# FIRE & CE

SUB\*ZERO UOLF

EMPLOYEE NEWSLETTER | QUARTER 2, 2017

# EXECUTIVE OVERVIEW

#### JACK PALAZZOLO | VICE PRESIDENT - MARKETING

# After 25 years at Ford, Jack knows a thing or two about marketing a legendary American brand.



Jack Palazzolo has had a remarkable career as a Ford executive. He is full of exciting ideas for marketing Sub-Zero, Wolf, and Cove. But the first thing we had to ask him about was...

The guitar in his office. It's a Gibson hollow body electric – a recent birthday present from his wife, Marilyn.

"It makes my office feel more like home to have it here," says Jack. "It also makes a great conversation starter. And for me, a guitar can always spur creativity. I do my best un-thinking with the guitar – just letting my mind go, which opens up space to solve other problems."

Jack didn't originally intend to go into marketing. He got a degree in mechanical engineering from the University of Michigan, intending

to build bridges, dams, and airports in foreign lands. That aspiration seemed to fit with the way he grew up: the son of Sicilian immigrants, living in the Detroit area, he worked various jobs in the construction trades from an early age. But when he went for his MBA to study operations and management, he realized that marketing suited him much better: "It was the perfect combination of creativity and science."

"One day you're trying to come up with the right brand positioning or ad campaign," he says. "The next day, you're digging into the data, searching for the best customer insights, trying to figure out where the market is heading, and what investments will bring the best return."

"IN THE SIMPLEST SENSE, MARKETING IS MAKING PRODUCTS COME ALIVE," SAYS JACK. "CAPTURING THE EMOTION IN A PRODUCT IN A WAY THAT IMPACTS A CUSTOMER'S HEART AS MUCH AS THEIR HEAD." HE SMILES. "BEING ITALIAN HELPS ME THERE."

Jack was hired on at Ford in 1992 to work on the Lincoln brand, then went on to an exciting 25-year career. "Ford is such a large and diverse company, it gave me an opportunity to design my career," says Jack. "I got involved in marketing strategy, product management, product innovation, brand and advertising and digital marketing. I worked for moderate brands, but also luxury brands like Jaguar and Volvo – similar to the Sub-Zero and Wolf brands."

And of course, like Sub-Zero, Ford is an iconic global brand: in addition to three-year assignments in England and Canada, twice Jack had jobs where he traveled back and forth between multiple offices in the US and abroad, in Sao Paulo, Brazil and the Middle East (Dubai). If he strikes you as sophisticated, that might be the reason why.

Despite all the obvious differences in size and products, Jack sees a key similarity between Ford and Sub-Zero.

"As big as Ford is, it still has a family heritage," says Jack. "There are still Fords at Ford, just as there are Bakkes at Sub-Zero. You still have an unbroken lineage of people who had that original creative spark – and are determined to keep it alive."

### EXECUTIVE OVERVIEW (continued)

"Both companies have a heritage of innovation. My favorite quote from Henry Ford is 'If I'd asked people what they wanted, they would have said faster horses.' So Ford pioneered the Model T, the assembly line, and much more. They're still innovating today. Sub-Zero has innovated with built-in refrigeration, dual refrigeration, and much more, largely because its leadership never forgets that we have to stay ahead of the game and anticipate our customers' wants and needs better than anyone else does."

Jack points out a fortunate difference between Sub-Zero and Ford. "Sub-Zero isn't bureaucratic – you can move fast, get things done. I intend to take full advantage of that."

Jack sees several key initiatives for marketing in the coming year, but there is one that is timeless and ongoing. "We've got to protect the health and sanctity of our brands," he says. "The competition in our industry is fierce – we have very able competitors, and they are aiming at us. In their zeal they tend to offer more incentives, or do copycat advertising, but that's a rabbit hole you don't want to go down. We won't lose the qualities that differentiate us, that make us Sub-Zero and Wolf. Uncompromising quality. Product innovation. A personality that is sophisticated, never snobbish. And an ownership experience that is second to none."

Specifically, the key marketing initiatives for 2017 fall under the categories of Best in Class Product, Continued Brand Leadership, Meaningful Customer/Trade Engagement, and Bringing It Alive in the Showroom/Retail.

The key product initiative is the long-awaited launch of Cove – our third brand, and the dishwasher customers have been asking for, the one that completes their Sub-Zero and Wolf kitchen.

"It's important that we leverage the strength of our existing brands, in introducing Cove," says Jack. "So the message will be, Introducing the only dishwasher with Sub-Zero and Wolf in its DNA. Both consumers and those in the trade need to realize that this is a dishwasher that not only performs at a high level, but is built and tested to last for twenty-plus years."

(We've arranged key media coups in the coming year, including a story in The Wall Street Journal about the Cove introduction, which ran on May 22, and another surprise Jack can't talk about yet.)

The key brand initiative will be a powerful new showroom campaign. "Our showrooms are much more than just showrooms," says Jack. "They're a multi-sensory experience--places where you can make your kitchen dreams come alive, without sales pressure. And a huge competitive advantage for us, that we need to make people more aware of."

Getting a prospect to visit a showroom has a strong impact on conversion, so we're creating a new showroom campaign to better align with the Path to Purchase program. Dramatic two-page print ads will be headlined: Our showrooms stimulate all five senses. Six if you include your sense of accomplishment. An online video campaign will be themed "Feast your eyes" (or "Feast your nose"), and will invite consumers to take a peek at a Sub-Zero and Wolf showroom.

Meaningful Customer Engagement, or "The 360° customer experience" as we call it, is one of our ambitious marketing ideas - meeting the customer's needs at every stage of their kitchen process, from initial interest (when we identify them as "hand-raisers") through design, purchase and installation, on to a lifetime of satisfying ownership. A key part of this initiative will be developing a more engaging and conversion-focused website, and providing more useful online content for our owners.

### EXECUTIVE OVERVIEW (continued)

"We're still formulating our top priorities in terms of showroom and retail," says Jack, "working with our Distributor advisory committee to determine what we can do that will really move the needle."

It's an ambitious agenda, from a customer-facing standpoint. And Jack continues to build his marketing group, in order to accomplish key initiatives, and continue to push the envelope, building even greater awareness for our brands. "We've got a lot of work to do, but we're going to have fun doing it," he says.

But enough about marketing, and the business side of Jack Palazzolo. Let's get back to the guitars.

"I still have every guitar I've ever owned, eight of them, going back to high school," says Jack. "I keep them because on each guitar, I've written different songs." His guitar hero? "Jimmy Page of Led Zeppelin. He can play hard, driving electric guitar, then play beautiful acoustic. Think about 'Stairway to Heaven' – it's got it all."

Marketing at Sub-Zero Group is in good hands. We can be sure that the ideas and inspiration will never stop flowing – as long as Jack's got a guitar handy.

### PAUL SIKIR WINS COVETED HAIL AWARD

#### JIM PELKEY ALSO HONORED



There is no more prestigious award in the world of home appliances than the HAIL award – short for Home Appliance Industry Leadership award – presented annually by the Association of Home Appliance Manufacturers (AHAM). At this year's annual meeting in Washington, D.C., that award was presented to Paul Sikir, vice-president of design engineering for Sub-Zero Group, Inc.

Sikir was honored for dedicating countless hours to volunteer leadership roles, and encouraging colleagues to serve on AHAM task forces and councils. His work has been instrumental in numerous policy and technical issues across the major appliance division. Sikir has held several leadership roles including AHAM Treasurer and First Vice Chair before rising to Chair the AHAM Board of Directors from 2012-2014. He continues to serve on the AHAM Executive and Finance Committees.

"AT EVERY LEVEL OF ENGAGEMENT, PAUL HAS BEEN A LEADER," COMMENTED JOSEPH MCGUIRE, PRESIDENT AND CEO OF AHAM. "PAUL WAS CHOSEN FOR LEADERSHIP BECAUSE OF HIS HARD WORK, THE HIGH ESTEEM IN WHICH HIS PEERS HOLD HIM, AND BECAUSE HE ALWAYS PUT THE SUCCESS OF THE INDUSTRY FIRST."

"I'm just proud to be associated with AHAM," says Paul. "The relationships I've been able to establish there have been fantastic."

AHAM also presented a 2017 Gordon Stauffer Liston Durden Distinguished Service Award to Jim Pelkey, design lab certification manager at Wolf Appliance, Inc. Jim was honored for his many years of dedicated work on cooking safety and performance.

# THE MOMENT OF TRUTH

PHASE 3 OF OUR FCI SERVICE UPGRADE IS UNDERWAY – ENSURING EVERY CUSTOMER HAS A SEAMLESS INSTALLATION EXPERIENCE.



What's the most critical point in the relationship between Sub-Zero and Wolf, and its customers?

"It's installation day," says Doug Johnson, Sub-Zero Group, Inc. National Service Manager. "That's when our owners are most excited – when their dream of a new kitchen is finally realized. But it's also when there's the highest potential for problems, if the installation isn't done properly."

Yet back in 2009, the installation program was floundering. We had only 50 certified installers – far too few to give our customers the high-touch, professional installation service that suits our luxury brands. In response, Sub-Zero directed Doug to head up a new Factory Certified Installation program.

In Phase 1, Doug and his team began identifying, training, and certifying a nationwide network of installers. As you might imagine, the process was not easy – it involved complete hands on training with our products, and the training had to be adapted to the varied skillsets of those being trained. It also involved immersing the installers in our unique brand values, so they understood the level of expertise and courtesy our customers expected.

By 2015, our installation network had grown from the initial 50 to over 1100 – a remarkable achievement for the company.

Then, Phase 2 began: an FCI Pilot Program to position Sub-Zero and Wolf FCI installers as premier, industry-leading installers. We hand-selected two installation companies to participate: Los Angeles-based Elite Installation and Chicago-based Wehrli General Contracting. Both companies were chosen because they are poised for growth, operationally strong, and working to enhance the Sub-Zero Group customer experience through product knowledge, use and care, and training.

The key elements of the program consist of a brand audit, market analysis, visual identity, online reputation and employee communications. Both Elite and Wehrli have revised their identity and procedures to reflect their dedication to a luxury installation experience.

### THE MOMENT OF TRUTH (continued)

Now in 2017, Phase 3 of our ambitious FCI customer service upgrade is underway. We're taking what we've learned in the pilot program with just two companies, and bringing it to every company in our installation network.

"It starts with a one-on-one conversation with the owner of each company," says Doug. "We need to find out, do they want to be on board as a truly high-end installer? It's a major commitment for them, but there are significant incentives."

The dedicated training, support and resources gains them a reputation as specialists. As a result, they're paid more, work in better environments and their businesses thrive. Additionally, they can offer an extra year of warranty, but what the customer really receives is an experience from the best of the best.

Another exciting part of Phase 3 is the mini-summits we will host throughout the nation – for the very first time, bringing together installers with our whole family of luxury partners: dealers, designers, sales, distribution, parts, service and more.

The first mini-summit was held in Detroit on April 17. "Really, it's a way of welcoming our installers into the luxury industry," says Doug, "and it was a great success. I felt the appreciation. I'm still getting calls about it, even today."

The agenda was wide-ranging: new products, sales direction, corporate goals, handling installation-related service claims, plus-ing the customer experience, appliance use and care, connected appliances and much more.

One point of emphasis is the importance of pre-site inspections. "You know what a customer is going through the night before an installation," says Doug. "Mental trauma! But a pre-site inspection has a real calming effect. It tells the customer that their installer really cares about what they're doing, and shares their excitement, and their expectations for their new kitchen."

"WE WANT OUR CUSTOMERS TO HAVE A GREAT EXPERIENCE RIGHT OFF THE BAT WITH OWNERSHIP," SAYS DOUG. "THAT STARTS WITH A PERFECT INSTALLATION EXPERIENCE. WE WANT OUR INSTALLERS COMMITTED TO PROVIDING THAT EXPERIENCE."

Doug and his team will measure our installation partners through product registrations, number of installation-related claims, percentage of FCI installations and more. Using these measurements, they'll determine which installers need the most training and support.

"It's a big undertaking, obviously," says Doug, "but getting the installation right is so critical to the Sub-Zero and Wolf ownership experience."

Many people would be daunted by the scope and challenge of our FCI customer service program, but Doug seems to take it in stride. "I'm an appliance guy," he says. "My family has over 75 years in the business. It all started with Guler Appliance Company in Rockford, Illinois. I learned early on that whether the product sold for \$300 or \$3000, customer satisfaction was key."

"I get personal gratification out of this program, making it work for our customers. I share that emotion when an owner sees their beautiful new kitchen for the first time, and I want our installers to share that emotion too. That's a big part of what makes Sub-Zero and Wolf so special – the excitement, the emotion, the sense our customers have that we really care about their happiness."

### SHOWROOM SPOTLIGHT

HOW DO YOU WOW YOUR CLIENTS IN THE WORLD'S LARGEST COMMERCIAL BUILDING? PERSONALITY.



Since it opened in 1930, the Merchandise Mart in Chicago has been one of the world's most iconic buildings. An Art Deco treasure, it spans two city blocks, rises 25 stories, and contains over four million square feet of offices and wholesale and retail space. Until 2008, it even had its own zip code: 60654.

Inside the Mart is the Design Center, the world's largest resource for custom home furnishings. On the first floor alone, there are over 30 kitchen, bath, homebuilding and renovation showrooms. One of these is the 5500-square-foot Sub-Zero and Wolf Showroom, which opened in 2010.

It has much to attract any customer who is even the slightest bit interested in creating a new kitchen. There are almost thirty live appliances that people can get hands on with, and even cook up a dish if they're so inclined. There is a large prep kitchen with a gorgeous view of the Chicago River and surrounding skyline. There are many stunning kitchen vignettes in every style from traditional to contemporary.

"The real 'wow room' is the De Giulio room," says showroom manager Irma Roman, who joined the showroom team in February 2017. "It has leather seating and a carved wood table that is like a piece of sculpture. There's also quite a bit of buzz about the new wine nook designed by Doug Durbin of nuHaus – almost every person who comes in the showroom wants one."

Irma is quickly finding that what makes the greatest impression on customers is..."Personality. It's how we greet them, how we treat them. Fresh baked cookies. Peanuts and pretzels in the bar area, where the customers tend to hang out. The thoughtful little things."

"BEING AT THE MART, WE GET MORE INTERNATIONAL VISITORS THAN A TYPICAL SHOWROOM MIGHT," SAYS IRMA. "ALMOST EVERY DAY, WE'RE MEETING PEOPLE FROM ASIA, LONDON, SOUTH AMERICA. THEY'VE HEARD ABOUT SUB-ZERO AND WOLF, BUT NEVER REALLY BEEN EXPOSED TO OUR PRODUCTS. SO WE KEEP FOOD ON HAND. WE'LL DO POTSTICKERS IN THE CONVECTION STEAM OVEN, OR THROW SHRIMP ON THE GRIDDLE OF A DUAL FUEL RANGE, AND OUR VISITORS WILL SAY, 'I DIDN'T KNOW IT COULD DO THIS!' OR ' I'VE GOT TO HAVE ONE OF THESE!'"

### SHOWROOM SPOTLIGHT (continued)

Irma has honed her customer skills through over 27 years in retail, most recently as the sales manager of Chanel products and women's handbags at Neiman-Marcus. Now she is building a diverse team who are dedicated to giving our showroom customers the most personal, memorable experience possible, from the time they are welcomed by receptionist Tyler Raines, through their interactions with showroom consultants Aga Tersh, Julie Boyko and Ingrid Baltasi, and of course including their delicious dealings with chef Colleen Karsted, a former instructor at the renowned Kendall College culinary school.

Colleen's expertise is just one of the things that makes cooking demonstrations special at our Mart showroom. "They always have a date night feel," says Irma, " with the view we have out the window of the Chicago River and the bridge – sometimes with boats coming through - and the city lights at night."

Irma and her team are enhancing the atmosphere of the showroom with candles, fresh flowers and many other touches. "We've added an herb garden to the demo kitchen area," says Irma. "You can smell lavender, basil, mint. Colleen uses the herbs in her cooking. And the garden rouses people's curiosity – they see it through the window – a little patch of greenery in the Merchandise Mart! - and wonder what's going on inside."

"We're trying to take everything a step up," says Irma," trying to enhance the customer experience in any way we can." Right now the showroom is averaging about 16 appointments per week, and Irma would like to increase that to 25 per week. But the main thing is making each appointment a worthwhile one for the customer.

"Our clients often want to take notes, jot down the details, of which appliances are they interested in," says Irma. "We tell them, we want your undivided attention, and we do a consultation summary for them, that captures all the pertinent information from their visit. It goes in their goody bag, along with product booklets, a menu if they were here for a meal, and a gift – perhaps a cutting board or a pizza cutter. They're always so appreciative, and much better prepared for the next step in their kitchen project."

When Irma first joined us, about 50% of our clients were going home with a consultation summary. For the past two months, the figure has been 100%.

"There are so many exceptional showrooms here at the Mart," says Irma. "But even with all the competition, the reputation of our brands brings people in. Our mission to make them feel welcome, and do everything we can to make their kitchen dreams come true,"

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### NO BARRIERS

RONNY JONES HAS SPENT 25 YEARS AMAZING PEOPLE - AND INSPIRING THEM TO ACHIEVE.



When people ask Ron Jones how he's doing, he usually replies, "Best day ever!" He's not really thinking about the successful career he's had at Sub-Zero (he was named Corporate Director of Manufacturing in January), he's thinking about his son Ronny.

In his first 25 years of life, Ronny has racked up a resume that would put most of us to shame. As an athlete, he has won over 100 Special Olympics medals, including gold and silver medals in swimming at the 2014 USA games. He served in the student government at his high school, and graduated with a 3.8 GPA. He has done dozens of public speaking engagements, countless hours of volunteering, and acted as a fundraising guru for the Special Olympics Athletic Leadership Program. He has been a Ball Kid for the Phoenix Suns, and thrown out the first pitch at an Arizona Diamondbacks game. He has sung the National Anthem at public events in front of thousands of people.

"When he told us he wanted to sing the National Anthem, we said, 'Ronny, do you sing?" recalls Ron. "We didn't know anything about it. But he told us, yes, I like to sing. We thought maybe he should have a few lessons, so we asked his youth worship leader Ashley if she could help. She came over and sang with him, and they sang over the phone a few times. Then he just did it, in front of all those people, and did a fine job. I don't think he knows what a barrier is – he's just fearless."

When we talk to Ronny, he does admit to "shaking a little" the first time he sang the anthem. "I was ready, because I had a great coach," he says, crediting Ashley.

Ronny has always loved basketball. When he was 14, he told his parents he wanted to try for a job as a Ball Kid with the Phoenix Suns. "My wife Laura asked Ronny if he wanted her to sit in on the interviews with him," says Ron, "but he said, no, I have to do it myself. So he went through the whole process and got the job. Then he went through the whole season, interacting with all these big NBA players, and wasn't a bit intimidated. He got acquainted with Steve Nash, Kobe Bryant and many more."

Ronny's favorite player? "Probably LeBron James," he says. "Or Shaquille O'Neal."

"A LOT OF PEOPLE WITH SPECIAL NEEDS TEND TO SHY AWAY FROM A CROWD OR A CONVERSATION," SAYS RON, "BUT RONNY HAS NEVER BEEN THAT WAY. HE'S AN EXTROVERT WHO LOVES PEOPLE. THE ROOM JUST LIGHTS UP WHEN HE WALKS IN."

### NO BARRIERS (continued)

Ronny's remarkable nature may have a lot to do with the way Ron and Laura raised him. "We wanted him to be mainstream, to participate in everything, to have all types of friends, to feel like he could do anything in life. Ronny knows he has Down's Syndrome, and that he competes in the Special Olympics, but he doesn't let that stop him from doing anything – or from helping others to do the kinds of things that he's done."

Ron and Laura didn't realize there was anything different about Ronny until the day they took him for his one-month check-up. "Oh, a Down's baby!" said a doctor who was walking past. They didn't even know what a Down's baby was, but after blood tests confirmed the doctor's breezy diagnosis, they began doing some research.

Unfortunately, the research was dated at the time on muscular development and overall potential. Ron and Laura began physical therapy with Ronny early on, stretching and strengthening, to help him crawling and walking and lifting his head. Luckily, three younger brothers followed soon after Ronny, and before long, all of them were rolling and tumbling and competing together in just about every sport under the sun. Even when Ronny couldn't quite keep up with his brothers in some competitive activities, he found outlets for his growing love for physical activity of all kinds. During the time the family lived in Tennessee, his parents got him into a horseback riding program. He discovered basketball and swimming. And he began competing in the Special Olympics, often with his mother as his coach.

Ronny was still on the shy side when he began attending North Canyon High School in Phoenix. Fortunately, he came in contact with an athletic director there named Scott Brown, who was getting the school involved in something called Unified Athletics – varsity athletes and special needs athletes competing together in a whole new way. Recognizing Ronny's potential, he asked him to become team manager of the football team, where he earned his varsity letter.

"When the athletes and special needs kids aren't separated at school, it makes a huge difference," says Ron. "Ronny just blossomed, with the players and the cheerleaders behind him. My next oldest son came into the school the next year, saw Ronny getting high-fived by everyone, and said for the first time, he realized how cool his brother was."

After graduating from high school, Ronny continued his active, amazing life, competing in both Special Olympics and Unified Sports events; working at Safeway, where he was just named Employee of the Month; and speaking at conferences and local high schools, recruiting both special needs athletes and varsity athletes into the programs he believes in.

He talks about Sharing the Love – showing the same kind of support for special needs friends that people have shown him, helping them succeed both on and off the playing field. "When I tell them about my experience, it gives them the confidence to do it themselves," says Ronny.

His example of service has had an impact in his own family, on his three younger brothers: one is an EMT, another is in the Air Force, and a third is becoming a pastor. "They're all working with people, helping people," says Ron. "I don't think that would have happened if it hadn't been for Ronny."

It's genuinely heartwarming, to hear how Ron and Ronny talk about each other. Ronny tells me that he and his Dad are frequent golf partners, competing in Unified Sports events. "Is your dad a better golfer than you?" we ask. "He thinks that," Ronny says. "He gives me a lot of advice."

Last weekend, Ronny was helping out at a Special Olympics track meet – in the sweltering 105° desert heat. This weekend, he's headed for Tucson, to share his story at a Special Olympics conference. What gives him his energy? "He's the happiest, most grateful person I know," says Ron.

If only all of us could have a Ronny Jones in our lives.

### ROCK AND ROLL ARIZONA EMPLOYEES GET THE NEW YEAR OFF TO A ROCKING, RUNNING START.



The Rock and Roll Marathon in Phoenix isn't your ordinary marathon. It's more like one big fitness party. Part of a nationwide series that started in 1998, it keeps runners pumped up with live bands along the way, and a full-blown concert at the finish.

A few years ago, Sub-Zero showroom concierge Alison Cechanowicz realized it would be the perfect company wellness event. In January 2017, a Sub-Zero team competed for the second year in a row.

"Overall this year we had more people sign up," says Alison. "Unfortunately, due to injuries and other things the week of, we didn't have as many participants on the actual day. But it was still a great opportunity for Sub-Zero Group employees from various locations to connect!"

She goes on: "We had one participant who was doing their very first race, and we had our first runner from Madison as well: Mark Swartz. We had twelve total participants and five others that signed up but didn't make it to the end. Rosa Ayala (a Production Planner at Goodyear) ran the marathon again; Alex Gonzales, Mark Swartz and Toby Brown did the half-marathon; and Pam Dahms, Mike Foley, Charmaine Villegas, Yariela Mejia, Danielle Fierro, Roy Helke, Liz Hossack and I did the 10K., along with a few spouses and children. So overall it was a success."

While everyone trained on their own, Alison kept spirits high: "I sent out bi-weekly emails to the team with motivational themes and info about training plans, weather, the importance of stretching, apps to help with running/workout plans, and ideas for activities to mix up the running."

Come race day, over 22,000 runners swarmed the streets of Phoenix, Tempe and Scottsdale, as temperatures dipped into the low 50's. They ran along a course that rocked with the sounds of bands like the Screamin' Javelinas and Cosmic Shindig. It was a great day of fitness and fun for everyone.

Not many of us could make it 26.2 miles like Rosa, or even 6.2 miles like the other members of our Arizona team, but it's taking that very first step that counts. If you have ideas for wellness activities in your own local area, please contact the Wellness Committee at wellness@subzero.com and they'll help you get the ball rock and rolling.

### 60 SUB-ZERO RUNNERS SHOW OFF THEIR CRAZY LEGS!



Every part of the USA has its own special spring traditions. In Madison, Wisconsin, the popular pastime for the past 36 years has been the Crazylegs Classic – an 8K fun run from the Wisconsin State Capitol to Camp Randall Stadium, named for the late hard-to-tackle Badger halfback Elroy "Crazy Legs" Hirsch.

The 36th annual race burst into action on April 29, 2017 at 10 AM, with many runners wearing tights or pants to combat the brisk winds and low 40's temps. The pack was huge, as usual, and among them to our great company pride were an even 60 Sub-Zero Group employees, tackling even Observatory Hill with enthusiasm. Our Wellness Committee is doing its job!

### CONGRATULATIONS TO OUR YOUNG SCHOLARSHIP WINNERS!

Nothing is more important than providing educational opportunities to young people. We're excited to announce the 2017 winners of the Walter Wiest/Glenn Dillard/Ed Murphy/Steve Dunlap Scholarship, given each year to the deserving sons and daughters of Sub-Zero Group, Inc. employees.

The program was established as a tribute to these former employees, who contributed so much to our success:

- Walter Wiest, for 36 years of contributions as Sub-Zero's Secretary Treasurer
- Glenn Dillard, for his leadership in safety, environmental health and employee training
- Ed Murphy, for 20 years of financial expertise
- Steve Dunlap, who retired as VP of Sales in 2016, after 25 years of service

Scholarship winners were selected by Scholarship Management Services, a national non-profit organization, on the basis of academic record, potential to succeed, leadership and participation in school and community activities, honors, work experience, a statement of educational and career goals, and an outside appraisal.

The renewable scholarships are offered each year for full-time study at any accredited post-secondary institution of the student's choice. Up to seven awards of \$1,000 each are awarded every year.

For more information about the Walter Wiest/Glenn Dillard/Ed Murphy/Steve Dunlap Scholarship or to receive an application for the 2018 program, please contact your Human Resources representative.

HERE ARE OUR 2017 SCHOLARSHIP WINNERS:



MELYNA ACOSTA ESTHER REYNA

University of Minnesota – Duluth

Marketing/Journalism



BRYN BOCK RALPH AND ARICA BOCK

University of Wisconsin – LaCrosse

**Business/Marketing** 

### CONGRATULATIONS (continued)











#### ANTHONY ASCIONE ANTHONY AND LYNN ASCIONE

**Northwestern University** 

Engineering

BROOKE BOWSER TAMI AND DAN BOWSER

**University of Wisconsin** 

**Environmental Science** 

JACKSON GRIMM MICHAEL AND JUDI GRIMM

**Colorado State University** 

Business

HUNTER TIERMAN DAVID AND AMBER TIERMAN

University of Wisconsin – LaCrosse

**Undecided Liberal Arts** 

#### LARISA STAUFFACHER JAMES AND MICHELLE STAUFFACHER

University of Wisconsin – Rock County

Veterinary Medicine

### SUB-ZERO PRODUCT CORNER

#### SUB-ZERO STRIVES FOR THE INDUSTRY'S MOST RELIABLE CONTROLS

The brains behind your Sub-Zero refrigerator. What keeps the lights on, the crisper crisping, and the temperature within 1° of set point.

It's the electronic controls, the software and hardware that drives the safe, reliable operation of every appliance. Often overshadowed these days by "smart" features and connectivity, but critical to a customer's day-to-day satisfaction.

Sub-Zero is in the midst of a sweeping change in the way we design the software and hardware of our controls. A change that is dramatically reducing both product development time and costs, but more importantly, is bringing our customers a much more reliable product.

As we listen to Steve Nackers, manager of electronic controls, talk about what's going on, our heads begin swimming. He uses phrases like "cyclomatic complexity," and it's a fascinating narrative.

Back in the early 1990's, when we first started doing electronics in Sub-Zero products, we relied on outside suppliers to do everything. Perhaps not surprisingly, this created significant problems. In some cases, the software code was written so poorly, the controls couldn't be fully tested, and a customer might end up with a light or temperature control that developed problems.

Here's where cyclomatic complexity comes in – it's an expression of how complicated software code is. "We usually try to come in at around 15," says Steve. "Maybe we'll go up to 50 with a more involved product. Some of the code from our suppliers was coming in at over 1000!"

As the new generation of integrated products was being developed in 2014, Steve and others realized something had to change, so they got approval to take three dramatic steps.

First, working closely with Supply Chain, they were able to work with new suppliers in new types of relationships. This allowed them to take full ownership of reviewing code and circuit board designs. "We see and modify everything," says Steve. "Nothing is proprietary with the supplier anymore. The process is no longer a 'black box' that we can't see into."

Second, they developed an automated testing system. Typically with a new Sub-Zero product, an engineer would spend two days running about 150 tests, checking the reliability of the controls. Now, as each new control feature was developed, the engineer would first test it, then create the software that allows it to be tested automatically. Now the automated testing can run over 7000 tests in 24 hours.

Third, they began moving toward more modular software and hardware. Instead of having completely different code and control boards for each product, they're beginning to share those things as much as possible. In some cases, what could take 24 months now can take as little as 3 months.

"We've developed Sub-Zero standards," says Steve. "And are eliminating the reliability issues that we had." Wolf is looking at taking similar steps.

### SUB-ZERO PRODUCT CORNER (continued)

Here's an example of how modularity benefits us. If the control board for a PRO 48 cost \$100, by simply stripping out about 40% of the features, we could create a control board for an undercounter refrigerator for about \$50. We don't need to create two completely different control boards, as we might have done before. The cost savings and reduction in development time can be enormous. And all features have been extensively tested, to ensure reliability.

All this is basically invisible to the customer. The only thing they notice is how well everything works. But now Steve and others are working on what the customer does see and use: the interface panels.

"WE'RE MOVING TOWARD CONSISTENCY ACROSS ALL PRODUCTS," SAYS STEVE. "THE TYPE OF ICONS, HOW THE MENUS FLOW, THE COLORS, EVEN THE FONTS. THE GOAL IS TO MAKE THE CONTROLS INTUITIVE, BEAUTIFUL AND EASY TO USE FOR OUR CUSTOMERS."

With the continued strides Steve is leading in upgrading electronic controls, it's certain that Sub-Zero will maintain its industry-best reputation for reliable service not just over years, but over decades.