benefits so no worker loses any benefits in their old plan.
- ue to be paid for all participants in the "legacy" plan and Pension Benefit Guaranty Corporation (PBGC) liabilities would go down as individual plan liabilities shrink.
- **Call Your Congressional Delegation at their Capitol Hill** or district offices. If pension legislation passes without Composite Plan/GROW Act language, it could be a long time before we get another chance.

Information on how to contact members of Congress can be found at contactingcongress.org.

MEMBERS

Welcome New SMACNA Members

BDS Ar Condicionado Ltda.	Rio Grande do Sul, Brazil
G.B.I. Inc. T/A Thermal Piping	Wrightstown, N.J.
MDS HVAC-R Inc.	Walden, N.Y.
Mowbray & Son Plumbing & Heating Inc. dba M&S Sheet Metal Inc.	Minot, N.D.
Pro Air Solutions	Cleveland, Ohio
RedLand Sheet Metal, Inc.	Oklahoma City, Okla.



For details, go to www.smacna.org/annualconvention





rolling heavy plate and food grade welding."

Early in their partnership, Sejat and Moore had to attend a lot of trade shows to introduce potential customers to the benefits of their new systems. Sales grew slowly.

"We actually were hoping to be able the run at least three systems a year through our shop, which would really help during slow times," Sejat said. "That didn't happen, but we are starting to get there."

"We're finally getting established enough, with good word of mouth, so we don't need as much marketing," Moore added.

Increased Demand

Another measure of growth is an increase in demand for larger capacity malting systems. Bauer said they began building systems designed for processing one to two tons of barley per batch. Now their customers are ordering 10 to 12-ton batch systems — still small scale, compared to large commercial malting companies.

"For years, craft breweries had to order from the major malt houses that process batches in the hundreds of tons at a time," Moore said. Craft brewers, he explained, don't want to use the same ingredients as every other brewery in the country.

Sejat said malting system fabrication has grown to account for approximately 15 percent of Bauer's annual revenue. Systems sales prices range from \$500,000 to \$5 million.

While Bauer's biggest competitors include malting systems manufacturers in Germany and Canada, Sejat said they are confident they can grow their customer base across North America and

"The most surprising thing is that a large portion of our customers are farmers," he added. They are either adding onto their family business or just looking to see what they can do with any of their byproducts."

SMACNA contractors' success in the craft malt market is certainly a reason to say 'cheers.' While it is another example of how the sheet metal and HVAC trades make life more comfortable and enjoyable, this time it's possible to taste the SMACNA difference.



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SMACNA CALENDAR

DECEMBER 2020

Dec 7

Annual Business & Council of Chapter Representatives Meetings Virtual

JANUARY 2021

Jan 31-Feb 03

Chapter Executive Institute Maui, HI

FEBRUARY 2021

Feb 21-25

Business Management University Tempe, AZ

Feb 26-28

College of Fellows Meeting Tampa, FL

MARCH 2021

Mar 11-12

Association Leadership Meeting Las Colinas, TX

Mar 30-31

Collective Bargaining Orientation Dallas, TX

APRIL 2021

Apr 18-20

Planning Your Exit and Business Valuation Program San Diego, CA

Apr 25-28

Project Managers Institute Raleigh, NC

MAY 2021

May 16-19

Financial Boot Camp Tempe, AZ

JUNE 2021

Jun 06-08

Council of Chapter Representatives Newport, RI

Jun 23-24

National Joint Adjustment Board Portland, OR

SEPTEMBER 2021

Sep 23-24

National Joint Adjustment Board *Pittsburgh, PA*

DECEMBER 2021

Dec 05-07

Council of Chapter Representatives Dana Point, CA

FUTURE SMACNA CONVENTIONS

Oct 24-27, 2021

2021 SMACNA Annual Convention *Maui, HI*

Sep 11-14, 2022

2022 SMACNA Annual Convention Colorado Springs, CO

Oct 15-18, 2023

2023 SMACNA Annual Convention Phoenix, AZ

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