

## #NTMA2019:

*What is Happening in the 2nd Half*

### Inside this issue

#### **NRL NATIONAL CHAMPIONSHIP:**

Bedford, PA team comes out on top in two days of competition. — p.12

#### **IMPROVING WORKFORCE DEVELOPMENT:**

How can business and industry work with educators. — p.16

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NTMA announces two new programs for members. — p.21





# 2019 NATIONAL EVENTS

For more information visit: [www.ntma.org/upcoming-events](http://www.ntma.org/upcoming-events)

## BACK BY POPULAR DEMAND: TOP SHOPS SEMINARS

February 20 Dallas, TX | May 22 Phoenix, AZ | August 21 Hartford, CT

Tap into your company's full potential and learn how your shop can become a Top Shop. Expand your knowledge in multiple facets of your shop. Topics will focus on Shop Floor Management, Shop Technology, Human Resources and Financial Analytics.

IN PARTNERSHIP WITH:



## CHAPTER LEADERSHIP SUMMIT

January 30 - February 1 Nashville, TN

Connect, Learn, Lead. Chapter Leadership Summit is all about maximizing your NTMA membership at the local level. Learn ways to engage your chapter and build your regional coalition for stronger companies and a stronger industry.

## THE MFG MEETING

March 6 - 9 Tucson, AZ

NTMA partners with the Association for Manufacturing Technology (AMT) for this interactive 4-day discussion of technological advances, innovative strategies and real-life case studies. It's the perfect platform for manufacturers to gain and share industry knowledge.

## EUROPEAN TECH TOUR

March 31 - April 6 Munich to Milan

Take this opportunity to learn and observe global best practices that can be applied in your own company. We've scheduled strategic stops and tours to highlight some of Europe's most successful manufacturing companies.

## LEGISLATIVE CONFERENCE

April 8 - 10 Washington, D.C.

There's power in our collective voice. Join NTMA member companies from across the country as we converge in Washington to meet with legislators and policy makers.

## EMERGING LEADERS CONFERENCE

April 29 - May 1 Louisville, KY

To insure the future successes of our businesses and our industry, we have to build the future today. NTMA gathers the best and brightest up-and-coming industry leaders to network, share knowledge and brainstorm about tomorrow's manufacturing industry.

## NATIONAL ROBOTICS LEAGUE COMPETITION

May 17 - 18 California, PA

Crunching metal, flying sparks-- it's a gladiator-style competition between robots designed and built by students. Come witness tomorrow's workforce in action today. It's a battle of epic proportions that truly is a win for both students and industry.

## FALL CONFERENCE

October 15 - 18 Austin, TX

NTMA's signature event is not to be missed! Our annual conference pulls together all that is great about NTMA into three days packed with networking, advocacy and learning. You'll enjoy nationally acclaimed speakers, roundtable discussions, social events and sessions designed to educate and inspire—consider it an opportunity to recharge both personally and professionally.



## WELCOMES NEW MEMBERS

### ADVANCED ENERGY IDEAS

#### FABRICATION

Arizona Chapter  
Keith Adams  
1113 W Birchwood Ave  
Mesa, AZ 85210

### COMMUNITY COLLEGE OF DENVER

Educational Organization  
Eric Miller  
Campus Box 211  
Denver, CO 80217

### EURO MACHINING ENTERPRISE, INC.

San Francisco Bay Area  
Chapter  
Ptryk Grobelny  
3280-A Edward Avenue  
Santa Clara, CA 95054

### WEIGH SAFE

Northern Utah Chapter  
Brandon Domain  
420 N Geneva Road  
Lindon, UT 84042

### WHISTLER MACHINE WORKS

General  
Christopher Warren  
3036 W Turner Rd  
Whistler, AL 36612-2019



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

## NTMA LEADERSHIP TRAINING

The Emerging Leaders Team of the NTMA has determined a need for a defined leadership program offered through the Association, and through much vetting of the various programs available on the market, the team has decided to move forward with the Corps Group training. What we need to be able to do before moving forward is ensure that we have all 20 slots filled for a Class of 2020. After reading the information below, if you feel that you or someone in your facility would be a good fit for this program, please email your interest to James Mayer [jmayer@ntma.org](mailto:jmayer@ntma.org). With a full class of 20 participants, the cost per participant would be \$2,000 for the year.

“Executing with discipline and focus in fast changing, dynamic, and sometimes chaotic environments reflects our experience as military officers, fighter pilots, and corporate executives. In these arenas, efficiency was critical – repetitive mistakes that consumed limited and valuable resources were not acceptable, nor

were exhaustive efforts that generated little gain. We have proven track records of applying knowledge and expertise to assess specific situations, ensure rapid and effective decision-making, and help teams drive results for mission accomplishment. Our experiences and the processes we incorporate to drive High Performing Team characteristics, Cultures of Excellence and outstanding results, resonate in results-driven organizations like NTMA, and we believe the application will be successful for the entire Team.”

The Corps Group delivers a comprehensive solution to your business challenges by helping leaders create an environment that fosters learning and the development of disciplines to ensure long-term success. Our methods involve:

- High Performing Teams to Drive a Culture of Excellence
- Culture of Learning to Drive Greater Value Faster
- Defined Future State and Leadership Alignment

SEE "TRAINING" PAGE 5



DOUG DEROSE / INTERIM PRESIDENT-NTMA

This year instead of holding actual Team Meetings, our Teams will help guide the content presented as breakout sessions called “TeamTracks”. This is an opportunity to showcase how each of our Teams con-

The schedule will also include some Association-specific meetings, because governance is a full-time job. There will be board meetings for NTMA, NTMF and NTMA-WD. We have added a Team Leaders meeting to provide additional orientation and a Trustees Roundtable to

DOUG DEROSE / NTMA INTERIM PRESIDENT





# THE RECORD

## OPERATIONS & EDITORIAL

Doug DeRose, Interim President  
James Mayer, Editor

## NTMA EXECUTIVE COMMITTEE

Mark Lashinske, Chairman  
*Modern Industries Inc. – Phoenix, AZ*

Alan Ortnier, Vice Chairman  
*Sirois Tool Co., Inc. – Berlin, CT*

Samuel Griffith, Board Member  
*National Jet Company – Cumberland, Maryland*

Mark Vaughn, Board Member  
*Vaughn Manufacturing Co., Inc. – Nashville, TN*

Tom Sothard, Board Member

Gillen Young, Board Member  
*Custom Tool, Cookeville, TN*

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## NATIONAL TOOLING & MACHINING ASSOCIATION

1357 Rockside Road  
Cleveland, OH 44134  
1-800-248-6862  
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Volume 40 / No 6



## NTMA NEWS

### "TRAINING" CONTINUED

- Strategic Principles and Development of Transformational Execution
  - Alignment of Teams and a Culture of Collaboration
  - Methods for Accomplishing Goals through a Straight Forward Execution Rhythm
  - Reducing Time to Insight through the Discipline of Debriefing and Adapting
- The Corps Group, believes learning truly takes place when people are involved and having fun. Therefore, they engage the team from all aspects of adult learning- to drive behavioral change rapidly.

The high impact sessions would be:

- Session #1- How to build and sustain a High Performing Team
- Session #2- How to become a High Performing Leader with Individual Leadership Development Plans
- Session #3- How to think, act and develop a High Performing Strategy with real world Strategic Development



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# THE INCENTIVE THAT WON'T BEND: HOW THE METALWORK MANUFACTURING INDUSTRY CAN LEVERAGE THE STRENGTH OF THE R&D TAX CREDIT

BY: TRACY LUSTYAN

Looking at the numbers, the U.S.'s fabricated metal industry is anticipating substantial growth in terms of revenue, employment and exports over the next four years. The structural steel fabrication market alone is expecting to reach more than \$184 billion by 2026, with manufacturing being one of the primary sectors of the market.

While these numbers certainly offer hope for those in the business of metal manufacturing, it also means that competition will likely increase, forcing these companies to innovate like never before.

Luckily, this innovation comes with a substantial financial benefit – the R&D Tax Credit. This government incentive, which has helped NTMA Members realize \$38.8 million in tax savings, was enacted in the early 1980s to stimulate economic growth and drive domestic business. The credit offers American businesses (and specifically American manufacturers) the chance to receive significant tax relief for what often amounts to their daily projects.

Over the years, the credit has evolved for the benefit of U.S. businesses, with the most recent changes coming as a result of the passage of the Tax Cuts and Jobs Act. Businesses working in the manufacturing industry shouldn't turn a blind eye to this tax saving opportunity – particularly with this legislation expanding individual AMT relief and eliminating the corporate AMT – changes that will greatly impact the number of businesses able to benefit from this incentive.

And with a host of qualifying activities, manufacturers are well positioned to reap the benefits of a stronger R&D Tax Credit.

## A POWERFUL TOOL

The incentive, which has only been strengthened over the years by Congress, has helped companies in the U.S. claim roughly \$10 billion a year in federal tax savings – additional revenue that can be put right back into their business. While tax code provisions are intimidating enough to send any business person running for the hills, it's key for those

working in any field of manufacturing to realize that the R&D tax credit isn't just about basic research, but also about applied research.

Simply put, the incentive rewards manufacturers who bring a new or improved product to market, as well as those who are improving the manufacturing process itself. Companies that have made technical enhancement to any product or process that they use on a daily basis would more than likely be a good candidate for the R&D credit.

The everyday technical problem-solving that manufacturers perform to improve an existing product, the steps taken on the factory floor to solve a production issue to make that product, or even the trial-and-error performed to ensure the product meets a client's specifications are all generally what qualify these businesses for the credit.

## FINDING THE APPLICATION

So, how valuable can the R&D Tax Credit be for a job shop or contract manufacturer? Countless production and design specializations make precision machine shops, fabricators, stampers and other metalworking companies potentially eligible for substantial tax savings.

Manufacturers in general have successfully claimed more than \$1.5 billion in credits working with alliantgroup. Here are some examples of qualifying activities that have led companies to large returns:

- Integrating new materials to improve product performance and manufacturing processes
- Achieving compliance with changing emissions laws and regulations
- Prototyping and three-dimensional solid modeling
- Streamlining manufacturing processes through automation
- Programming PLCs, CNCs, RTUs, DCS, PACs, CLCs, CNCs, SCADA and more
- Exploring new or improved material applications and testing alternative uses of steel, iron, aluminum or plastics

Manufacturers need to simply create

or improve upon an existing product or process in order to set themselves up for a return. When it comes to actually calculating the credit, the end result will ultimately be impacted by the supplies consumed or used during those qualifying projects and the wages of the workers performing those specific projects.

## A HISTORY OF SUCCESS

The key for manufacturing companies attempting to claim credits is making sure to take into account all of the activities completed during the lifecycle of the project. This includes activities involved in the ideation, design, testing and production phases.

One example of a company claiming the credit came when a small secondary automotive manufacturer reported expenses dealing with developing and prototyping its manufacturing process for certain automotive parts. For four years' worth of qualifying projects, this company received more than \$1 million in federal and state tax credits.

In other examples, a steel ring manufacturer received \$406,000 in federal credits for design improvements in its products, a manufacturer of high-tech armor defense was granted \$787,000 in federal credits and a multi-tools manufacturer was able to claim more than \$286,000 in federal credits.

Manufacturers of all shapes and sizes are turning to government incentives to put money back into their company to create and maintain a competitive edge. With numbers like these, any manufacturer should take a second look at what the R&D credit has to offer. Doing so might be the most profitable move they make – so why wait?





## NTMA-U UPDATE

As many of you know, the last few months NTMA-U has been put under the microscope. There have been leadership changes and open discussions regarding a change in direction for 7+ year old, NTMA-developed online training program. In fact, there are still some potential game-changing options being researched. However, the underlying concept of NTMA-U will remain. While the platform and the method of deploying the program is being looked at to establish a “refresh,” or a “2.0” look and feel, rest assured that NTMA-U is not going away. We will have more information on the future of the portals as the summer arrives, so stay tuned.

We are pleased to announce that Dan Flick has joined our staff as our new NTMA-U Technical Support person. Dan has extensive experience in the field as a machinist, as an instructor and program director. He will be a big part of our NTMA-U course review process and we look forward to his recommendations on how we can improve our educational and training offerings to the membership.

### NTMA-U ARTICULATION AGREEMENT

In recent months there have been some

confusing messages being circulated about the agreement between NTMA and the University of Akron. To set the record straight, both NTMA and the University of Akron have always been behind the Articulation Agreement and we remain excited about its potential. In the next few weeks we will sit down with the University of Akron to discuss ways to further promote the program. In a nutshell, this agreement grants block credit for technical and academic courses offered in the Automated Manufacturing program at University of Akron for NTMA Journeymen who have successfully completed the NTMA Journeyman's Machinist Program. More information should be coming soon, but to find out about the program, contact Bill Padnos at bpadnos@ntma.org.

### PRE-APPRENTICESHIP PROGRAM

Developed last winter, NTMA's Pre-Apprenticeship program is designed to develop entry-level skills for employment and enhance the skills set for existing employees. Program participants will benefit by learning skills and behaviors that will lead to success as an apprentice at your shop. You benefit

by providing your company with the opportunity to attract and engage new talent in a cost-effective and flexible manner.

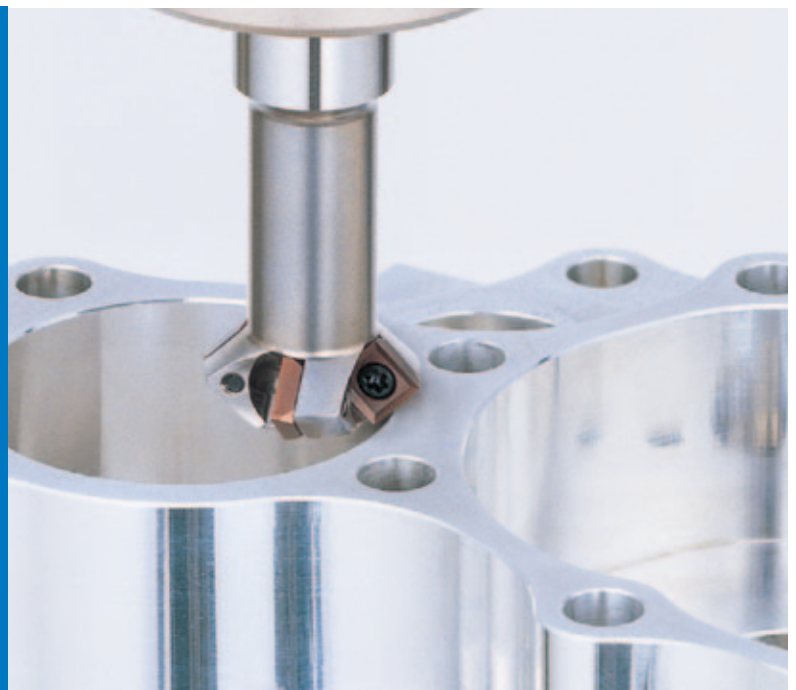
The NTMA Pre-Apprenticeship program combines four of our in-depth online training courses via NTMA-U with relevant reading material, hands-on exercises, and either the physical parts or the blueprints to make the physical parts for the hands-on exercises. Visit <http://tinyurl.com/NTMA-PreApp> for more information. For questions or to get started, contact Bill Padnos at bpadnos@ntma.org.

We believe that NTMA-U is a powerful resource and a tool that can be used for your apprenticeship and general training programs for multiple skilled positions at your companies. NTMA is committed to NTMA-U and its role as one of the main member benefits of your Association!



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Above: Campfire chats.  
Below: Networking activity

## NTMA EMERGING LEADERS TAKE ON LOUISVILLE

5TH ANNUAL EMERGING LEADERS CONFERENCE IN LOUISVILLE, KY A SUCCESS!

From April 29 through May 1, NTMA's Emerging Leaders gathered at the Marriott Louisville Downtown to network with peers, learn from experts and grow their skill sets. The group had an action packed two-and-a-half days filled with both work and fun.

Performance metrics, machine metrics, time management and advocacy were the hot topics covered this year by expert speakers from The Franklin Partnership, CliftonLarsonAllen, goBRANDgo! and machinometrics. The conference also featured campfire chats – short, quick chats led by Emerging Leaders Team Members on pressing topics including attracting good talent to your company, promoting a positive and inspiring environment among employees, negotiation tactics, performance review ideas and tips and new technologies implemented on the shop floor.

Along with all the learning, there was also time for a plant tour at

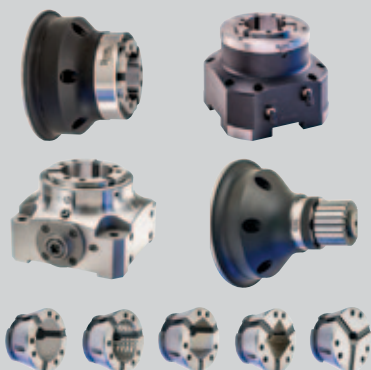
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the Louisville Slugger Museum & Factory where attendees had the chance to see where they have been making baseball bats since 1884. The factory produces about 3,000 full sized bats a day - quite impressive! There was also time for a networking night at Patrick O'Shea's Public House where attendees experienced some true Louisville staples – Old-Fashioned making and bourbon tasting.

A special thank you to Benz Incorporated and machinemetrics for their sponsorship of the event.



And don't forget to mark your calendars for the 2020 Emerging Leaders Conference scheduled for April 27 -29 in Kansas City, MO!



Networking activity

# HOSTING AN NRL COMPETITION – OVERCOMING THE “UNKNOWNNS”

Every year in late November/early December, our Rocky Mountain Chapter BOD schedules a planning day to discuss and makes plans for the upcoming year. We do our due diligence, review the previous year, what is successful, what was not, review budgets, discuss available resources (both time and monies), always trying to identify existing and future programs and events that bring real value to our membership.

For several years, we have discussed, but not pursued, hosting our own National Robotic League (NRL) competition. Our reasons for not pursuing varied. There were lots of “unknownns” (costs – time – student interest – school interest – available venues – understanding competition rules – how to score a competition – level of volunteer support – member support – NTMA support, etcetera, etcetera), all legitimate concerns, but we decided it was time for us to make a commitment to sponsoring an NRL event and we did.

## BUILDING A TEAM

Our first order of business was identifying those board members with a passion for the event and appointing a leader. That part was easy. We had several board members step forward and board member Amy Primrose took the lead. Amy has been serving on our board for two years. She and her family run a contract swiss machining business in Broomfield, CO. Now having been through the entire process, from our initial planning meetings, to successful completion, a valuable lesson was learned. We cannot overemphasize, the importance of an involved leadership team and a focused leader that champions your efforts. Amy was our champion!

## DEFINING GOALS

We needed to have a common understanding of our event and program goals. The results of the NRL program may vary, but our overarching goals were: to promote and expose students to manufacturing and give them some understanding of potential career pathways (workforce development); to support and advance STEM focused education

programs and show their practical applications; to link students to industry mentors and businesses; to involve students, parents, schools and staff in an educational process that is engaging, creative and FUN!

## OVERCOMING THE UNKNOWNNS

You have heard the expression “you don’t know, what you don’t know”. In the case of our chapter putting together the initial NRL competition, this was quite true. We do have technical experience and backgrounds for building most things mechanical, but we had little experience putting together an educational program, that would produce our desired goals (see above). This part of program development can be daunting, but we quickly learned something “really cool”; there are people and organizations out there that “DO KNOW” and are eager to help.

We relied heavily on Bill Padnos (NTMA Workforce Development Manager). We were in contact with Bill on a regular basis. He was terrific, as he steered us through the process. Because of his many experiences with other chapters, he was able to coach and point us in directions we needed to go. He and NTMA staff were a constant source of information and encouragement.

## OTHER UNKNOWNNS – THAT WE NOW KNOW

- We learned there were high schools, eager to engage with our manufacturing organization. Out of these schools the competition teams were formed.

- We worked with Community College of Denver. They have an active program that offers associates degree in manufacturing technology. We were able to use their facility as the venue for our competition.

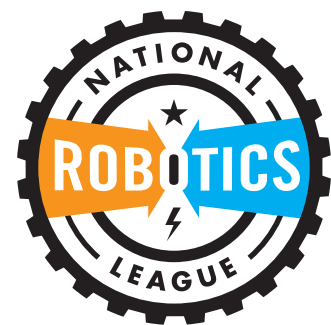
- We sought out several of our member companies to provide guidance and mentoring, to the high school teams. They responded positively. Each team had at least one mentor.

- We expanded participation to use some of the “other” resources available through the schools and organizations.

One of the participating high schools had a “media team”, that wanted to be involved. They provided audio/visual assistance and served as event emcees. We also used volunteers from supporting schools and companies for (judging, safety, reception, documentation review,).

- We had no arena to stage our competition. Bill Padnos put us in touch with several NTMA chapters that already had an arena and they were gracious enough to let us use theirs. Mark Lashinske from the Arizona Chapter (now Chairman of the NTMA Board) drove their portable arena from AZ. to CO. Thank you Mark!

There were many things we learned going through this process. We learned that going from the unknown to the known was not so daunting. We learned that much of the information and help we needed was readily available. We learned there is an educational community out there, wanting to engage with the manufacturing community. We learned that being involved in the NRL served as a great vehicle for building relationships with schools, and businesses. We are excited and already making plans for next year’s event. If your chapter is not yet involved sponsoring an NRL event, we would encourage you to consider it.





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# **Student Teams Create Combat Bots, Also Fight Industry Skills Gap at National Robotics League Championships**

BEDFORD, PA TEAM COMES OUT ON TOP IN TWO DAYS OF COMPETITION  
(SEE NEXT PAGE)



# NATIONAL ROBOTICS LEAGUE CHAMPIONSHIPS

BEDFORD, PA TEAM COMES OUT ON TOP IN TWO DAYS OF COMPETITION

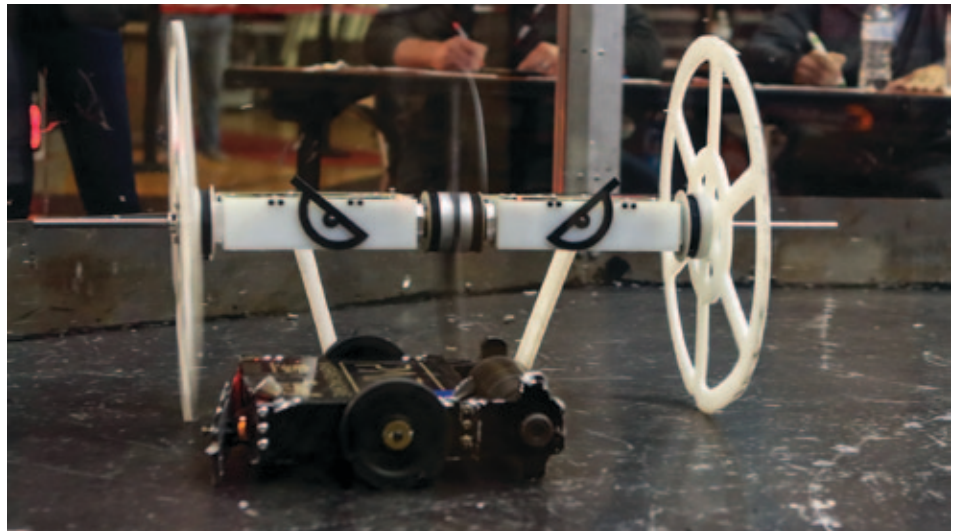
California, PA – After two days of high-intensity, double-elimination battles, a winner of the 2019 National Robotics League (NRL) Championship was crowned. Rosie the Riveter designed, built and driven by a student team from Bedford High School in Bedford, PA reigned supreme over the competition of fifty-eight teams from seven states (Arizona, California, Florida, Kansas, Ohio, Pennsylvania and Utah) at the Convocation Center on the campus of California University of Pennsylvania last weekend.

“We congratulate the Grand Champion team from Bedford High School as well as all of the outstanding student participants and their academic and industry advisors for their efforts in this year’s competition,” said Bill Padnos, NRL Program Manager and NTMA’s Workforce Development Manager. “Every team brought energy, creativity and tenacity to the ring, which made the battles exciting and fun.”

“NTMA’s NRL program is designed to make manufacturing interesting and accessible to young people,” Padnos continued. “We have all heard about the skills gap in manufacturing - companies cannot find qualified workers to fill their open positions. The NRL is the only job-driven, project-based STEM learning experience created by industry to solve its biggest issue – recruiting that badly needed future workforce. The NRL shows students that if they want high-tech, high-impact careers, manufacturing is a good path.”



Above: Grand Champion, Bedford High School - Rosie the Riveter. Below: Team UGEEEE Battle Bot



## GRAND CHAMPION:

Bedford High School – Rosie the Riveter  
Bedford, PA – SWPA BotsIQ

## 1ST PLACE:

Bedford High School – Rosie the Riveter  
Bedford, PA – SWPA BotsIQ

## 2ND PLACE:

Pine-Richland High School – M.O.A.B.  
Gibsonia, PA – SWPA BotsIQ

## CONGRATULATIONS TO THESE AWARD WINNERS:

### 3RD PLACE:

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Bloomsburg, PA – Rage in the Cage,  
Bloomsburg, PA

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Pine-Richland High School  
Gibsonia, PA – SWPA BotsIQ

### COOLEST BOT

CMU Robotics Club – UGEEEE  
Pittsburgh, PA

### BEST ENGINEERING DOCUMENTATION

Frazier High School- VOID  
Perryopolis, PA – SWPA BotsIQ

### BEST SPORTSMANSHIP AND BEST ENGINEERED BOT

Hempfield Area High School – Lucy  
Greensburg, PA – SWPA BotsIQ





## FEATURE

NATIONAL TOOLING AND MACHINING ASSOCIATION

## TCI PRECISION METALS DONATES MILLING SYSTEM TO ROBOTICS TEAM

Gardena, Calif.-based TCI Precision Metals, in collaboration with the National Tooling and Machining Association (NTMA) and Tormach, has donated a Tormach PCNC 440 mill to the Downey High School Striking Vikings robotics team in Downey, Calif. The new addition will help the team machine and fabricate their battlebot robots, which they enter into National Robotics League competitions.

The Downey High School robotics team is an after-school club comprising students enrolled in the school's engineering workforce development program. It provides the students with an introduction to engineering design, principles of engineering, aerospace engineering, and engineering physics.

TCI Precision Metals also provides the robotics program with machine-ready blanks for student projects.

The machine donation is part of a coordinated effort with the National Robotics League, a manufacturing workforce development program of the NTMA designed to help students explore and consider manufacturing as a viable career option. The program provides hands-on, experiential STEM learning experiences through business/education partnerships that will spark interest and build the current and future workforce needed by the manufacturing industry.



The Downey High School Striking Vikings robotics team with instructor Glenn Yamasaki (Row 2, left), Chris Fox of Tormach (Row 2, right), and Ben Belzer of TCI Precision Metals (Row 2, second from right).







## HOW CAN BUSINESS AND INDUSTRY WORK WITH EDUCATORS TO IMPROVE WORKFORCE DEVELOPMENT? NOW IS A GOOD TIME TO REACH OUT

If you are like many business and industry leaders, you are struggling to secure the talent required to move your company forward. According to SHRM's report "The Global Skills Shortage," 7 million jobs were open in December 2018, but only 6.3 million unemployed people were looking for work. While the number of individuals entering the workforce is a mostly static issue, couple that statistic with the skills needed by employers verses what students and graduates possess; the result is a challenge that must be addressed.

Not enough students are proactively considering the breadth of available career options and the commensurate education and credentials that are needed to reach their goals. More education alignment with local economic needs, transparency in the information about

careers in sectors not as well known to the general public, and a deliberate focus on helping students prepare for these opportunities would improve this scenario. Quality career and technical education (CTE) programs are in a position to address the issue but need your partnership. There are some great opportunities on the horizon to consider.

The recent passage of the federal "Strengthening Career and Technical Education for the 21st Century Act" provides one opportunity to bring business leaders to the table with educators. The law, known to educators as "Perkins V (read "5")," was reauthorized by Congress and signed into law by President Trump nearly a year ago. State CTE leaders are currently working on their plans required by the government to guide how the law will be implemented

at the state and local level.

Local recipients of Perkins V funds are required to consult with stakeholder groups as they develop their own implementation plans and states are developing guidelines and supports to help them meet this objective. If you are an industry with locations and employees throughout the state, make sure that you have reached out to CTE leaders within the state agency responsible for oversight. You can find that information on the website managed by the U.S. Department of Education: <https://cte.ed.gov/grants/state-profiles>

Perhaps more important related to your company's hiring needs, reach out to the local CTE programs in your community if you have not already. The new Perkins law includes a needs assessment process that will drive development of

CONTINUED NEXT PAGE

the local Perkins application that local CTE leaders will be submitting to states for approval. Business and industry representatives are specifically named as an important stakeholder and local CTE programs will be required to reach out to industry leaders to participate in this process. If your industry has never been contacted by a CTE program, make sure they know you exist.

Introduce yourself and determine if there are ways to work collaboratively to address workforce development issues you are facing. The new focus of the Perkins V law includes strengthening consideration of the economic drivers in communities and regions where CTE programs reside, and designing programs that help educate and prepare students for those opportunities. Collaboration must be meaningful in order to be successful. This means more than an hour-long meeting once per quarter. It might mean providing work-based learning opportunities to students so they can experience the “real world” environment of your business or providing mentors from your company to help guide these students on what it means to be part of

your productive workforce.

This is not usually “easy” work, but strong educator-employer connections can be powerful and there are many leaders who have found local CTE programs to be an outstanding feeder of their workforce pipeline. One example, the International Sign Association (ISA), a national trade organization representing many different manufacturing companies

and other leaders who are working in sectors supporting signage and display information. ISA has developed a national campaign that connects their members with educational organizations in their local area, and produced resources to assist them in their conversations to build partnerships.

ACTE has created a primer document  
SEE “WORKFORCE” PAGE 21





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# 10 REASONS MANUFACTURERS NEED SOFTWARE & TECHNOLOGY

BY ADAM GRABOWSKI, DIRECTOR OF MARKETING, GLOBAL SHOP SOLUTIONS

Global Shop Solutions' core values are to love, serve, and care for our customers. We help them simplify their manufacturing and deliver a quality part on time every time. Here's what our customers identify as the top 10 reasons they continue to use ERP software and technology.

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4) Grow sales. ERP software provides a hidden return: sales growth from delivering a quality part on-time every time and knowing your bids are competitive, profitable, and margin-true.

5) Know job costs. When you can trust your costing process, you know how much each job costs. Fast quoting and accurate pricing brings in new customers and brings back existing ones.

6) Maintain accurate inventory. Knowing jobs are never late from lack of materials or more expensive than they should be reduces risk.

7) Control labor costs. With ERP, shop floor operators can log on and off jobs and job sequences without leaving their work stations. Collecting time and performance metrics becomes fast, efficient, and accurate, which allows you to reduce and control your labor costs.

8) Great customer service. ERP lets you go beyond merely upholding promises and stay one step ahead by anticipating customer needs and having all the information you need when they ask.

9) Competitive edge with technology; easy customization. ERP technology lets machines, systems, and devices do much of the work employees used to, allowing them to focus on decisions, thinking, and improving the business. Customize into the system what is special about your manufacturing.

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## ABOUT THE AUTHOR

Adam Grabowski is the Director of Marketing at Global Shop Solutions. He is responsible for translating the company's business objectives into successful brand, marketing, and communication strategies to drive awareness, revenue, and loyalty.



## "WORKFORCE" CONTINUED

ment, a Guide to Understanding CTE ([https://www.acteonline.org/wp-content/uploads/2018/02/CTE%20Guide\\_%20Final%20Version.pdf](https://www.acteonline.org/wp-content/uploads/2018/02/CTE%20Guide_%20Final%20Version.pdf)), which helps explain some of the basics regarding CTE such as the Career Clusters framework that organizes workforce sectors into 16 groups, and the terminology used by the educators that teach the programs. A good place to begin a conversation with a local education program is learning to speak each other's language and the Guide may help with that conversation.

The Association for Career and Technical Education understands local business leaders are seeking solutions to their workforce challenges and that CTE can and should be a support for these issues. We held the first "Workforce Development through CTE Summit" in December of 2018 with over 30 national trade associations, federal government leaders and representatives from national foundations. We have developed a set of four scenarios – solutions to help bridge CTE with the business and industry community. Our goal is to ensure that more students consider and enter CTE programs that are helping to drive the American economy.

To find out more about the Workforce Development through CTE Initiative, visit [www.acteonline.org/wfd-cte](http://www.acteonline.org/wfd-cte). ACTE will be hosting the second Summit on December 3-4 in Anaheim and we would love to have you join us to continue pursuit of solutions. Finding a way to work together to solve today's workforce skills challenges is good for students and it's good for business!




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## EXCITING NEW MEMBER BENEFIT PROGRAMS

It is with great pleasure that we are announcing two new programs designed to be member benefits! We have added Constant Contact as an email marketing service and National Purchasing Partners to provide you with a multitude of companies for your business and your employees to use. Please see the explanation of each, and if you have any questions, please reach out to James Mayer at [jmayer@ntma.org](mailto:jmayer@ntma.org).

### CONSTANT CONTACT

With NTMA's partnership with Constant Contact, it has never been easier to connect with your customers! Our modern, mobile-optimized templates and drag-and-drop editor makes it easy to create, customize, and send professional emails to highlight upcoming events and communications. Our marketing advisors can help you—whether you are sending your first email newsletter or switching services. Constant Contact delivers everything you need to connect with your members.

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\*If you have an existing Constant Contact account send an email to [partnersupport@constantcontact.com](mailto:partnersupport@constantcontact.com), in the subject line put “move account” and in the body of the email list your username and ask the team to move you under the partner name- ntma. Within a day the team will move your account and update your pricing, no additional action needed.

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On Friday, April 12, 2019, the Cleveland NTMA Chapter took a tour of the NASA Plum Brook Station located in Sandusky, OH. Plum Brook Station is a remote test facility for the NASA Glenn Research Center in Cleveland, OH and is home to four world-class test facilities which perform complex and innovative ground tests for the international space community.

The group saw the Reverberant Acoustic Test Facility which is the world's most powerful spacecraft acoustic test chamber, the In-Space Propulsion Facility which is the world's only facility capable of testing full-scale, upper-stage launch vehicles and rocket engines under simulated high-altitude conditions along with much more.



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