

## CONNECT FOR SUCCESS: HARNESS THE POWER OF *NETWORKING*

### Inside this issue

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Don't miss these events! p. 11

#### A SNEAK PEEK AT A FALL CONFERENCE FEATURED SPEAKER:

Meet Deb Elam. p.13

#### HOW TO WORK A ROOM LIKE A PRO:

Your Step-by-Step Guide. pp.16-17







# 2018 EVENTS

## LEARNING

- ✓ Software Bootcamp • Cleveland, OH • May 10—11
- ✓ Big Hairy Audacious Growth Conference • St. Louis, MO • June 6—8
- ✓ Emerging Leaders Roundtable • Nashville, TN • August 22

## GLOBAL

- Japan Tour • Japan • April 22—28 ✓

## NETWORKING

- ✓ Chapter Leadership Summit • New Orleans, LA • January 28—30
- ✓ MFG Meeting • Miami, FL • March 7—10
- ✓ Emerging Leaders Conference • Pittsburgh, PA • April 30—May 2
- Fall Conference • Denver, CO • October 23—26

## ADVOCACY

- Legislative Conference • Washington, DC • April 16—18 ✓
- NRL Competition • California, PA • May 18—19 ✓

## NTMA NEWS

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LOOK FOR THIS SYMBOL THROUGHOUT THE ISSUE FOR STORIES RELATED TO THIS MONTH'S FEATURED TOPIC.



NATIONAL TOOLING AND MACHINING ASSOCIATION

## 75 YEARS OF MANUFACTURING SUCCESS AND EXCELLENCE



In 2018, the National Tooling and Machining Association is celebrating our 75th Anniversary. We'll share stories, information and the history of the organization throughout the year. Do you have something that you would like to share? Please contact Kelly LaMarca at [klamarca@ntma.org](mailto:klamarca@ntma.org) with any stories, photos or ideas. We look forward to celebrating our diamond anniversary together!



# SAVE THE DATE

## CHAPTER LEADERSHIP SUMMIT 2019

January 30 - Feb 1, 2019  
Nashville, TN



## NTMA SAYS GOODBYE TO RICHARD DALE "DICK" CARR

Richard Dale "Dick" Carr, former NTMA chairman, died July 17, 2018.

Dick, formerly of Lebanon, Missouri and most recently of Destin, Florida was a former NTMA chairman and past president of the Missouri Chamber of Commerce in addition to serving on several boards and civic committees.

Dick was CEO of Detroit Tool and Engineer Company in Lebanon. In 1986, he acquired Superior Gearbox Company and located facilities in Stockton and Buffalo.

His hobbies included fishing, hunting, flying and his automobile collection.

He was an active member of Trinity Episcopal Church in Lebanon and also attended St. Simons Church in Ft. Walton Beach, Florida.

He is survived by his wife, Karen, of 31 years; five children, two brothers, one sister, and 15 grandchildren.







## PRESIDENT'S UPDATE

DAVE TILSTONE / NTMA PRESIDENT

**75**  
YEARS  
MADE  
STRONG

It is bitter sweet for me to be writing you for the last time as the president of the NTMA. I have enjoyed my tenure here for more reasons than I can list, but in reality, it's time for me to pass the torch to Dr. Dean Bartles, your new president. As most of you know, the process to identify and recruit my successor was put in motion one year ago as part of the succession plan. I joined the NTMA almost eight years ago during very turbulent times in the market place and at the NTMA. Because of the support of many members and chapter leaders coupled with the guidance I received from the Executive Committee (EC), the NTMA is in a much better place, and on a course of sustainability for many years to come with education as the foundation for the future.

The NTMA staff deserve all the credit for executing on key initiatives that allow me to make the aforementioned statement. They are all A players who work as a team and thrive in an atmosphere of accountability and challenge. I'm very proud to have been associated with such profession-

als and admire their business acumen and management capabilities.

Our strength is also due, in large part, to our National Associates and Affinity Partners. They provide technology, services and products that make the NTMA more competitive and profitable. Without them, we would not be able to have the rich content at our conferences, nor enjoy the relationships with some of the world's leading companies in our industry. I especially appreciate their loyalty and commitment to the NTMA.

Many changes have been implemented since I joined the NTMA. Some were welcomed with enthusiasm--others with skepticism, but in the end, the tough decisions aren't necessarily the popular ones. The EC members were my advisors, confidantes and most importantly the strategists who set the path for success and longevity. Because they all run successful businesses, each of them has full-time jobs, however, you would never know this as you observe their commitment and contribution through countless hours of volunteerism.

For those of you who have not met

Dean, he's a very accomplished professional who has managed a multimillion dollar division for a defense contractor, has held leadership positions at associations and their boards, as well as educational and government-funded institutions. He's a life-long learner with a passion for U.S. manufacturing. I encourage each of you to welcome him and invite him to your chapters and businesses, so he too can experience the pride and dedication in support of Made By American Families.

I plan to stay involved with the industry that I so dearly love. In this way it is "see you later" rather than good bye.

DAVE TILSTONE / NTMA PRESIDENT

*Dave Tilstone*



## THE RECORD

### OPERATIONS & EDITORIAL

Dave Tilstone, President

Molly West, Editor

### NTMA EXECUTIVE COMMITTEE

Mark Vaughn, Chairman

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Mark Lashinske, Vice Chairman

*Modern Industries Inc. - Phoenix, AZ*

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*Homeyer Precision Manufacturing - St. Louis, MO*

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Tom Sothard, Board Member

*Konecranes, Inc. - Dayton, Ohio*

### ADVERTISING INQUIRIES

To advertise in *The Record*, or for information on publishing your corporate newsletter or sales literature, contact NTMA at (216) 264-2847 or [mgilmore@ntma.org](mailto:mgilmore@ntma.org) for advertising, [mwest@ntma.org](mailto:mwest@ntma.org) for editorial content.

Layout by Z Graphics

[dave@DaveZgraphics.com](mailto:dave@DaveZgraphics.com)



### NATIONAL TOOLING & MACHINING ASSOCIATION

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Volume 39 / No 9



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## NTMA Membership Healthcare Plans

### MEDICAL, DENTAL, VISION, LIFE, DISABILITY

Using the buying power of its members, the NTMA offers the NTMA Membership Healthcare Plans. The plans offer comprehensive healthcare coverage and ancillary programs to provide the best healthcare coverage at reasonable rates and renewals only for NTMA members. The NTMA plan helps American manufacturing stay strong by providing health and wellness opportunities for its members and their employees.

ENROLLMENTS FOR JANUARY STARTING NOW  
THROUGH THE NTMA

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mgilmore@ntma.org

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request a quote



## NTMA IS NOW ACCEPTING APPLICATIONS FOR 6S AWARD



The NTMA Technology Team is committed to improving the perception of American manufacturing by promoting and recognizing excellence in member shops. The 6S Excellence Award is specifically designed to honor shops that display excellence in organization and efficiency.

COMPANIES APPLY FOR THE AWARD BY SUBMITTING A SELF-ASSESSMENT BASED ON CRITERIA THAT DEMONSTRATES BEST IN CLASS PRACTICE IN THESE SIX CATEGORIES.

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#### OVERTON INDUSTRIES 6S PROGRAM



Recipients of the 6S Award are presented with a Certificate of Excellence at the NTMA Fall Conference which will be held in Denver, Colorado, October 23-26.

For the 6S audit worksheets and application go to <http://ntma.org/resources/documents/6S-excellence-program/> or contact Christine Benco at 216-264-2835 or [cbenco@ntma.org](mailto:cbenco@ntma.org)

The deadline for applications for the 6S Award is September 28, 2018.

The Technology Team looks forward to presenting the 6S Award to you this year!



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# ENGAGE MANUFACTURING'S NEXT GENERATION RAFFLE

To Benefit the National Robotics League  
Purchase tickets at <https://raffles.ticketprinting.com/?r=7955>



## WIN AN ALL NEW FULLY LOADED TORMACH PCNC 440 CNC MACHINE FOR YOUR LOCAL SCHOOL

### Ticket Price

**\$100 each / 3 for \$250**

Seed the future of manufacturing in your community and across the country. Take advantage of this opportunity to directly influence technology education at your local high school and prepare students for careers in modern manufacturing. Tormach has generously donated to the NRL a PCNC 440 CNC Mill for this raffle. This machine is the perfect combination of performance and affordability with the precision and power for real-life manufacturing projects. Be the catalyst to develop a trained future workforce tailored to meet your business growth needs.



All proceeds to benefit the National Robotics League, NTMA's job-driven, project-based STEM learning experience to close the skills gap and promote pathways to careers in manufacturing.

Drawing will take place at the NTMA Fall Conference at 7 PM on October 24, 2018.

Need not be present to win. Winner will not be responsible for any taxes if the prize is donated directly to a school or qualified youth organization.



Purchase tickets at <https://raffles.ticketprinting.com/?r=7955>

## A WHOLE NEW WAY TO SUPPORT YOUR FUTURE WORKFORCE

*The Tormach CNC Raffle could benefit a school near you*

BY BILL PADNOS, NTMA, DIRECTOR OF YOUTH ENGAGEMENT

In Pittsburgh, I volunteered to serve on the advisory board for a high school's Engineering Technology CTC program. When I attended the first meeting, I could not believe my eyes when I looked around their classroom area. The back classroom resembled a more of a machine shop museum than a working learning lab.

At the next meeting of the advisory board (one year later), the new teacher mentioned that none of the machines in the classroom worked. I was horrified that this teacher was charged to recruit new students in the program and prepare them for the state required NOCTI exam on substandard equipment. Actually, saying "substandard" does not adequately describe these machines. These non-working relics should have been in a junkyard instead of being in a classroom. Instead of promoting modern manufacturing, this classroom was more of a deterrent. During the advisory board meeting, I kept saying that it was better to have an empty classroom than have these machines in there. The school needed to call 1-800-Got-Junk to haul them away.

This meeting energized me to make it my mission to assist educators in securing the machines and tools that they need in their classroom. We have obtained free licenses from SolidWorks and Mastercam for teachers and students. We have helped educators connect with both local funders and the Haas Factory Outlet to add new machines into their classrooms. NTMA members like Stellar Precision Components, donated older and well-maintained machines to one of the schools that they support in the NRL program.

My ultimate method for preparing high school students for careers in modern manufacturing: getting a CNC machine donated, and raffling it off for a company to donate to his or her local school. This raffle would serve as

both a fundraiser for the NRL program and provide the opportunity for NTMA members to be the catalyst in developing a highly-trained future workforce tailored to fill your business growth needs.

Fortunately, the NRL has found a partner in Tormach. The company recognizes how critical it is to engage manufacturing's next generation. Tormach ([www.tormach.com](http://www.tormach.com)) makes CNC machine tools that are perfect for educators along with light industrial and hobbyists. Their machines may be smaller than what you have in your shop, but they do cut titanium, stainless steel, hardened

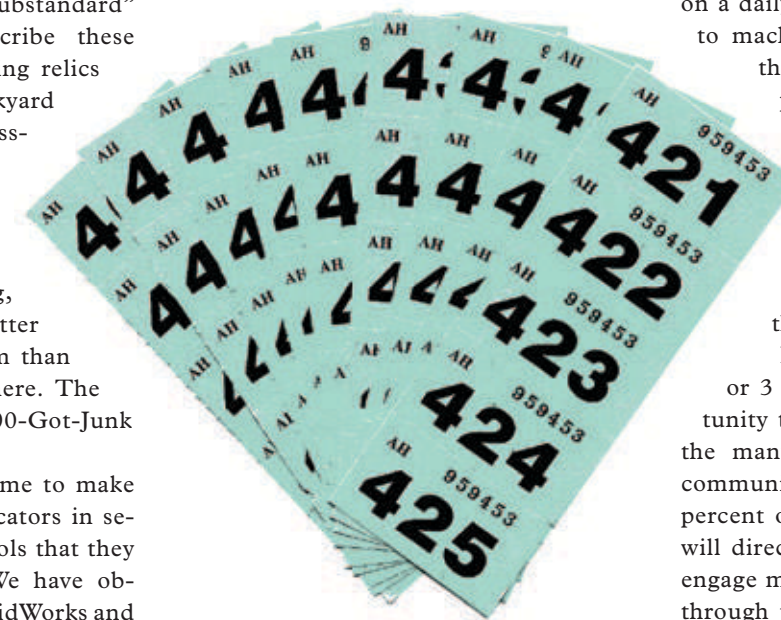
in a ribbon-cutting event with community leaders to showcase your donation of the new Tormach PCNC 440 CNC Mill. Imagine being able to build a relationship with that school and to create your own personal workforce talent pipeline with students that are excited to build upon the technical skills that they have learned on the machine that you donated.

When I mentioned that we were raffling off a Tormach PCNC 440 CNC Mill to veteran NRL teachers the other day, their mouth started to water. These three technology education teachers recognize the value that the Tormach machine would add to their classroom on a daily basis. While it will help them to machine parts for their NRL bot, the CNC machine will help them prepare students for careers in manufacturing. All of these

teachers have program alumni that are working in industry and they understand the impact that this machine will make in their classroom.

For only \$100 per raffle ticket or 3 for \$250, you have the opportunity to make a difference in closing the manufacturing skills gap in your community and across the country. 100 percent of the proceeds from the raffle will directly benefit NTMA's efforts to engage manufacturing's next generation through the National Robotics League. The raffle is open now until 7 PM eastern time on Wednesday, October 24, 2018. While the winner does not need to be present, wouldn't it be great to hear your name called during the NTMA 75th Anniversary Gala at the Fall Conference in Denver?

Seed the future of manufacturing in your community and across the country. Purchase your raffle tickets today at <https://tinyurl.com/NRLraffle>.



steel, tool steel, aluminum, plastics and wood. Tormach was founded on the idea that there should be a capable CNC tool that's affordable and easy to learn and use.

Tormach has generously donated a fully loaded PCNC 440 CNC Mill for the NRL raffle. Imagine being able to contact your local high school and tell them that you have won an industry-level CNC mill that you would like to donate to them so students can work through real-life manufacturing projects! Imagine being able to participate





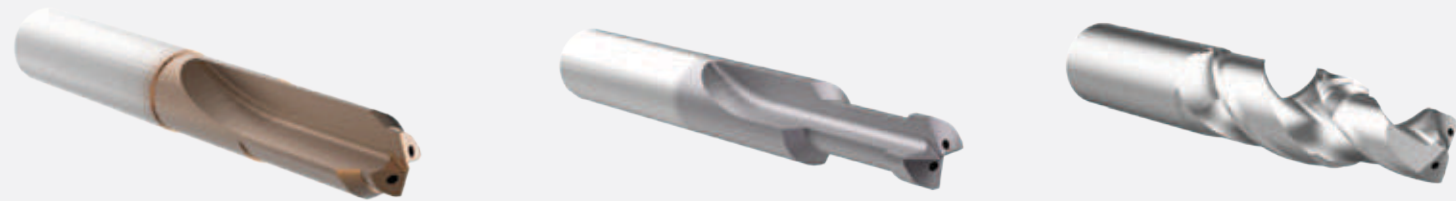
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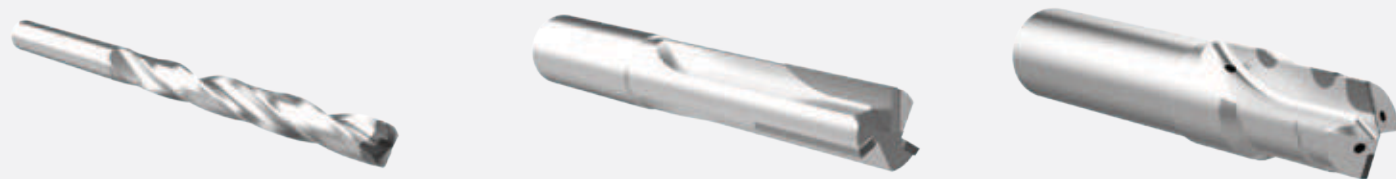
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## ARE YOU PLANNING TO ATTEND THESE GREAT NETWORKING OPPORTUNITIES AT FALL CONFERENCE?

### NRL FUNDRAISER

Tuesday, October 23 • 7:00PM - 10:00PM

Registration Rate: \$25 per person • \$50 for a team

Back by popular demand, simply because it was a whole lot of fun, we are kicking off opening night with our 2nd Annual Cornhole Tournament. Pair up with a favorite teammate or let NTMA help you connect with another member, and help us Toss Out the Skills Gap. The winning team will go home with a special trophy and bragging rights! All proceeds will benefit the National Robotics League. Watch for a link to register!



### PAC RECEPTION

Thursday, October 25 • 4:30PM - 5:30PM

Come have a drink on us as we celebrate those who support NTMA's Political Action Committee (PAC). Talk with John Guzik and Omar Nashashibi of The Franklin Partnership to learn more about all of our recent successes on the Hill and what you can do to become involved.

### CASINO NIGHT AT WYNKOOP BREWING CO.

Thursday, October 25 • 7:00PM - 10:00PM

Suggested Dress: Casual

Meet with old friends and make new ones as you help support the Government Affairs Administrative Fund (GAAP) at Wynkoop Brewing Company, Colorado's First Brewpub, home to tastemakers and rulebreakers, bushwhackers and envelope pushers. Purchase all the chips you'd like and put your winnings towards one of our many raffle prizes. In between the gambling hopefully you'll find some time to take a brewery tour or challenge your colleagues to a game of pool, darts or shuffleboard! Dinner and drinks will be provided.

### NTMF COCKTAIL HOUR

Wednesday, October 25 • 6:00PM - 7:00PM

Network with the industry's best and brightest before our Diamond Anniversary celebration. Enjoy light hors d'oeuvres and cocktails and have your picture taken with friends as you make your way down the blue carpet.

### 75TH ANNIVERSARY AWARDS GALA

Wednesday, October 24 • 7:00PM - 11:00PM

Suggested Dress: Black Tie Optional

Come enjoy an event that will be remembered for years to come as NTMA celebrates 75 years of making America strong together. The gala will feature an awards ceremony highlighting the key achievements and achievers of the first 75 years of NTMA's history. After the awards are announced, put on your dancing shoes and help us close out the night in style!



## FEATURE

## STRONG CONNECTIONS CAN MOVE US FROM 'DATA OVERLOAD' TO VALUABLE IMPACT

BY STACEY SCRHOEDER, NTMA, DIRECTOR OF WORKFORCE DEVELOPMENT



The focus of this month's Record is networking. It's overwhelming to ponder how many times I see the word networking in an average day. It's used in solicitations for webinars and events, alumni outreach, community gatherings – you get the idea.

But I think sometimes we forget how important networking is beyond just for ourselves personally.

Each of us is involved and invested in many entities – our company, our

community, organizations we volunteer with, local political groups, religious or sports groups, schools, the Chamber of Commerce and so many more.

I'd like to share a few examples of networking I do to benefit the NTMA and you, our members. Maybe they will spark some ideas of new ways you can grow your business, influence your community and local schools and make an even bigger impact in your region.

Cleveland, Ohio is home to many

non-profits focused on a range of needs – manufacturing, economic development, disadvantaged youth, people with barriers to employment, ecological concerns, human resources, training and development, young professionals and many more.

I have built relationships with PMA, PMPA, the Forging Institute and others that are both local and far away, that focus on aspects of the industries we

SEE "NETWORKING" NEXT PAGE



"NETWORKING" CONTINUED

serve. We have shared experiences and best practices with our respective training programs and software platforms. We are brainstorming how to grow the talent pipeline for our industries through targeted scholarships. We have learned how to better track scholarship recipients over time. We have helped each other overcome obstacles, polish communications and strategies and work together for a stronger manufacturing community.

I have worked with numerous organizations that help disadvantaged individuals and continue to push for diversity and flexibility in recruiting practices to help these individuals break the cycle of unemployment or underemployment. In previous roles, I taught monthly sessions on basic manufacturing practices and terms to people looking to enter our industries. I have worked at manufacturing companies that have hired from those programs, and will continue to educate on the value of tapping into these new talent sources, and provide connections to learn more from those that have done it successfully.

I have attended events with representatives from the national association for community colleges, RCBI, state-specific apprenticeship offices, NIMS, and many others. Each of us is doing things that others find amazing and inspiring. Each of us is learning something new, and making connections to

take back to our company and community. Everyone brings unique experiences, and none of us are individually staffed to do it all – collaboration is key!

I frequently participate in Women in Manufacturing events, Association for Talent Development events, a Learning & Development peer learning group through the Institute for Management Studies, and so many more – SHRM, ERC, the alphabet soup of HR and learning & development organizations is limitless. All of these allow me to share the good work that NTMA is doing to fill the manufacturing skills gap, while teaching me something new to share. These experts have helped guide my thinking, and given me better ways to answer members' questions and help solve problems.

Our NTMA Education Team is another amazing network. We have NTMA members, Chapter Executives and Chapter Leaders, and external participants. Nearly every call includes a member thanking someone for a great idea they plan to bring back to their own company. We're collaborating constantly on ideas for attracting talent, refreshing our training programs, developing new promotional materials, and driving utilization of existing opportunities.

I hope you found some of these examples interesting and inspiring. My greatest wish is that it sparked at least one concrete idea for something new

you can try. Maybe it's attending that local Chamber of Commerce meeting on community workforce development. Maybe it's calling up someone at that organization that always posts amazing articles about strategic thinking on LinkedIn. Maybe it's doing a search for economic development non-profits in your area and asking how you can partner to build a talent pipeline and keep local people in the area, and gainfully employed. The possibilities are endless. NTMA members are a family, and no matter how much information is out there, each of us can continue to make connections that make a difference.

If you have stories or advice you'd like to share, please contact me at [sschroeder@ntma.org](mailto:sschroeder@ntma.org).



## DEB ELAM: CHAPTER TWO

BY DANA JOHNSON

ORIGINALLY PUBLISHED IN LEAD360 MAGAZINE

Deborah Elam is a rare find. A unicorn, some would say.

This African-American girl from New Orleans rose to the top of the pyramid of a Fortune 500 company. Today, the retired GE Foundation President and Chief Diversity Officer is CEO and president of Corporate Playbook™, a consulting firm that specializes in developing senior executives.

Elam has often been likened to a unicorn by the people around her. She admires unicorns for their strength and their horn possessing extraordinary power. Elam can relate. She herself has broken through glass ceilings and charged through walls of preconceived notions. Luckily for those who come upon the unicorn, she's determined to bring others along for the ride.

Corporate Playbook™ is headquartered in Elam's hometown, New Orleans and bears the emblem of a black unicorn. It offers a host of services to pre-C-suite leaders, C-suite leaders, and organizations. Drawing from thirty years of varied experiences at GE, Elam helps usher leaders to new heights. She coaches on how to modify behavior, expectations, and skills for new roles. In her coaching practice, Elam helps her clients frame, shape and articulate what success means to each individual and what it will take to reach that goal.

As the first African-American female corporate officer at GE and a leader in a corporation of 300,000, Elam looks back over a stunning career quilted in diverse industries: Financial Services, Insurance, Tech, Aviation—matched by the diversity of locations: Cincinnati, Washington D.C., Raleigh, Atlanta and Fairfield, Connecticut. Her willingness

to relocate allowed Elam to take on successively larger roles. Elam believes in being strategically proactive about career. She advises others to actively lobby for positions, prepare for roles externally when necessary, and leverage their network. Most importantly, Elam says have faith.

Elam draws from her own experience when she shares wisdom. When the president of the GE Foundation announced his retirement, it seemed like a great opportunity for Elam to pursue

her interest in philanthropic management. Because GE has only one such



position, there was no opportunity within the company to learn about the job. So, Elam secured seats on the board of a few nonprofit organizations to gain knowledge and experience. With her broadened background, she landed the role in addition to the title of chief diversity officer, for which she had already been receiving accolades. Elam had correctly recognized and believed she was uniquely qualified to lead in two roles, marrying the duties to maximize the results of both the company's diversity initiatives and philanthropic endeavors.

Following that thread of extensive expertise, Corporate Playbook™ helps companies form and develop strategies around philanthropic activities that align with and enhance business. Elam

believes philanthropy is more than simply buying a table at a fundraising event. She guides companies in identifying return on investment of diversity and charitable giving. She also offers resources for corporate crisis management and speaks at a myriad of events.

She believes that younger leaders need to understand how the game works, win at the current rules, and then advance to where they can change the rules.

She advises baby boomers to focus on how many more rungs of their company they desire to climb, if any, then plan accordingly. Whatever the timeline, these more seasoned leaders should aim to "crescendo at the finale of Chapter One," retiring on a high note with a strong sense of accomplishment. Elam also suggests that leaders discern Chapter Two, or envision what it is they really want to do—and turn that vision into action.

According to Elam, emerging leaders and senior leaders alike benefit when they adopt a framework that highlights three key areas: entrepreneurial skills, global experience, and technological understanding.

Learn more. Elam will share her experiences and expertise at this year's NTMA Fall Conference—a session you won't want to miss!







# CORPORATE PROFILE

Okuma America Corporation is the U.S.-based sales and service affiliate of Okuma Corporation, a world leader in CNC machine tools. The company is the industry’s only single-source provider, with the CNC machine, drive, motors, encoders, spindle and CNC control all manufactured by Okuma. Okuma’s innovative and reliable CNC machining technology, paired with our comprehensive, localized service network, allows users to run continuously with confidence and maximize profitability. Along with our industry-leading distribution network (largest in the Americas), and Partners in THINC, Okuma facilitates quality, productivity and efficiency, empowering the customer and enabling competitive advantages in today’s demanding manufacturing environment.

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# How To Work A Room™

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It's 6:50 a.m. at an early-riser business-and-technology conference at the Museum of Science in Boston. A model of Skylab hangs from the high ceiling of the upper concourse, giving the room a dreamy feeling. The attendees, a mix of about 750 business people, entrepreneurs, techies and venture capitalists, have come to scout clients, investors, or jobs.

That's certainly what drew Diane Darling. Author of *The Networking Survival Guide*, Darling is a corporate consultant, business school lecturer, and sought after as an expert in networking. As the conference begins, she straightens her name tag, pops a mint and strides the crowd.

## 1 Don't go in cold

A week before, Darling researches the event on the Web to get a sense of the audience. "That way I could do a little research on people I want to meet and use that information to break the ice with them," she explains. "Are these people entrepreneurs? CEOs? VCs? I try to know as much as I can about the crowd before going."

## 2 Travel light

Darling wears a tasteful red jacket. "There are a bazillion blue suits here. I stand out in this jacket—but not in a bad way." She carries a small leather portfolio from Levenger, about twice the size of a wallet, with two pockets: One for business cards coming in, the other for cards going out. No fumbling.

## 3 Walk the walk

She walks through the concourse confidently, smiling. "Powerful people come to these events because they want to meet other skilled, talented people. So carry yourself accordingly. Don't fold your arms. Look like you are having a good time."

## 4 Start with breakfast

Darling first heads to the long breakfast table—but not because she's hungry. "People tend to be very accessible around the food. Talking and eating go together. It's a great way to get started at an event," says Darling, who carries her orange juice in her left hand so she can shake with her right.

## 5 Who's who

Darling circles the room once to scan names into her memory, giving her an idea of who's in the room before she picks her targets. "Don't read name tags while talking to people. Always maintain eye contact." Besides, sideways glances at name tags make you look furtive and shifty.

## 6 Approach VIPs first

Darling darts over to one of the morning's guest speakers, a Harvard Business School professor, a good 15 minutes before his presentation starts. "Keynote speakers love to talk and can be great contacts, but after they give their speeches they're always swamped."

## 7 Spot the lone wolves

The room is crowded, so Darling next looks for people who are standing alone. "It's harder to integrate into a group. Besides, individual contact is best; one-on-one makes for the most effective networking. Just make sure you smile as you approach."

## 8 "And you are?"

She approaches a man near the podium and asks his connection to the event, host, speaker, Museum of Science, etc. The goal is to ask others about themselves so you can connect to their interests and lives. When asked about herself she says, "I'm with Effective Networking — we help companies and people figure out where to network and refine their networking skills. My name is Diane Darling." She says her name at the end so he's more likely to remember it.

## 10 Be curious

While talking with strangers Darling asks open-ended questions to assess right off whether they'll be of any help. "Don't go into a polished 20-second commercial about yourself. Real leaders are curious. You're trying to pass the test as a personable human being first and foremost."

## 9 Press the flesh

On her approach, she's the first to extend her hand. "It's an old protocol, a sign that you're eager to interact," she says later. Also: Make sure to shake hands good-bye, especially if you're a woman. "It's not a natural part of a woman's repertoire of body language, as it is for men."

## 11 Card exchange

Darling has her cards readily available in her right pocket so they're easy to exchange. She puts cards she receives in her left pocket so they don't get mixed up.

## 12 Get an introduction

After traversing the room twice, she spots the conference moderator, a player in the Boston media world. He's alone drinking coffee, but rather than approaching him solo she enlists a mutual acquaintance to give her an introduction. "An intro is like an implicit endorsement, and the next time we meet, there will be that association and that context."

## 13 Give and take

The moderator mentions that he's looking to get in touch with a professor at MIT who Darling happens to know. She offers to call the professor as a way of introduction. "Always try to be a connector, the person who brings people together," she says. This not only makes Darling look well-connected, it may also make the moderator want to return her favor.

## 14 It's a wrap

After three hours, Darling has talked with around two dozen new contacts. She leaves the conference with plans to call these leads in the next week. "Remember, you're not there to close deals or get a job. You're there to get the right to follow-up with a phone call or a meeting over coffee. Even one contact like that makes the whole day worthwhile."

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## ADVANCE WELDING 40TH ANNIVERSARY CLAMBAKE AND CAR SHOW CELEBRATION



Advance Welding of Springfield, Massachusetts celebrated their 40 years in business with an anniversary Clambake and Cruise Night on June 14, 2018. The celebration was co-hosted by the Western Massachusetts Chapter of the NTMA. The fun-filled evening included great food, beautiful classic cars and plenty of networking.



## METHODS MACHINE TOOLS NAMES NEW DIRECTOR OF FINANCIAL SERVICES

Methods Machine Tools, Inc., has announced that Matthew Sheehan has joined the company as its Director of Financial Services.

"Matt has a skill set that is exemplary in the areas of industrial finance, communication, customer service and professionalism - all which complement and strengthen our department in order to meet and exceed customers' expectations," said Kevin Sarro, Director of Finance, Methods Machine Tools, Inc. "We are excited to welcome Matt and look forward to him expanding our finance program, to build the most competitive and tailored finance products."

Prior to joining Methods, Mr. Sheehan was Vice President/ Relationship Manager

at U.S. Bank Equipment Finance for over ten years. In this role, he was in the Manufacturing Vendor Services Group and worked closely with Methods as one of its key lending partners, gaining an extensive knowledge of equipment financing requirements. Earlier in 2018, he received the highest award given at U.S. Bank for his performance and commitment to excellence in 2017 - "The Legends of Possible Award". Prior to this, Mr. Sheehan held various roles at Fidelity Investments.

Methods Machine Tools, Inc., in operation for 60 years, is a leading supplier of precision machine tools, automation and accessories, providing extensive applications engineering support, installation, parts, ser-



vice and training through a network of large state-of-the-art technology centers and dealers throughout North America.



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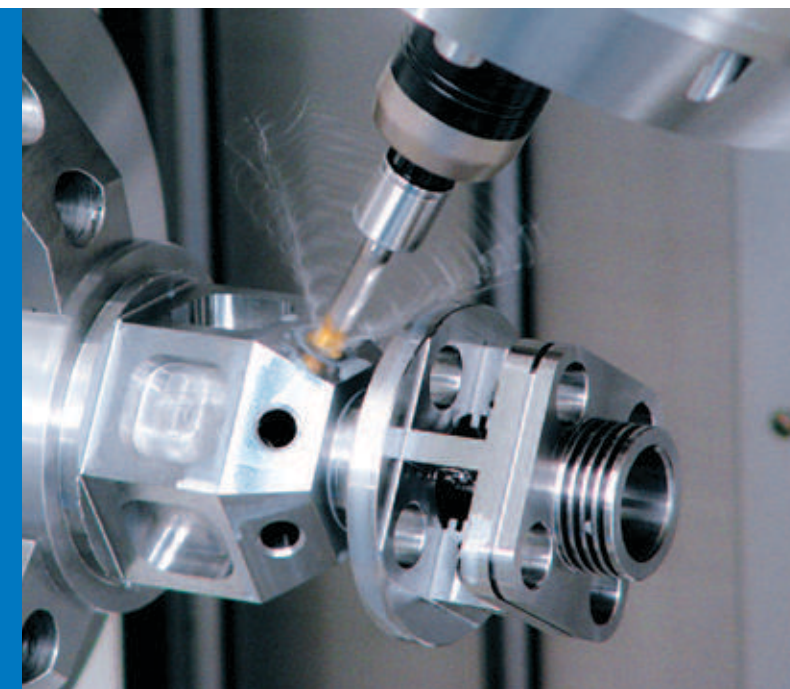
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# THE VALUE OF NETWORKING FOR NATIONAL ASSOCIATE MEMBERS- A SYMBIOTIC RELATIONSHIP BETWEEN NATIONAL ASSOCIATE AND ASSOCIATION TO ENSURE GROWTH

BY JAMES MAYER, NTMA, NATIONAL ACCOUNT MANAGER



Networking is instrumental in the National Associate’s ability to recoup the return on investment of their membership dues. The reality is that networking provides value to the membership of the NTMA, both general members and National Associates, in monetary and non-monetary forms. Phil Harris, Marketing Manager for Paulo Heat Treating, defines his networking value proposition. According to Harris, “NTMA events offer NAMs (National Associate Members) the unique opportunity to meet key decision makers at NTMA companies outside of their shops, bond over meals and drinks, and create an equal business stature that can be difficult to create in the typical sales call or customer visit.” Phil is very active in NTMA events, namely the Emerging Leaders and Fall Conferences. He has built a network of members and fellow National Associates who respect him and his opinions, bringing value in form of friendship, business opportunities, and avenues for advice. Through this network, Phil now has a number of people he can go to for introductions and community building.

Another National Associate, Wolfgang Neitzke, International Business Manager at Siemens says, “Siemens has been honored to be a National Associate at NTMA for a number of years. All of the national and local events provide an excellent opportunity for Siemens to build lasting relationships, to learn about job shops’ needs, business challenges, and best practices, and to make job shops aware of new technology that can help them to be more competitive, productive and efficient in their operations.” Once again, while there is a monetary understanding of the value of networking, Wolfgang’s comments are centered on the non-monetary benefits. As an NTMA National Associate Member, Wolfgang develops a



better understanding of the industry and the needs of his customer base. Membership is also an opportunity for sharing and learning about techniques and technologies that will ultimately make him and his customers more effective-- in turn, this increases the monetary value.

National Associate Members have networking opportunities ranging from National Chapter events like the Fall Conference (where I first met Wolfgang) and the Emerging Leaders Conference (where I first met Phil), to the IMTS Tech Tours and the International Tech Tour. The NTMA offers the National Associates the ability to connect with the 30+ local chapters, providing introductions to the chapter president and chapter executive, if only to ensure that they are invited to the local events in their area to begin networking with people they may not see at a national event. National Associates are also provided the ability to network using the social media followers of the NTMA to connect to the membership.

Networking in associations provides members with monetary and non-monetary benefits, the later coming in the form of camaraderie, shared purpose and new business. While revenue and market share gain is the ultimate goal of both prospective and current National Associates, the networking opportunities provided are hard to put a price tag on.



## COLUMBIA MACHINE WORKS TURNS 91 THIS YEAR



Congratulations to NTMA member, Columbia Machine Works, turning 91 this year. Here's a glimpse at the changes from 1931 to today.



## LEAVE IT TO LEECH

SUBMITTED BY BILL BEERS, LEECH INDUSTRIES

Leech Industries is celebrating its 70th anniversary in 2018 with the fourth generation in place. The company strives to offer competitive pricing and on-time delivery while maintaining stringent standards of quality. Statistical process control techniques are used throughout manufacturing facilities as required, and the quality system implemented has successfully attained ISO 9001:2008 and AS9100 certifications.

Leech Industries is a staunch supporter of apprenticeship programs. Leech Industries has five apprentices currently. The program is a differentiator for us - not many companies in our area have programs like this, so we have been able to attract and retain young talent. The apprentices often come from local technical schools with a strong desire to learn, and a desire for a structured wage scale. Our company believes in the value of apprenticeships and we would like to see other NTMA members start or grow their own programs to help fill the manufacturing skills gap! Please contact me if you have questions about starting or growing your company’s apprenticeship program.



Pictured: current class of apprentices at Leech Industries



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## MEMBER NEWS

## SUPERIOR DIE SET MARKS 95TH YEAR IN BUSINESS

By FRANK JANISZEWSKI, PRESIDENT, SUPERIOR DIE SET CORPORATION

2018 marks Superior Die Set Corporation's 95th year in the die and mold building industries, a component of the old-line skilled manufacturing, which has vanished from the Wisconsin business environment. My grandfather, Kasimir Janiszewski, founded and established the tool and die manufacturing company just as the Great Depression unfolded. As the tool building market crashed, all of the employees and owners of Superior petitioned the Honorable Gustave G. Gehrz to save Superior from receivership and he ruled in favor to keep the company open on July 28, 1936. Superior survived and thrived: in the late 30s and early 40s we employed 90 people. Kasimir's three sons, Alphonse, Casimir Sr.—my father—and Edward all entered WWII. During the war, Kasimir split off the tool and die building business and concentrated on die set building. After the war ended, all three Janiszewski men returned and found a very different business. Since Kasimir thought there was a chance his three sons might not return, and if they did, they would be too old to learn the tool and die trade, he only had retained 12 employees.

Superior was built back up during the 40s and 50s and moved several times from downtown Milwaukee to West Allis and back to Milwaukee at 19th and Cleveland. In 1964, Superior broke ground in Oak Creek, its current headquarters. Alphonse was appointed president and Edward opened a similar facility in Connecticut, operating as an independent company. In 1969, Casimir Sr. was appointed president. Superior continued its growth pattern and entered the mold base market with new products. The last expansion in 1985 put our headquarters at 135,000 sq. ft.

In 1986, Superior grew again as Casimir Jr. (Casey) was appointed president and I was appointed the VP of Manufacturing. During this time, the sphere of communism was beginning to crumble in Eastern Europe, and particularly in Poland. Casey was compelled to go back to Kasimir's roots and be part of the rebuilding of the manufacturing

sector in Poland. Through a series of networking meetings, which included political, manufacturing and academia representatives, Casey identified a small company in the north of Poland as a source of components that Superior was already purchasing in the Far East. In July of 1993, Superior executed what we believe may be the first lease with an option to buy in all of Poland. The company, FCPK-Bytow, the "K" honoring Kasimir, doubled its sales each year for seven consecutive years. We acquired another facility in 2002 in the southern city of Kielce, Poland. In May 2014, FCPK-Bytow purchased another building adjacent to the Kielce plant for future growth. FCPK-Bytow now operates out of three facilities and employs over 275 people. In June of 2018 FCPK opened a new 135,000 sq. ft. addition.

From 2008-2010, Superior confronted the recession and survived because of the dedication of our employees and also the success we experienced in Poland. In late 2013, we began a complete restructuring of our manufacturing operation. By embracing Rapid Response Manufacturing techniques and investing over 3 million dollars in

capital improvements from 2013-2015, Superior is well positioned to once again grow not only in our current markets, but match our core competencies to new markets. In a marketplace where many are scaling back or closing their doors, we're expanding, investing in our business and adding to our workforce. Our family is incredibly proud of our longevity in this competitive and fast-paced industry, and we can't wait to see what else the Janiszewskis and Superior Die Set Corporation can accomplish.



## DORIS JEAN DYSINGER PASSES

Long-time member and friend of the NTMA, Doris Jean Dysinger, passed away on August 15 at her home in Tipp City, Ohio.

The Dysinger family has been actively involved in the NTMA for decades, and past conference attendees likely recognize Doris's warm smile from NTMA functions.

She is survived by her mother; her husband of 52 years, David Dysinger (past NTMA chairman); children, David Jr. (Tamara) Dysinger, Greg (Mindy) Dysinger, Jeremy (Cristina) Dysinger; six grandchildren; and a brother, William (Lisa) Cole.

In lieu of flowers, memorial contributions may be made to The ALS Association Central & Southern Ohio or Hospice of Miami County. Expressions of sympathy may be sent to [www.trostelchapman.com](http://www.trostelchapman.com)





## CULTIVATING THE MACHINING FIELD BY PLANTING SEEDS IN THE MATH CLASSROOM

BY DR. KELLY WAMSER REMIJAN, PH.D., O'FALLON TOWNSHIP HIGH SCHOOL MATHEMATICS TEACHER, O'FALLON, IL



*To increase the pool of acquiring highly qualified machinists, this article will provide an example of how technical schools and/or manufacturers can collaborate with schools, specifically 6th-12th grade mathematics teachers, to expose students to the field of manufacturing as well as a potential career in machining and can help mathematics teachers illustrate real life connections to improve student learning, understanding, and appreciation of the importance of mathematics.*

While not all schools offer CTE (Career Technical Education) programs or STEM classes, all schools require students to take mathematics. Promoting collaborative activities that educate the workforce early can positively impact the manufacturing workforce for the future, as well as positively impact education at a local level now. Thus, professionals from the field of machining should consider collaborative efforts with secondary mathematics teachers to develop lessons/activities that show students how math is used in manufacturing as well as introduce students to the potential jobs related to skilled trades.

After being one of the only math teachers to attend “Manufacturing Day” at Southwestern Illinois College (SWIC) in Granite City, Illinois, I reached out to Mr. Mark Bosworth, Instructor and Coordinator for Industrial Technology and Precision Machining and asked if he would be willing to show me more about the mathematics behind CNC programming. After Mr. Bosworth graciously invited me to spend the day at SWIC, I was able to gain a basic understanding of how plotting points on a coordinate plane could be used to program a machine to cut my name out of a piece of aluminum through this hands-on experience. Following my one-day experience, I began developing a two-day class activity in collaboration with Mr. Bosworth which was then implemented with my 9th grade algebra students at O’Fallon High School in O’Fallon, Illinois.

To begin connecting MATH to Computer Numerical Control, I presented students with a given problem involving x and y coordinates as shown in

Figure 1. After following the given steps, students not only used their math knowledge to discover that the given word was MATH, but were also able to determine, from this example, the sequence of steps used to “program” a machine.

Next, students were given a ¼ inch graph paper representative of a 3 inch by 5 inch piece of wood with the word FUN (as shown in figure 2) and were asked to write a program that would create the word FUN out of a piece of wood using a machine. Students, then, wrote a program as shown in figure 3 by ninth grade math student Sadie D.

Following the student creation of the program for the word FUN, we, as a class, discussed the program steps to de-

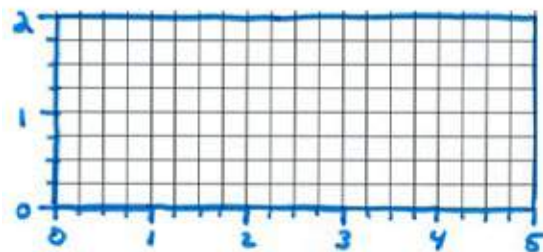
termine if any steps were missing and if there might be a different way to write the program. (Note, in the student's work shown in figure 3, the student forgot to write "put down pencil" after G1X2Y2.5 as identified with the arrow.)

Next, students were given the task of writing a word with at least three letters or creating a design with at least three letters or three numbers followed by the corresponding program. While some students wrote their name or their initials, some students were able to share more about themselves such as with student Sadi D. who wrote the name of her favorite band along with the corresponding program as shown in figure 4.

CONTINUED NEXT PAGE

**FIGURE 1**

Given the  $\frac{1}{4}$  inch graph paper and blue outline of a 2 inch by 5 inch piece of aluminum, follow the given program to create a word which can be cut out of a piece of aluminum using a machine.



G1 X.25 Y.50  
Put down your pencil  
G1 X.25 Y1.5  
G1 X.75 Y1.0  
G1 X1.25 Y1.50  
G1 X1.25 Y.50  
Pick up your pencil  
G1 X1.50 Y.5  
Put down your pencil  
G1 X2.0 Y1.5  
G1 X2.5 Y.5

(What LETTER was created?)

Pick up your pencil  
G1 X1.75 Y1.0  
Put down your pencil  
G1 X2.25 Y1.0  
Pick up your pencil  
G1 X3.25 Y.50  
Put down your pencil  
G1 X3.25 Y1.5  
Pick up your pencil  
G1 X2.75 Y1.5  
Put down your pencil  
G1 X3.75 Y1.5  
Pick up your pencil  
G1 X4.0 Y.5  
Put down your pencil  
G1 X4.0 Y1.5  
Pick up your pencil  
G1 X4.0 Y1.0  
Put down your pencil  
G1 X4.75 Y1.0

(What LETTER was created?)

Pick up your pencil  
G1 X4.75 Y1.5  
Put down your pencil  
G1 X4.75 Y.5  
Pick up your pencil

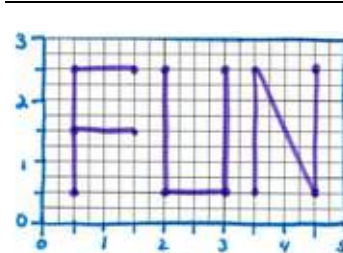
(What LETTER was created?)

(What LETTER was created?)

(What WORD was created?)

---

**FIGURE 2**

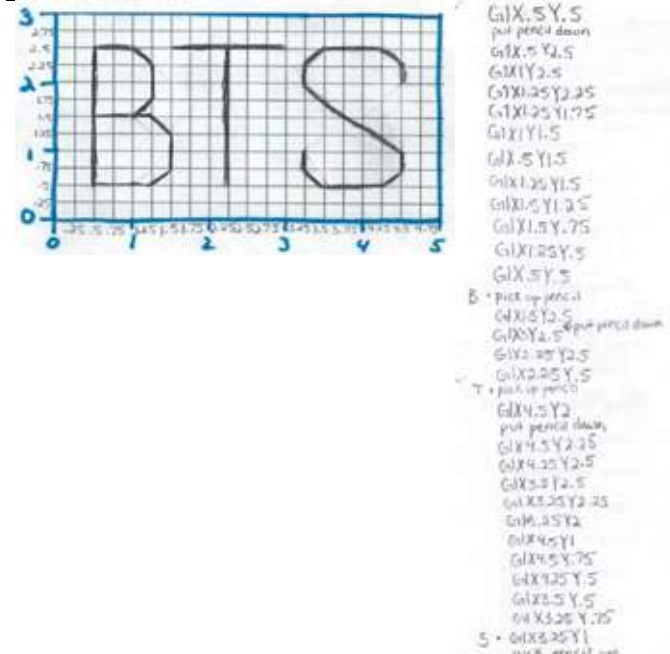
**FIGURE 3**

G1X.5Y.5  
put pencil down  
G1X.5Y2.5  
G1X1.5Y2.5  
pick up pencil  
G1X.5Y1.5  
put pencil down  
G1X1.5Y1.5  
F. pick up pencil  
G1X2Y2.5  
G1X2Y.5  
G1X3Y.5  
G1X3Y2.5  
U. pick up pencil  
G1X3.5Y.5  
put down pencil  
G1X3.5Y2.5  
G1X4.5Y.5  
G1X4.5Y2.5  
N. pick up pencil

Student forgot  
"put down  
pencil"

---

**FIGURE 4**



After students created their nameplate design and hand-wrote their corresponding program, the class met in the computer lab the next day where they were provided with instructions (see figure 5) on transferring their program into an electronic form that could be followed by a CNC Piranha FX Router Machine.

As students worked in the computer lab, I facilitated student progress and helped students along with Mr. Mark Bosworth and Mr. Jerry Bonifield from Southwestern Illinois College who provided their time to answer questions, assist students and share information about manufacturing, Precision Machine Technology, job opportunities and programs offered through Southwestern Illinois College. Although Mr. Bosworth was admittedly a little worried about how the hour would go, he shared that he thought the day went great and was even surprised that many of the students completed their programs within 20 minutes.

<b>What did you like about this activity?</b>	<b>What did you better?</b>
Watching the machine cut the wood	How to p
Meeting the students	Getting

Once students saved their program in an acceptable format, Mr. Bosworth and Mr. Bonifield reviewed the students' programs using CIMCO software 8 and helped students make any necessary corrections. At the end of the week, Mr. Bosworth, Mr. Bonifield, and another SWIC instructor, Mr. Lou Marino, returned to my school where they set up the CNC Machine in the cafeteria to run the students' programs to cut

their nameplates during all lunch hours. During this time, my math students had the opportunity to learn how to load their programs into the machine, and to see, firsthand, their nameplates cut by the CNC machine as shown. My students were amazed by how their program moved the machine to cut their initials out of a piece of wood and Mr. Bosworth shared this sentiment as he heard lots of positive comments from students such as “I had no idea I could use math to make real parts, now I know where I can really use these skills”.

Having the CNC machine set up during lunch hours, all students, even those not in my class, had the chance to speak to SWIC instructors, see examples of items made by my math students and other SWIC students from the past, and to learn

more about the job opportunities available through 2-year technical programs.

While Mr. Bosworth, Mr. Bonifield, Mr. Marino and I all agreed that we thought the collaborative activity to showcase math and machining was a success, I wanted to get student feedback in an unfiltered manner. Thus, the day after making their nameplate, students were given an opportunity to reflect and to share their thoughts in an anonymous manner re-

SEE "CULTIVATING"  
NEXT PAGE

What did you like about this activity?	What did this activity help you better understand?	After doing this activity, what would you like to know more about?
Watching the machine cut the wood	How to program machines	How to work on the machines
Making the name plate	Coding, writing computer programs	How the cutting machine works
I liked watching the machine cut the wood	That math is applied to a lot of different jobs	I would like to know some of the jobs that use this machine daily
I liked how SWIC came in and showed/talked to us about the classes that they teach and how they come came to life	It made me better understand how my accuracy and precision can affect an outcome based on my actions	I'd like to know more about the 3D manufacturing as well
I liked creating the graph how I'd like it to look. I also really liked seeing it made so smoothly	It helped me understand the importance of graphing and how you actually will use them in the real world.	More about coding
It was interesting	Graphing	Using math in manufacturing
I liked that we were able to create something with math	The way math is used in the society we live today.	I'm super interested in this occupation.
Graphing and coding	How coding can help and effect life and build on it	How to get into the class and learn to build things with the machine...
I liked how we learned about computer programming at a beginning college level	How to program	How to do more/harder programming



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## FEATURE

"CULTIVATING" CONTINUED

garding three questions: 1) What did you like about this activity?, 2) What did this activity help you better understand?, and 3) After doing this activity, what would you like to know more about? A sample of the students' anonymous comments are shown left.

When professionals from the field of machining collaborate with secondary mathematics teachers to develop real-world lessons/activities, the impact on student knowledge is significant. Not only do students begin to understand how math is used in the real world and apply what they are learning to actually make something, they also gain knowledge about potential job opportunities beyond high school.

I am forever grateful to Mr. Bosworth for taking time to help me begin to understand how math is used in machining. Thank you to Mr. Bosworth and Mr. Bonifield for helping students learn how to write operative programs that can be read by a CNC machine. Thank you to Southwestern Illinois College for providing wood for students to cut their nameplates and to have as a learning memory from this experience. Lastly, thank you to Mr. Bosworth, Mr. Bonifield, and Mr. Marino for spending the day at my school, helping run the CNC machine and for talking to students about the opportunities related to machining.

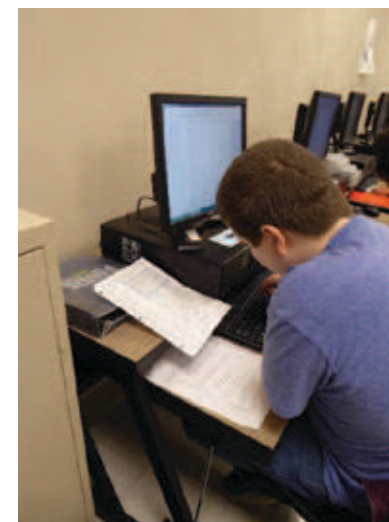
\*Lead Author: Kelly Remijan, PhD (O'Fallon Township High School)

Contributor: Mr. Mark Bosworth (Southwestern Illinois College)

Dr. Remijan is a mathematics teacher with 23 years of experience. In addition to being a classroom teacher and a 2003 Milken National Educator Award Recipient, Dr. Remijan has taught mathematics and prepared future teachers as university adjunct, organized and led professional development as a k-12 grant coordinator for 13 counties in Illinois, traveled to Japan as a teacher ambassador with the Fulbright Memorial Fund Teacher Program, written/received grants such as the Math and Science Partnership Grant, and continues to spearhead STEAM initiatives across all levels as presenter, consultant, and STEM/STEAM advocate. For more information about Dr. Remijan, check out: <https://kellyremijan.wixsite.com/website>.



Sadi D. completed her project with her favorite band name



Trenton B. works on transferring his handwritten program into an electronic form accepted by a CNC Piranha FX Router Machine





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