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2018 EVENTS

LEARNING

- Plant Managers Roundtable • Chicago, IL • March 19—20
- Software Bootcamp • Cleveland, OH • May 10—11
- Sales & Marketing Conference • St. Louis, MO • June 6—8
- Emerging Leaders Roundtable • Nashville, TN • August 22
- Plant Managers Roundtable • Cleveland, OH • September 24—25
- Financial Managers Conference • Dallas, TX • November 7—9

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

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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 with any stories, photos or ideas. We look forward to celebrating our diamond anniversary together!

NTMA NEWS

NTMA RECOGNIZES TOP SAFETY PERFORMERS

You should have received an email this month with a personal link to the NTMA Safety Award Competition Survey based on OSHA Form 300A. Please take a moment to complete it.

The purpose of the survey is to present the top-performing companies with an NTMA Safety Award Certificate that can be proudly displayed in their company, as well as provide NTMA the composite data that will allow them to represent the member with OSHA and other regulatory agencies. A company's eligibility to receive this award is determined by a calculation using the number of injuries versus the total number of man-hours worked in that calendar year. Those eligible to receive this award are among the best in the industry and something the owner and employees should be proud of.

THE DEADLINE TO COMPLETE THE SURVEY IS APRIL 1, 2018.

Please be sure to read the instructions carefully. They contain an important reminder regarding Federal requirements for the official OSHA Form 300A.

If you no longer have your email, you may complete the survey using this link: <http://ow.ly/kOf330it0ga>



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PRESIDENT'S UPDATE

DAVE TILSTONE / NTMA PRESIDENT



Advocacy is the focus of this issue and it is one of the three pillars of NTMA and our mission (Advocate, Learn and Network). Advocacy often comes to mind this time of year as we approach the date of our Legislative Fly-In to DC with One Voice April 16-18, 2018. Visit www.ntma.org and click on events to register.

Many of our members join NTMA because of our track record and effective lobbying as well as public relations provided by Franklin Partnership and Bracewell, respectively. Our One Voice efforts are especially important and relevant with an administration that is focused on improving the competitiveness of manufacturing. The impact of the 2017 Tax Reform Law is still being studied by accounting professionals, but it's clear that the intent was to put American manufacturing on a more competitive tax basis to international competitors. With great effort and support, One Voice was successful and instrumental with shaping the tax reform legislation as it relates to our industry and NTMA members. Another example of One Voice in action: A recent proposal delivered to the office of the president by The Department of Commerce recommends tariffs and restricts imports on steel and aluminum imports. Although your initial reaction might be to support this proposal, it would penalize our members who rely on foreign steel and aluminum alloys

not available from domestic suppliers. Last year, we met with Secretary of Commerce Wilbur Ross to inform him and his office of the negative impact this proposed tariff would have on our industry. One Voice continues to use the media channels and their influence on law makers to educate on the potential impact of this proposal. We are recommending a more targeted approach on foreign imports that excludes allies such as Canada, Mexico, Japan and Europe-- countries who are your key suppliers.

The Legislative Fly-In is an excellent way to be heard on the Hill. One Voice arranges meetings on the Hill with congressional staff and legislators from your district. Upon arrival into Washington, the Franklin Partnership and Bracewell provide an overview of key legislation and regulations being considered and their potential impact (good and bad) on your business. They also provide a profile of your congressional representatives regarding their position on the proposed regulations and legislation. With this information you are well prepared to explain the potential impact their votes will have on your business... it's very powerful for them to receive information directly from you, their constituents. In this way, you make a difference. Together we can make a difference!

Another important component of our advocacy efforts: presenting a positive image of our industry to the public and more specifically to parents, guidance counselors and to students. The National Robotics League

(NRL) is our program to attract young people to our industry. We have a strategic initiative to expose 20,000 students to our industry in the next two years. Because of the success of the NRL, we are on the path of achieving this goal. Thanks to the passion and leadership of Bill Padnos, our chapters, NTMA members, educators and numerous dedicated volunteers as well as sponsors, the NRL is introducing young, bright students to our industry. Through their involvement with the competitions, they are seeing that our industry provides a career path that is safe, challenging and provides a compensation package that in many cases exceeds four-year college degree programs. If you factor in the student debt many accrued when acquiring a college degree, a career in precision manufacturing is the best career path. Without these bright, young students entering our industry we will be facing an ever-increasing skills shortage. Please support your local NRL chapter program and if you don't have one, please contact Bill Padnos at padnos@ntma.org. He can explain and help you get an NRL program started.

DAVE TILSTONE / NTMA PRESIDENT

Dave Tilstone



THE RECORD

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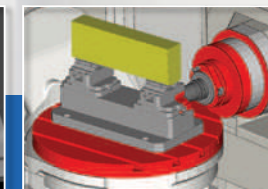


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TRUMP'S FIRST YEAR: DELIVERING ON CHANGE

BY OMAR NASHASHIBI,
THE FRANKLIN PARTNERSHIP, LLP



The 365 days each seemed like an eternity, but taken together, the first year now looks like a blur. President Trump has many supporters and more than his share of detractors, but they can all agree he is living up to his campaign promise to shake up Washington. He is constantly keeping his fellow Republicans on edge and has managed to do what no politician could do in 2016 – unite Democrats. Assessing accomplishments of any president's first year is always challenging given they are but only one of three branches of the federal government and Congress rarely acts on major legislation.

The most obvious success of the president's first year in office was signing into law the Republican tax plan drafted by Senators and Representatives. Roughly 80 percent of individual Americans now pay lower taxes in what ranks as the fifth largest tax cut as a percent of GDP since 1964. In a major victory for certain manufacturers, C-Corporations now pay a 21 percent income tax rate down from 35 percent. For the majority of U.S. businesses structured as pass-throughs, the top effective tax rate through 2025 drops to 29.6 percent (on the first \$315,000) from 39.6 percent. The new law expands the Section 179 Equipment Expensing provision and temporarily allows for 100 percent business expensing.

However, outside of a new tax law, the president lacks many significant policy victories, though in his first year he definitely changed how the government functions – especially at key federal agencies. Overall, the federal

government maintains roughly the same level of employees today as it did when President Obama left office and even when President George W. Bush began his term. Despite the overall numbers, in key areas the administration made profound changes during its first year, especially in the total of federal regulations issued.

In 2017, federal government agencies released 32 major rules (more than \$100 million effect on the economy), a quarter of the 127 issued under President Obama's last year and the lowest in any year since Congress created the category in 1996. Another measurement of regulatory activity commonly used is the sheer number of pages printed in the Federal Register annually notifying the public of rules, regulations, and other government actions. At 61,950, the year 2017 saw the fewest pages printed since 1992 and well below the 95,894 pages Americans had to review in 2016 if they wanted to know what the federal government was doing for (to) them.

Nowhere has the Trump effect been felt more than at the Environmental Protection Agency (EPA). Through Christmas, more than 700 EPA employees took buyouts, retired, or quit with the Administration publicly stating it will seek to shrink the Agency's current 15,000 workforce by up to 4,000 employees. The EPA Administrator recently announced the implementation of a "Lean Manufacturing" approach to policymaking, with a specific goal of expediting infrastructure project reviews

and transferring more power to enforce environmental laws to the states. The EPA is also rewriting major Obama era rules covering power plant emissions, ground level ozone, and federal jurisdiction over inland waterways, among others. While environmental groups are immediately challenging these actions in courts, President Trump has distinctly altered the direction of the EPA and certainly changed the composition of the Agency itself.

On the campaign trail, the president also mentioned the "terrible" trade deals previously made, vowing to renegotiate (or terminate) NAFTA and to balance the trade deficit. In this space, the president has not met the high bar set. In part due to a robust economy leading to increased consumer demand, the U.S. trade deficit jumped over 12 percent to \$566 billion in 2017, the highest recorded since 2008. Imports from China and Mexico also reached new highs as both countries sit firmly in the president's crosshairs on trade negotiations.

Manufacturers continue to watch the NAFTA negotiations closely, which the administration had hoped to conclude in 2017 but remain ongoing. As the president focused much of his 2017 policy efforts on taxes, trade priorities took a back seat, particularly in the second half of the year. Many in Washington expect a renewed emphasis on global trade as we have already seen the administration impose tariffs and import restrictions on solar panels and washing machines.

All of the above made for a chaotic, and

often confounding, first year for President Trump. Year two is already bringing much of the same chaos but with the focus shifting from taxes and regulatory overhaul to infrastructure and trade. In his State of the Union address, the president called for a \$2.5 trillion infrastructure package (up from \$2 trillion in his speech to Congress last year). While federal agencies are laying the groundwork to expedite infrastructure projects, GOP leaders remain skeptical about how to pay for such a large proposal, especially following lower government revenues due to the new tax law.

A great risk to manufacturers in the coming months is that the president is required by law to decide whether to act on Commerce Department reports regarding the impact of steel and aluminum imports on national security. Sources indicated late last year that the president favored imposing 35 percent tariffs on the raw materials but received significant resistance from U.S.

industrial users of steel and aluminum, in addition to concerns from the Department of Defense over import restrictions. The White House could also set tariff rate quotas triggering a tariff once imports reach a certain level.

Many say achieving the tax law in the first year more than accounts for any concerns over the president's style, potential import tariffs, and uncertainty over maintaining GOP control in the midterm Congressional elections created by increased political divisions. Regardless of how we each feel about the first 12 months of the Trump presidency, looking back, the most apt quote may be, "the days are long but the years are short."

Omar Nashashibi is a founding partner at The Franklin Partnership, LLP, a bi-partisan government relations firm retained by the National Tooling and Machining Association in Washington, D.C.



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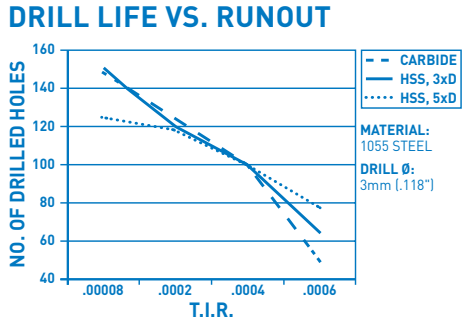
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FEATURE

NATIONAL TOOLING AND MACHINING ASSOCIATION

CHANGING ENTITY STRUCTURE MAY HELP MANUFACTURERS TAKE ADVANTAGE OF TAX REFORM

SUBMITTED BY LESLIE BOYD AND ALLYSON BAUMEISTER, CLIFTONLARSONALLEN

Final tax reform legislation has been signed into law, bringing significant individual and business tax rate modifications that may prompt manufacturers and distributors to reconsider their entity structure. But before you abandon your choice of business entity from a tax perspective, you should carefully contemplate several factors.

It’s important to understand the notable provisions of the *Tax Cuts and Jobs Act* that change tax rates for individuals, C corporations, and pass-through entities.

- Individual tax rates are temporarily reduced, with the top rate lowered from 39.6 percent to 37 percent. The top individual rate applies to taxable incomes exceeding \$500,000 for single filers and \$600,000 for joint filers. These individual rates will sunset after December 31, 2025.
- The corporate rate is lowered from 35 percent to 21 percent beginning January 1, 2018. This is the largest reduction in the U.S. corporate tax rate in our nation’s history.
- A 20 percent tax deduction generally applies to income generated from manufacturing and distribution businesses organized as S corporations, partnerships, and sole proprietorships. For individuals with more than \$157,500 (\$315,000 for joint filers) of taxable income, the amount of the deduction cannot exceed the greater of (i) 50 percent of wages paid by the business and (ii) 25 percent of wages paid by the business plus 2.5 percent of the cost of depreciable business assets. The deduction reduces the effective marginal tax rate for many Main Street job creators to no more than 29.6 percent.

Given the new low corporate rate, you may be wondering if it would be preferential to be taxed as a C corporation rather than as a pass-through entity. To help you weigh your options, we will compare after-tax cash flow to shareholders of an S corporation and a C corporation in the following three scenarios, all fairly common to businesses in the manufacturing and distribution industries:

- Reinvestment of earnings followed by a shareholder distribution
- Sale of intangible assets and liquidation of corporation
- Sale of intangible assets and liquidation of corporation with qualified small business stock exclusion

SCENARIO 1: REINVESTMENT OF EARNINGS FOLLOWED BY A SHAREHOLDER DISTRIBUTION

On the surface, a potential change from a pass-through entity to a C corporation structure appears attractive to those who wish to reinvest profits into the business; a C corporation can clearly accumulate more capital and expand its operations faster with a 21 percent annual tax cost, as opposed to the 29.6 percent in-

come tax generally levied on pass-through entities. Where corporate earnings are reinvested in productive assets and the earnings are distributed far into the future, the C corporation structure may provide a better after-tax cash flow result on a present value basis. But, as Table 1 shows (see below), if the owners withdraw

	Double Taxation		S Corp. Taxation of Marginal Earnings	
	1120	1040		1040
Year One				
Net income (after W-2 wages and rent)	\$1.00		Net income after W-2 wages and rent	\$1.00
Corporate tax	(.21)		Less top 1040 rate (37%)	
			after 20% deduction (.296)	(.296)
Net after-tax cash in corporation	\$.79		Net after-tax cash to shareholder	\$.704
Year Two				
Redemption or dividend to shareholder		\$.79		
Less: 23.8% LTCG/dividend		(.19)		
Net after-tax cash to shareholder		\$.60		\$.704

after-tax earnings of the corporation in relatively short order, the S corporation may provide better after-tax cash flow to the shareholders when taking into account the shareholder-level tax imposed on C corporation dividends.

While this is a simple example, the impact is pretty clear. If the earnings are invested back into the corporation, it will have more after-tax funds to reinvest, temporarily. The impact of the double taxation is delayed until the subsequent year when the earnings are extracted from the corporation.

This example does not contemplate additional factors, including the deductibility of state taxes inside the C corporation, which are now severely limited to individuals under the new tax legislation, making the reinvestment strategy even more compelling. State tax considerations, along with plans to reinvest earnings rather than distribute proceeds to the shareholder, would have to be considered to fully model the impact.

SCENARIO 2: SALE OF INTANGIBLE ASSETS AND LIQUIDATION OF CORPORATION

It’s also important to consider the long-term plans for the business owner. It is estimated that \$11 trillion of wealth will be transferred from one generation to the next over the coming several years. Managing the tax impact of a business exit is critical to optimizing the business owner’s after-tax retirement nest egg. The effect of a double tax structure could be significantly less beneficial when you stand to earn sizable gains from the sale

SEE "TAX REFORM" PAGE 10

	Double Taxation of Inside Gain		S Corporation Taxation	
	1120	1040		1040
Capital gain on sale of intangibles	\$1.00		Capital gain on sale of intangibles	\$1.00
Corporate tax	(.21)		Capital gains tax for material participating owner	(.20)
Net funds in corporation	\$.79			
Proceeds received in liquidation		\$.79		
Less: 23.8% LTCG		(.19)		
Net after-tax cash to owner		\$.60	Net after-tax cash to owner	\$.80

"TAX REFORM"CONTINUED

of business assets, including intangibles. As you can see in Table 2 (see above), the pass-through entity structure actually yields a better result. (Please note that this example assumes material participation by the S corporation owner.)

While this illustrates the eventual cost to the C corporation shareholder on the sale or liquidation of the stock, it may still make sense to use a C corporation structure when the sale or liquidation event is clearly far into the future, or where intangible value can be attributed to the personal relationships of the business owner, allowing sale of “personal goodwill” directly by the owner in a manner that escapes double taxation.

SCENARIO 3: SALE OF INTANGIBLE ASSETS AND LIQUIDATION OF CORPORATION WITH QSB EXCLUSION

Scenario 3 illustrates the cost of the shareholder-level tax that is generally imposed upon the sale or liquidation of a C corporation. In some instances, the shareholder may be able to exclude all or part of the gain from the sale of qualified small business (QSB) stock, eliminating the shareholder-level tax and putting C corporations and S corporations on a more level playing field when it comes to the sale of a business. Several criteria must be satisfied for gain to be excluded, including the following:

- The stock must be acquired directly from a corporation while the corporation is a C corporation. Stock acquired from other shareholders or while the corporation was an S corporation will not qualify.
- The corporation cannot have more than \$50 million in assets at any time before or immediately after the investment.
- At least 80 percent of the corporation’s assets must be devoted to a qualifying business, including manufacturing and distribution.
- The stock must have been held for at least 5 years.

Outstanding stock at the time an S corporation converts to a C corporation is not QSB stock-eligible for the exclusion, but stock issued by the corporation after it becomes a C corporation may qualify as QSB stock. A switch to a C corporation could be compelling if the company is going to issue significant additional stock.

New businesses that are qualified small businesses may benefit

	Double Taxation of Inside Gain		S Corporation Taxation	
	1120	1040		1040
Capital gain on sale of intangibles	\$1.00		Capital gain on sale of intangibles	\$1.00
Corporate tax	(.21)		Capital gains tax for material participating owner	(.20)
Net funds in corporation	\$.79			
Proceeds received in liquidation		\$.79		
Less: 0% LTCG QSB rate		(.00)		
Net after-tax cash to owner		\$.79	Net after-tax cash to owner	\$.80

included in the modeling and analysis, including:

- Whether earnings will be distributed to owners or reinvested to fund future growth
- Whether the corporation holds appreciating assets, like real estate or intangible assets
- The business exit strategy and timeline for owner(s)
- Whether the second level of tax in a C corporation can be managed (for example by taking advantage of the gain exclusion for QSB stock, by using reasonable shareholder compensation in a C corporation as a mechanism to draw earnings out of the business, etc.)
- Impact of state taxes on overall after-tax cash flow

It’s also helpful to keep in mind that this legislation isn’t permanent. The law as written sunsets the individual and tax-favored pass-through rates after December 31, 2025. And while the corporate rates do not have a sunset provision, this bill did not get bipartisan support; a change in congressional control could reverse or alter the tax rates. If you switch to a C corporation and the corporate rate rises, getting back to pass-through taxation could be challenging.

HOW WE CAN HELP

Modeling the impact of an entity structure change is a worthwhile exercise, especially in light of all the variables. CLA’s manufacturing and distribution professionals have developed tools to help business owners like you evaluate your entity structure and develop a tax-advantaged strategy.



from a C corporation structure since corporate earnings can be reinvested at a lower tax cost than with an S corporation (21 percent for a C corporation versus. 29.6 percent top rate for an S corporation) without imposing a second level of tax on the shareholders when the corporation eventually sells its assets and liquidates, as illustrated in Table 3 (see below).

REMEMBER, THESE CHANGES AREN'T WRITTEN IN STONE

Running the numbers is enlightening, but when contemplating this decision, several factors should also be

NTMA’S DIRECTOR OF WORKFORCE DEVELOPMENT RECOGNIZED AS MENTOR OF THE YEAR

Please join us in congratulating Stacey Schroeder, our Director of Workforce Development, on winning the Mentor of the Year award through College Now Greater Cleveland. Four years ago, Stacey was matched with an incoming freshman at The Ohio State University. Her mentee came from an underserved area on the east side of Cleveland, OH and experienced several obstacles during their time together – financial, academic, health and others. During their time together, Stacey and her mentee have moved beyond a mentoring relationship to a friendship that is more like being part of a family. Although Stacey and her mentee are still formally ‘matched,’ the relationship will last forever.

The award ceremony was held at the Cleveland Renaissance Hotel on January 11, 2018. Stacey’s mentee had just started the semester at OSU, but their twin sister delivered her mentee’s remarks, which are excerpted below:

“Let me start by just saying, one paragraph is not sufficient enough to describe how Stacey has impacted my life. Stacey should definitely be Mentor of the Year because she is helping me through the most nerve wrecking part of my life so far.... Also, I am strongly introverted and so I am not as readily open about intimate subjects with others. Most of the time, it’s honestly a struggle for me to just say “Hi” to a new person. But, it had

been extremely easy to connect with Stacey from the start...Honestly, she has become like another sister to me and I have even had the honor of inviting her to a family gathering recently. She seems to fit right in. In addition to that, she introduced me to opportunities that I probably would not have explored, otherwise, like eating at different restaurants and attending a lecture on Dark Matter and a play. She provides a lot of laughs, great advice, warm smiles and hugs, words of wisdom, and a sense of peace when I am with her. Most importantly for me, at least, she is open to sharing parts of her life, too. This is helping me feel more comfortable with expressing myself and engaging with others. Thank you Stacey for helping me become more comfortable in my own skin and being more of a sister to me than a mentor. Considering that I have four sisters, I didn’t expect to have another in three years’ time. Haha!”

Please consider joining an organization like College Now, Big Brothers Big Sisters, or other regional mentoring programs if you have the time and interest. These programs provide a safe, structured platform for making a major impact in someone’s life (as well as in your own). This is also a great way to engage



younger workers who place a high value on community engagement, and to help workers getting ready to transition out of the workforce who may soon have more time available.

Stacey is a true believer in the value of mentoring and will be authoring future articles on mentoring programs, speaking about mentoring at the Emerging Leaders Conference in Pittsburgh, and working with NTMA staff and teams to develop an effective and valuable mentoring program for NTMA members.

If you have a mentoring program at your company or Chapter that you’d like to share information about, or have other ideas on the topic, please reach out to Stacey at sschroeder@ntma.org.



BUSINESS CONDITIONS REPORT – WHAT’S TRENDING IN THE INDUSTRY?

Results of the NTMA Business Conditions Survey covering the second half of 2017 are now available. This report also includes projections for the first half of 2018, and a geographical “snapshot” of business trends and conditions in the special tooling and machining industry.

This report, based on information from 93 NTMA member companies, indicates that overall business conditions during the six-month period ending December, 2017 were Very Good to Excellent for 45 percent of respondents, while business conditions were considered Good by another 37 percent of respondents. This is considerably better than

what was reported at the end of June 2017. Looking ahead, 65 percent are projecting that the next six months will bring a moderate-to-substantial increase in business conditions. The greatest levels of optimism was expressed by members in the Central Region (IA, MO, NE, KS, MN) and New England (ME, VT, RI, NH, MA, CT); and by those serving the Aerospace Machining & Fabrication and Metal Fabrication & Stamping sectors.

Average work week per employee remained stable at 44.5 hours. Future work on the books increased from 14.7 weeks to 16.1. Average Sales Per Employee came in at \$122,290 – down \$7,000 from the June report.

TOP BUSINESS PRIORITIES REMAIN:

1. Increase Productivity
2. Increase Sales (existing customers)
3. Finding Skilled Employees
4. Finding New Customers
5. Cost Reductions
6. Leadership Staffing

The full report is available to members only and can be downloaded from our website at www.ntma.org. After logging in, Click on Resources>Reports>Business Conditions Report.



2018 MIDTERM ELECTIONS PREVIEW

BY OMAR NASHASHIBI, THE FRANKLIN PARTNERSHIP, LLP



Political prognosticators often look to the mid-term congressional elections as a referendum on the party in power and a preview of the presidential campaigns to follow. Democrats must net twenty-four House seats to take control with twenty-three of those being GOP Representatives coming from congressional districts Hillary Clinton won. In the Senate, following the upset results in Alabama, Democrats only need to net two seats, however, they still face an uphill climb defending 25 of their own members' seats that are up for grabs with only eight in the same situation for the GOP.

Every president from FDR through Obama saw their party lose a net number of seats during their terms with Roosevelt in 1934, Clinton in 1998, and W. Bush in 2002 as the only presidents to actually have their party gain House seats during a mid-term election. Historically, there are three major criteria for trying to anticipate the impact of mid-term election results on the president's party: number of retirements, president's approval rating, and the generic, "would you vote for the Democrat or Republican" poll.

As of February 1, thirty-four Republicans announced they would retire, leading to the highest number of total open seats for the party in power since the 1994 GOP takeover. Taken together, retirements by members of both parties is nearing 50, guaranteeing a sizable incoming freshman class for the House in 2019.

Throughout the campaign, the president would decry the polls during the general election after promoting select ones during the primaries. Regardless of one's opinion of polling use in the heat of a campaign, after the elections, we can see the president's popularity does contribute to the level of beating their party takes at the polls. Only Presidents Harry Truman and George W. Bush ever recorded consistent quarterly job approval ratings below 40 percent, and in each of those elections years, they lost 29 and 30 seats, respectively.

The generic congressional ballot, where pollsters ask if the election



were held today, would you vote for the Republican or Democrat candidate, may have lost some of its luster over the years as the number of voters registered in either party declines. However, the current average gives Democrats a six percent advantage after an 18 point high in December.

Despite the above, the 2016 election clearly violated historical trends and expectations. Regardless, Democrats are optimistic and House Republicans are extremely concerned. Netting 24 seats is clearly within reach for Nancy Pelosi to regain the Speakership in 2019. The Cook Political Report ranks 20 House Republican seats as Toss-Up or favoring Democrats with another 20 GOP races listed as Lean Republican. The Senate is more complicated with ten of the 24 seats Democrats are defending being in states Trump won.

The historical data and momentum are certainly on the side of Democrats, but in the age of Trump, every day brings new uncertainty that should make Republicans and political prognosticators alike nervous.

Omar Nashashibi is a founding partner at The Franklin Partnership, LLP, a bi-partisan government relations firm retained by the National Tooling and Machining Association in Washington, D.C.



THE R&D TAX CREDIT: A MUST HAVE OPPORTUNITY FOR FABRICATORS, METALWORKERS AND CONTRACT MANUFACTURERS

BY ALLIANTGROUP MANAGING DIRECTOR MICHAEL SIEGEL



With the recent passage of the tax reform bill, there are many changes set to take place that will impact the long-term strategic business planning of manufacturers across the country. From changes to the benefits of certain business structures to modifications on expensing and bonus depreciation, there are a number of opportunities that executives should consider when looking to reduce their operating costs and add value back into their businesses.

However, even after the passage of this landmark piece of legislation, the most important tax incentive for fabricators, metalwork-

ers and other contract manufacturers remains the same – the Research and Development (R&D) Tax Credit. For NTMA members that are unfamiliar with the R&D Tax Credit, this credit remains the most valuable incentive available for the benefit of their industry. To date, alliantgroup has helped NTMA members claim over \$33.5 million in R&D tax credits, generating the bottom-line savings needed to hire and retain talent, purchase new equipment and reinvest in better products and services.

THE R&D TAX CREDIT: A BRIEF PRIMER

The R&D Tax Credit is certainly not new

and has been a part of the tax code since the 1980s. However, over time, the credit has evolved for the benefit of U.S. businesses, with a number of legislative and regulatory changes as well as a string of court rulings expanding the credit for the benefit of American businesses – and in particular, the benefit of contract manufacturers.

What makes contract manufacturers such as machine shops, fabricators and metalworkers such excellent candidates for the credit?

It relates back to their daily activities and to a more expansive definition of "R&D" than the average business owner may expect. Simply put, the R&D Tax Credit relates to the applied sciences as much as it does to research labs and Silicon Valley startups. That means for the technical improvements that are made on the factory floor to better a product or process, for the technical problem-solving that is done to make a product or process faster, cheaper, cleaner and more efficient, a business can receive substantial tax savings.

REAL-WORLD APPLICATION

To better understand how the credit applies to contract manufacturing, let's take a real-world example.

For a year's worth of qualifying projects, one machine shop (and NTMA member) received over \$500,000 in federal and state R&D tax credits. One of their qualified projects was the manufacturing of equipment for a submarine, a project that required the company to overcome challenges related to the design of the tooling to machine the equipment. To ultimately create the tool, the company evaluated various machines for the tooling and ran different tests to ensure the machines could work with different metals as well as other various components. After multiple design iterations for the tooling (in-

cluding alternate materials and programming for the machines), the company successfully designed the tool and an efficient manufacturing process.

While not every company will receive such a significant credit result, this example does illustrate the kind of value that is out there for contract manufacturers when it comes to the R&D Tax Credit.

QUALIFYING ACTIVITIES

For a better understanding of what qualifies, here is a list of common activities that have qualified contract manufacturers in the past:

- Introducing new or improved efficiencies to a wide range of precision manufacturing operations
- Determining the machining procedures for fabricating complicated part geometries with dimensional accuracy and precision
- Developing software to manage workflow, traceability, quality control, supply chain and more
- Simulating design concepts with CAS/CAD, technical surfacing, Class-A modeling and more
- Programming PLCs, CNCs, RTUs, DCS, PACs, CLCs, CNCs, SCADA and more
- Automating manufacturing operations

with CNC machines, robotics, sensors and other industrial control systems

- Prototyping or improving tooling systems, extrusion machinery, metal stampings and other precision performance equipment
- Exploring new or improved material applications and testing alternative uses of steel, iron, aluminum, plastics and more

• Conducting First Article Inspection Reports to maintain quality assurance

TAX REFORM AND NEW R&D CREDIT OPPORTUNITIES

In addition to the current savings the credit has already provided, the passage of the recent tax reform bill will offer further R&D Tax Credit opportunities for numerous companies within the industry.

Why? As described by my colleague Dean Zerbe in his latest Forbes piece, the expansion of individual AMT relief and the elimination of corporate AMT included in the legislation will offer significant help to many businesses – and with a host of qualifying activities, contract manufacturers are well-positioned to reap the benefits.

With many tax-saving opportunities at their disposal, contract manufacturers would be wise to explore their options. And the best place to start would be the R&D Tax Credit.






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The event sponsors cover all logistics, ground transportation, meals and accommodations in Japan.

Only 25 spots available!

Airfare should not be purchased until you have received confirmation that your tour registration has been processed.

Please note: The Japanese national holiday begins at the end of April and can result in limited flight options. We recommend registering early so flights can be booked as early as possible.

Register with Brittany Belko by Phone 216-264-2848
e-mail: bbelko@ntma.org

Registration and payment deadline is March 23, 2018 or when the tour is full.



2018 TECH TOUR JAPAN

PRELIMINARY ITINERARY:

DAY 1 — SATURDAY 4/21

+ Departing flights from the U.S.

DAY 2 — SUNDAY 4/22

+ Arrive in Nagoya, Japan. You will be met at the airport and escorted directly to the hotel to unpack & relax.

DAY 3 — MONDAY 4/23

+ Visit and tour Okuma world headquarters in Oguchi and the Okuma Kani Plant.

DAY 4 — TUESDAY 4/24

+ Travel by bullet train to the historic city of Kyoto and enjoy a day of sightseeing with your fellow NTMA members.

DAY 5 — WEDNESDAY 4/25

+ Manufacturing facility visit & tour (to be confirmed) and then travel by coach bus to Awaji Island near Osaka.

DAY 6 — THURSDAY 4/26

+ Visit and tour the world headquarters of BIG Daishowa (BIG KAISER).

DAY 7 — FRIDAY 4/27

+ Return to Osaka for a free afternoon of relaxing or sightseeing before a final group dinner.

DAY 8 — SATURDAY 4/28

+ Departures from either Osaka Kansai (KIX) or Osaka Itami (ITM) airport.



WHAT PAST ATTENDEES SAY:

“The overall quality of the shops we visited was very impressive.”

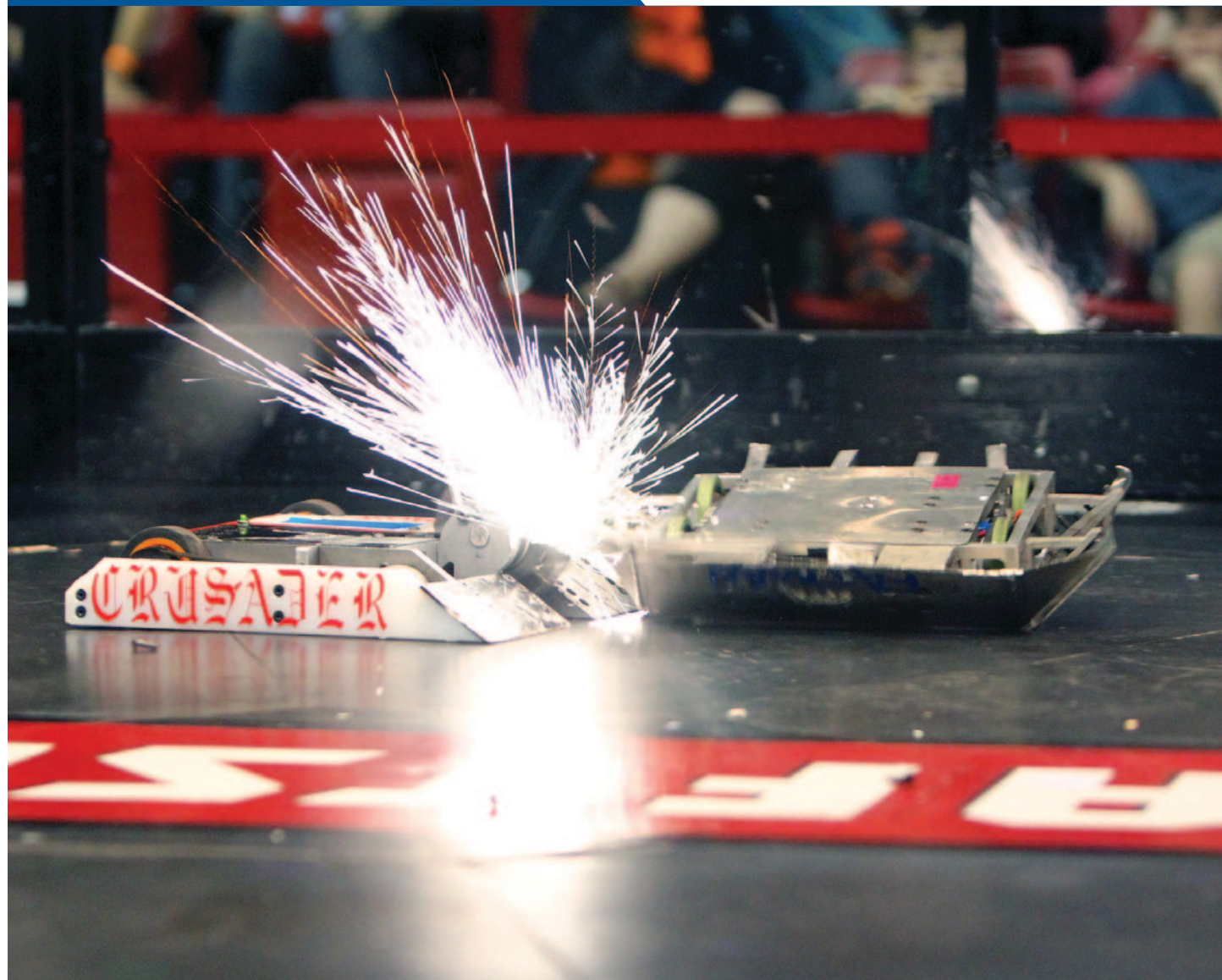
“I was blown away by what I saw.”

“It was an incredible learning experience.”

“Hats off to the sponsors for providing a great experience!”

“I’ve made connections and friendships that are invaluable.”





A ONE DAY INVESTMENT THAT PAYS DIVIDENDS: NRL COMPETITION DAY

By BILL PADNOS, NTMA, DIRECTOR OF YOUTH ENGAGEMENT

In December 2015, I was able to travel to Southern California to witness the NTMA Training Center's Metal Crunch NRL Competition. I wrote about my experience at the competition and the conversation that I had with an NTMA member. He equated his volunteering at an NRL competition to being a baseball scout. He was there to see the talent in action and then sign the ones that would fit best on his team.

Months later, I wrote an article for this publication about Ed Frieze (then at Stellar Precision Components) recruiting an Eastern Westmoreland CTC student right in the middle of the SWPA BotsIQ competition. That student was hired by the company two weeks later. The following year, PBM Valve Solutions and other members

of the Pittsburgh NTMA Chapter walked around the SWPA BotsIQ pit area talking to teachers and students.

Across the country, students participating in the NRL program are being recruited by NTMA member companies before, after and during the competitions. Initially, the competitions were designed to provide an opportunity for these students to safely battle their 15-pound remote-controlled gladiators and to spark their interest in careers in manufacturing. However, smart manufacturing companies and post-secondary institutions have realized that the competitions are the best place to scout and recruit new talent. They have invested time away from the shop for a day to attend an NRL competition and in some cases, invested their talent to serve as a volunteer

to be able to be in the middle of the action.

These facts are real:

- Ninety-seven percent of NTMA members have indicated that their company has a severe to moderate shortage of skilled workers.
- Workforce development is now the number one concern of NTMA members.
- The estimated revenue loss per manufacturing position that goes unfilled in \$14,000 per year.

Is one day out of the office to be present at an NRL competition in order to learn more about the program and the benefits of your company's participation worth it? The numbers above prove the case that it does. Even if three percent of the membership indicate that they do not have a shortage of skilled workers, I bet that in five years they

will-- due to retirements or hopefully, due to an increase in production levels.

Being an active attendee of an NRL competition is a productive use of your time. Please note that I said "active attendee." This means that you do not just sit in the stands and watch. Walk through the pit areas and start conversations with the students and teachers. Talk to the parents and learn about how the NRL program has benefited their child. Or, put yourself in the middle of the action. Volunteers power NRL competitions. Whatever your expertise, the NRL has a volunteer opportunity for you. Whether it be for a few hours, or for the entire competition day, opportunities abound for you to be a proactive observer of manufacturing's next generation.

I have included a complete listing of all of the NRL competitions in this article or you can visit the NRL web site at www.gonrl.org for more information. Attending an NRL competition can be life-altering experience for the future success of your company. Isn't that worth one day out of the year to get out of your shop or office?



NORTHERN UTAH NRL

(<http://www.owatc.edu/rage-in-the-cage2018-competition/>)

March 28 – Ogden-Weber Technical College

BOTSKC

(<http://botskc.org/>)

April 7 – Olathe NW High School

ROBOBOT

(<http://www.metalsinmotion.org/robotbots.php>)

April 7 – Meadville Senior High School

SOUTHWESTERN PA BOTS IQ

(<http://botsiqpa.org/>)

April 13-14 – California University of PA

XTREME BOTS / COLLEGIATE CLASH

(<http://xtremestem.org/>)

April 20-21 – Write State University

BOTS STL

(<http://botsstl.org/>)

April 21 – Ft. Zumwalt South High School

AWT ROBOBOTS

(<http://thinkmfg.com/robotbots/>)

April 27-28 – Lakeland Community College

RAGE IN THE CAGE

(<http://www.rage-in-the-cage.com/>)

April 28 – Bloomsburg Area High School

BOTS IQ WISCONSIN

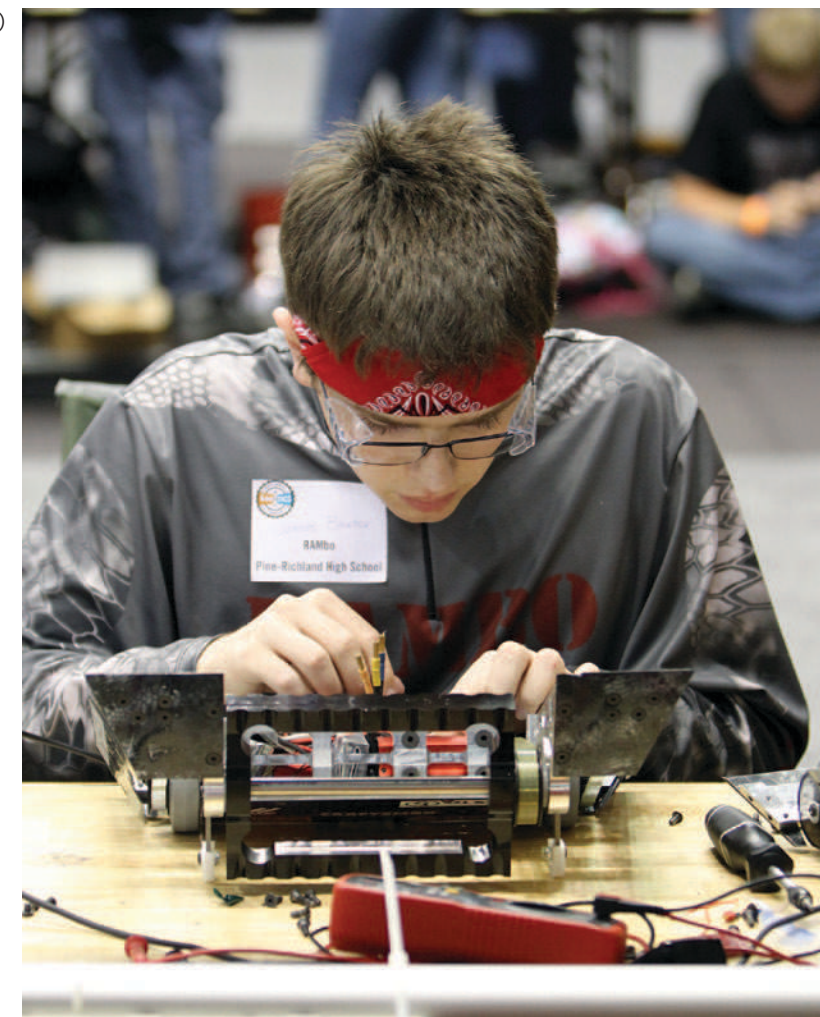
(<http://www.wi-robotics.org/>)

May 5, 2018

NRL 2018 NATIONAL COMPETITION

(<http://gonrl.org>)

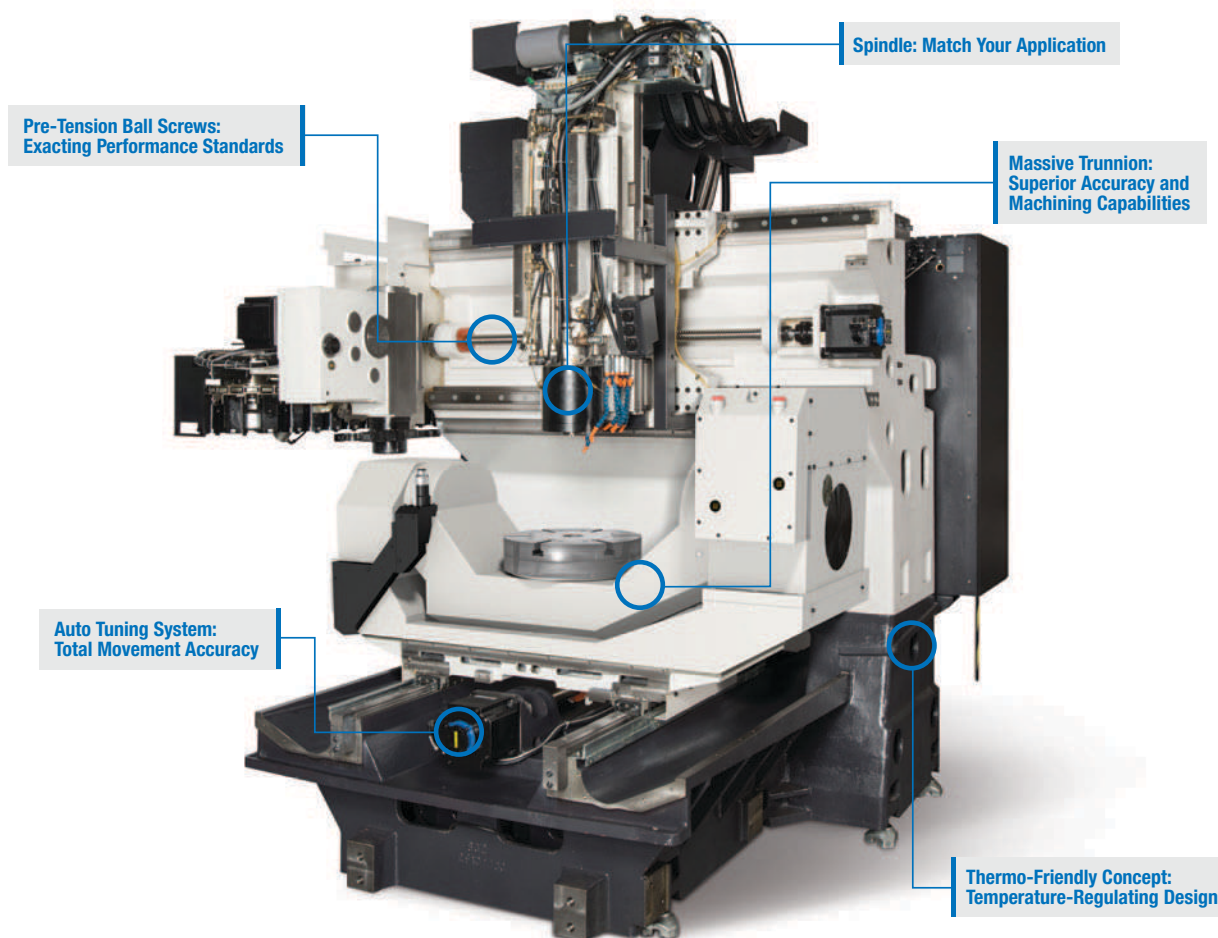
May 18-19 – California University of PA



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LIEUTENANT GOVERNOR SPEAKS AT NORTHERN UTAH CHAPTER NTMA MEETING

SUBMITTED BY MADDIE DAHL, CHAPTER EXECUTIVE



On February 8, more than 40 people, including NUNTMA members, prospective members, and associates attended a meeting with Utah Lieutenant Governor Spencer Cox. Lt. Gov Cox talked about the extremely low unemployment rate in Utah, and everything that the government is doing to help with the work-force shortage. In Utah, Governor Gary Herbert declared 2018 the year of technical education. Lt. Gov Cox said, “Machining has changed almost more than any other industry. You all have very

high-tech, high-wage jobs available, which is great for our state, and our economy.”

Todd Bingham of the UMA and Utech Commissioner Dave Wulstenhulme were also in attendance.

To learn more about Utah’s year of technical education, please visit: <https://highereducation.org/2018-the-year-of-technical-education/>



NEW YEAR, NEW EQUIPMENT?

SUBMITTED BY KAITY VAN AMERSFORT



If your 2018 capital expense budget is primed for upgrading equipment, give the LANTMA Foundation a call. Many companies may love your used machines and, if you donate it to the Foundation, its sale will go to education grants! The industry needs many more trained workers, but often students drop out due to financial challenges. Grants to cover some of their expenses are part of a long-term plan

to ease the pain for both those wishing to go into manufacturing and the companies looking for good applicants.

Want another reason? When your donation sells, it’s a tax deduction for you. So, look around. What can you donate?

Visit www.lantmafoundation.org or call Mark Osterstock, the Foundation’s president at 949-457-1913 for more information.



THE NORTH TEXAS CHAPTER IS PROUD OF RECENT NTMA-U GRADS!

SUBMITTED BY JON KOZESKY



The North Texas Chapter took time out to recognize three NTMA-U grads from Southern Machine Works, Inc.: Bob Beasley, Tim Wooten and Bea Killgore. All were encouraged to participate by their employer, and North Texas Chapter Board Member Frank Burch.



DETROIT CHAPTER WELCOMES U.S. SENATOR



In February, the board of the Detroit chapter NTMA, national NTMA representatives and the executive director of the NTMF met with U.S. Senator Debbie Stabenow. She used the meeting to announce her federal legislation to open Pell grants to trade schools. Additionally, the Senator said she will promote more federal resources to encourage students to consider careers in the skilled trades.



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FEATURE

NATIONAL TOOLING AND MACHINING ASSOCIATION

UNCONSCIOUS GENDER BIAS STILL OBSTRUCTS WOMEN IN MANUFACTURING

BY DIANA BILIMORIA, PROFESSOR, WEATHERHEAD SCHOOL OF MANAGEMENT, CASE WESTERN RESERVE UNIVERSITY

Reprinted with permission from Industry Week

Most of us like to think of ourselves as unbiased. We make a sincere effort to ensure that stereotypes and preconceived judgments do not play a role in our decision-making, especially when it comes to hiring and promotions.

Yet, there is a subtle, unconscious bias that still prevails in the manufacturing industry and in the general workplace today, even within organizations that pride themselves on their efforts to provide equal opportunity for all.

This unconscious bias relates to gender and, specifically, the perceptions we have of the roles typically played by women and men in the workplace and in society.

Surprisingly, these perceptions are often held by women as well as men, even though they can impede opportunities for women's advancement. As a result, they create challenges for women in the workplace that receive relatively little attention in the conversation about equal opportunity. Many people are unaware that this bias even exists.

Researchers Herminia Ibarra, Robin Ely, and Deborah Kolb call this "second-generation" bias. In their article, "Women Rising: The Unseen Barriers", they note: "Research has moved away from a focus on the deliberate exclusion of women and toward investigating 'second-generation' forms of gender bias as the primary cause of women's persistent underrepresentation in leadership roles. This bias erects powerful but subtle and often invisible barriers for women that arise from cultural assumptions and organizational structures, practices, and patterns of interaction that inadvertently benefit men while putting women at a

disadvantage."

This strong and invisible bias can exclude women from opportunities in many ways. For example, gendered work roles and career paths are the norm in many industries, and particularly in manufacturing. These industries, and society, expect men to fill the vast majority of engineering, sales representative, and

gressiveness, independence, control, drive, etc.), which are deemed as more "masculine."

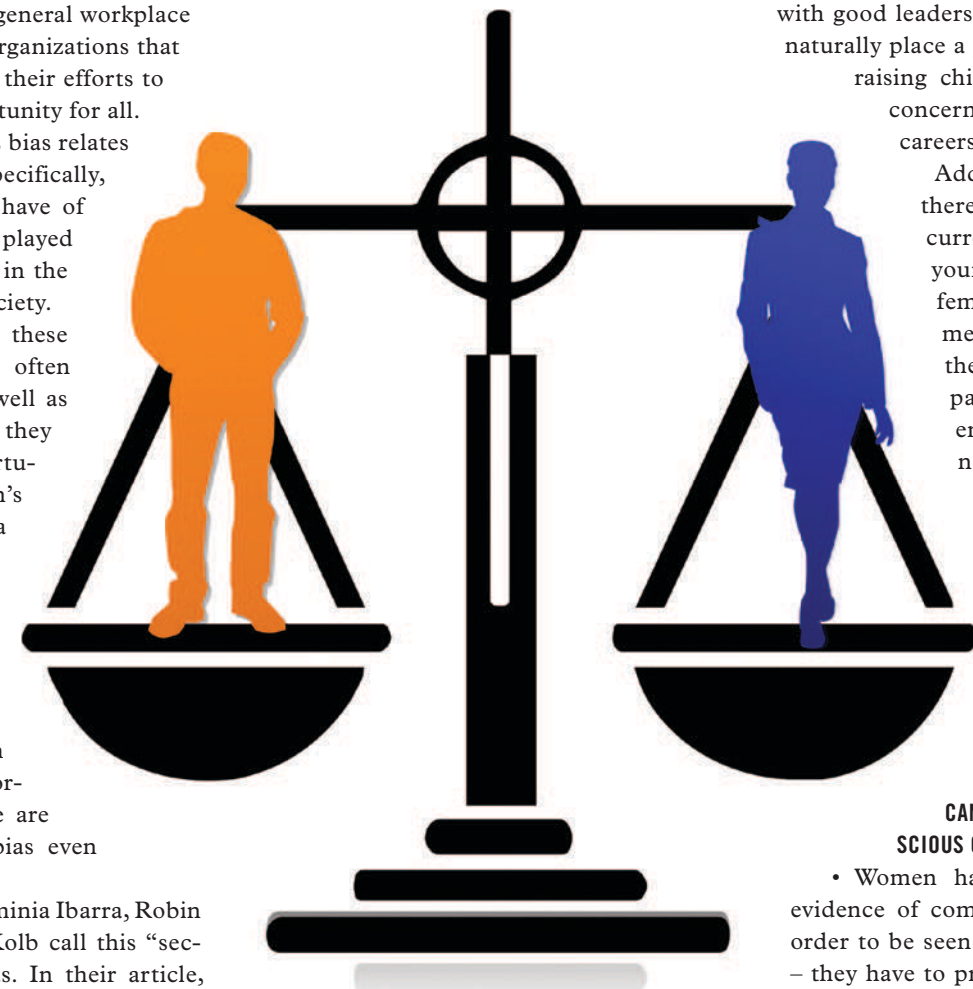
Whether intentional or not, the tendency is for organizations and industries to provide more career-related development and opportunities for men than for women. This stems from society's stereotypical beliefs that not only do men better exhibit the traits usually associated with good leaders, but also that women naturally place a priority on family and raising children, while men are concerned only about their careers.

Additionally, because there are few women currently in these roles, younger women often lack female senior management role models within their desired career paths, and they experience a lack of access to networks, mentors, and sponsorships that can be critical to career advancement.

IN "WHAT WORKS FOR WOMEN AT WORK" JOAN WILLIAMS AND RACHEL DEMPSEY DESCRIBE FOUR WORK-PLACE PATTERNS THAT CAN ARISE FROM UNCONSCIOUS GENDER BIAS:

- Women have to provide more evidence of competence than men in order to be seen as equally competent – they have to prove themselves again, and again, and again.
- Women find themselves walking a tightrope between being seen as too feminine to be competent – or too masculine to be likable.
- The social stereotype is that women lose their work commitment and competence after they have children, and that mothers can't commit to both a career and raising a family at the same time.
- Gender bias can fuel a tug-of-war conflict among women, particularly in traditionally masculine domains such as

SEE "GENDER BIAS" PAGE 25



high-level management positions, while quality control, safety, accounting, human resources and other support-oriented careers are more typically associated with women.

This creates a "double bind" mismatch for women between what are considered feminine qualities (nurturing, caring, supportive, kind, etc.) as opposed to desired leadership characteristics (ag-

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FEATURE

NATIONAL TOOLING AND MACHINING ASSOCIATION

"GENDER BIAS" CONTINUED

manufacturing, where women compete against each other for only a limited number of opportunities.

Perhaps the reason this kind of bias is so powerful, entrenched, and ignored is that it is accepted so naturally as part of our societal expectations, and it is not malicious in any way. By contrast, "first-generation" bias, which is more direct and deliberate in excluding specific classes of people from opportunities, is easier to identify and, therefore, easier to correct. Unconscious bias is an unseen and often unrecognized enemy that requires a widespread change in attitudes and beliefs before it can be fully vanquished.

SO, WHAT CAN WE DO ABOUT IT?

For starters, as Sheryl Sandberg advocates in her book, *Lean In*, women in the workforce can be more active in developing leadership skills and promoting themselves as leaders. And, through their actions and commitment to their careers as well as their families, women can leave little doubt that they are capable of succeeding at both.

Yet, it is far from sufficient to put the

onus of change on individual women only. For organizations that have worked to eliminate first-generation bias, yet still see a lack of women in key roles, the burden is on them to engender organizational culture transformation – bringing about a mindset change in how the workplace is structured for equality of access and opportunity.

This is facilitated by the commitment of resources by top management, particularly to compile and analyze data to show that their recruitment, promotion, compensation, and development decisions are truly equitable. To combat second-generation bias, programs may be needed to educate both men and women about these attitudes and prioritize the elimination of unconscious bias as well as the more direct kind.

Individual managers, both men and women, can help by holding training sessions, doing more mentoring, and becoming more sensitive to how women are treated in meetings, performance evaluations, and work-related activities in general.

The good news is, as Ibarra, Ely, and Kolb observe, "Second-generation bias is embedded in stereotypes and organizational practices that can be hard to detect, but when people are made aware of it, they see possibilities for change."

We help make people aware through proactive efforts such as our Leadership Lab for Women in Manufacturing at Case Western Reserve University, where we are building toward a new style of inclusive leadership that will genuinely welcome and promote diversity in the workplace of the future. It is our hope that unconscious bias eventually will be recognized for what it is, and will have no place in that future.

Diana Bilimoria is the KeyBank Professor, Chair and Professor of Organizational Behavior Weatherhead School of Management, Case Western Reserve University.



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- **How you purchase supplies:** It starts with purchasing less, buying only what you need, when you need it. Standardizing products and reducing suppliers also help improve the purchasing process.
- **How you manage inventory:** Grainger can help you determine what's the right amount of critical inventory items so you have what you need, when and where you need it, saving you money, time and space. Having the right supplies helps you maintain a productive environment, avoid costly downtime from stock-outs and reduce expensive overstock.

- **How you manage safety:** Grainger has the products, services and resources to help keep your people and facilities safe. Get the safety solutions you need to help reduce injuries, facilitate compliance, manage risk and increase productivity.
- **How you operate sustainably:** Grainger offers environmentally preferable solutions to help you manage your energy consumption, conserve water, reduce waste and improve air quality.

Driving costs out of these four areas helps Grainger customers put their resources toward managing and growing their business.

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MEMBER NEWS

NATIONAL TOOLING AND MACHINING ASSOCIATION

MANUFACTURING SUCCESS IN DUNDEE, MICHIGAN: WORKFORCE & TECHNOLOGY AT WORK

SUBMITTED BY DAWN DAYTON

Dundee Manufacturing Company (D.M.C.) is investing and growing in Monroe County, Michigan. The company has received a Skilled Trades Training Fund (STTF) grant and will begin upskilling its current workforce. They have installed a new 220-TonAIDA Servo Driven stamping press and is making final preparations to expand its manufacturing facility. Dundee Manufacturing Company produces high-quality metal stampings in plumbing, electrical, solar and engineered products.

In 2003, Peter and Dale Davis bought the company with the idea to grow it into a globally recognized company. Their commitment to quality, technology and workforce development has positioned them well for growth in the coming year. The company's capital investment, along with the State's Skilled Trades Training Fund award are in line with the company's mission and value statements.

The new Servo driven press installed in December will help D.M.C. and their customers realize:

- Greater consistency and higher accuracy in terms of part quality made possible by application specific programmable stroke profiles.

• The latest in Advanced Stamping Press Technology is in line with Dundee's belief that "technology is essential to its mission in meeting its growth".

• Expanded ability to take on new work through greater productivity and throughput for current products (freeing up time on the press for other jobs) and improved ability to prove out new dies, thanks to the DSF Series step feed and precision controls.

• Energy savings during production.

• The ability to tackle more difficult materials and reduced tooling cost.

D.M.C. will use the \$40,000 state grant to develop and upskill its workforce in the areas of stamping, maintenance and quality. The company also offers an Apprenticeship Program in Tool & Die and incentivizes their employees to further develop their skills.

"D.M.C. is a perfect example of how the STTF program can help strengthen the Michigan economy. The commitment by D.M.C. to invest in their employees and equipment helps assure they remain com-

petitive and grow." said SEMCA Michigan Works! CEO Gregory E. Pitoniak. The Talent Investment Agency grants the funds to employers through the Michigan Works! system. The Southeast Michigan Community Alliance is the administrator of the Michigan Works! programs in Monroe County.

Earlier this year, the company also invested in a new ERP system called PLEX that helps process improvements, real time reporting and further creates a modern, effective manufacturing environment.

"Our dream is being realized," said Peter Davis, President of D.M.C. "We have a great core team in place and are investing in state-of-the-art equipment in our quest to provide the best products for our customers. We are well-positioned as we look to 2018 to attract and retain the best employees and offer them an opportunity to work with the best equipment in the industry. It really is an exciting time at Dundee Manufacturing Company."



AKRON MEMBER RECEIVES CITY HONOR

SUBMITTED BY JON KOZESKY

On Thursday, January 18, Akron NTMA member McAfee Tool and Die was awarded the City of Green Area Chamber of Commerce Impact Award for 2018. McAfee Tool & Die is headquartered in Green. Owner Gary McAfee and his team were honored for their continued commitment in growing the area workforce and their continued investment in their facility. Award recipients are pictured with Green mayor Gerard Neugebauer and Summit County executive Ilene Shapiro.





SAVE THE DATE

10th Annual

NTMA/PMA One Voice

Legislative Conference

April 17-18, 2018

Dupont Circle Hotel | Washington, D.C.



HAVE YOUR VOICE HEARD IN WASHINGTON!

Washington has undergone profound changes since the 2016 elections and One Voice wants to continue building on our successes by keeping the pressure on Congress. We have passed a major tax bill, rolled back significant environmental regulations and raised the profile of apprenticeships in the nation's capital.



The 10th Annual One Voice Legislative Conference is your chance to keep the momentum going as we work to keep metalworking manufacturing front and center. We are heading into a contentious mid-term election and government officials need to hear from you about the priorities that affect your company, your industry and your community.

Join together to speak with One Voice, April 17-18, 2018 in Washington, D.C.

LEGISLATIVE CONFERENCE AGENDA

Monday, April 16, 2018

4:00 p.m. – 5:30 p.m.

Early Conference Registration

5:30 p.m. – 6:30 p.m.

Optional Early Arrivals Reception

Tuesday, April 17, 2018

8:00 a.m. – 11:30 a.m.

Conference Registration

11:30 a.m. – 1:00 p.m.

Conference Opening Remarks, Briefing and Lunch

2:00 p.m. – 4:30 p.m.

Capitol Hill Visits

5:30 p.m. – 6:30 p.m.

Networking Reception

Wednesday, April 18, 2018

8:00 a.m. – 9:30 a.m.

Breakfast, Issues Presentation

10:00 a.m. – 4:00 p.m.

Capitol Hill Visits

TO REGISTER,

VISIT **WWW.METALWORKINGADVOCATE.ORG**

NTMA | PMA | WiM members \$299 per person

Nonmember \$499 per person

Registration deadline March 16, 2018.

Questions? Contact onevoice@metalworkingadvocate.org or 202-393-8250.



CONFERENCE LOCATION/ HOTEL ACCOMMODATIONS

The Dupont Circle Hotel
1500 New Hampshire Ave., NW
Washington, DC 20036
Phone: 202-483-6000
Rate: \$289 per night (plus tax)

To make your hotel reservation, please call 202-483-6000 and reference NTMA/PMA One Voice Conference. Deadline to make reservations in our group block is **March 26**. Rooms reserved after this date are subject to space and rate availability.