



tma news bulletin

THE VOICE OF ILLINOIS MANUFACTURING

NOT JUST TALK

TMA DEVELOPS, TRAINS, AND
INVESTS IN TOMORROW'S
MANUFACTURING PROFESSIONALS



tma news bulletin

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technology & manufacturing association

The Technology & Manufacturing Association (TMA) was founded in 1925 by eight small manufacturing companies who believed they could better themselves by associating with one another. Through the years, members established programs and services that would help their businesses grow and prosper, train their employees, and provide medical and retirement benefits. As a result of these efforts, TMA has grown into a not-for-profit organization of precision manufacturing and supplier companies in the greater Chicago area.

TMA is governed by a Board of Directors, composed of executives from member firms. A full-time professional staff works closely with the Board, its committees and trust.

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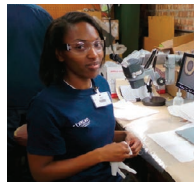
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message from the president



Dear TMA Friends,

As President of TMA I go to a lot of meetings, and I get invited to even more than I can accept. At many of those meetings, workforce development, training, the skills gap, and recruiting are the topics of conversation. More times than I can count I hear the words “collaboration,” “partnership” and “joint effort.” And usually the people I’m meeting with are looking to TMA, or TMA staff, for an answer.

Why, I ask myself, do so many groups and organizations and institutions want to meet with TMA and our staff?

I think I know the answer...and you probably do as well.

They want to meet with TMA because we get things done.

As you read through this month’s TMA News Bulletin, it’s pretty amazing the breadth and depth of what TMA is involved in: a record setting Precision Machining Competition, the largest Related Theory Graduation in a decade, the celebration of 25 years of educational philanthropy, the annual meeting of mayors and manufacturers, and on and on.

TMA is sought after because we are “doers,” not just talkers. The hundreds of hours of volunteer time that TMA members devote to our programs – supported by a committed, high quality professional staff – is why things get done.

And because we get things done, other groups want our attention and interest and support.

I think those solid citizens 90 years ago that had the vision to found the Tool and Die Institute would be proud of what TMA is today. And I hope you are proud as well of what your Association is working to accomplish.

I’m certainly proud to be part of this Association of committed volunteer doers who put their time, talent and treasure where their mouth is. That’s why I get invited to a lot of meetings, because TMA gets things done.


Steve Rauschenberger

cover story

NOT JUST TALK

TMA DEVELOPS, TRAINS, AND INVESTS IN TOMORROW'S MANUFACTURING PROFESSIONALS

It's something every manufacturer knows: well-trained, skilled talent is in demand.

"Help wanted" signs are posted outside manufacturing firms throughout the Chicago area. Monster.com reports over 1000 local industry jobs currently available.

If a manufacturing or logistics job stays vacant for 55 days or so, it can cost a company \$8500. If the job is unfilled for three months or longer, that company can lose over \$14,000.

And the situation is about to grow more intense as America's economy improves and manufacturing continues to re-shore. In fact, while China is currently the most competitive manufacturing nation, a new study suggests the United States could resume the number one position from China by 2020.

This predicted resurgence in U.S. manufacturing is based upon – among other things – manufacturing investments, a strong energy profile, and high-quality talent, infrastructure and innovation.

It's that coveted "high-quality talent" that Schaumburg-based Technology and Manufacturing Association (TMA) can boast they've played a crucial part in developing. Instead of talking about the problem, we did something about it.

Who would have thought that the high-level skills training TMA has offered for years contributed to the predicted United States' manufacturing upswing?

This month, 46 of the 150 students enrolled in TMA's training programs completed their Related Theory Apprenticeship training in tool & die, mold making or CNC programming. The graduates' employers funded the training at TMA while the students worked fulltime, leaving them with little or no education debt, and equipping them with good-paying jobs and bright futures.

The industry has long been crippled by a shortage of qualified professionals to fill shop floor vacancies. The search for skilled talent is complicated even more during economic downturns, like the latest one in 2008-2009. At that time, American manufacturers laid off skilled and unskilled workers – many who abandoned making things to driving trucks and serving others, never to return to manufacturing.

The resulting void pushed talent availability to be American manufacturers' top priority. But it won't be easy. Over the next ten years, 3.5 million manufacturing opportunities are expected to be open up due to the aging of the current workforce. Experts say 1.5 million of those lucrative careers could go unfilled if training demands are not met.

And that factor could undermine America's manufacturing re-emergence.

"While the U.S. lead is encouraging, the existing engineering and manufacturing workforce that pushed us forward is beginning to age out," Michelle Drew Rodriguez with Deloitte's Center for Industry Insights told Compete.com. "Therefore, it's imperative that our public and private sectors collaborate on our nation's educational and technological future to remain a top manufacturing competitor."

FIRST THINGS FIRST

Career opportunities in manufacturing have an image problem. While parents are proud to say their children are studying medicine, law or business, pursuing careers in technology and manufacturing just isn't as sexy. That affects potential talent's interest in the field.

So how can that thinking be changed? Public relations experts say such a shift in perception demands education, exposure and familiarity with the topic.

Here's three points about manufacturing that can start the needed conversation:

- 1.) Manufacturing's environment has changed dramatically. Modern factories are air-conditioned, filtered, clean, brightly lit and much less dangerous than they were fifty years ago.
- 2.) Manufacturing is crucial to our ease-driven lifestyles. While locals drive by buildings housing machinery, technology and workers, they rarely have any idea what goes on inside those walls. They don't realize items they use everyday are being designed, prototyped, modeled, manufactured and assembled inside. They simply have not been exposed to the manufacturing process.
- 3.) Skilled manufacturing talent is paid a good living wage, with

an amazing 92 percent eligible for health benefits. The average parent has no idea that the average manufacturing worker earned \$79,553 annually in 2014 – including pay and benefits, the National Association of Manufacturers reports.

Touch those points and the ears of students, parents, teachers and the media perk up. Then get them in to tour manufacturing plants, the latest technology and the working environments to acquaint them with what goes on within those brick walls.

FAMILIARITY MATTERS

A recent Deloitte research study showed that 52 percent of those with high manufacturing familiarity agree they would encourage a child to pursue manufacturing as opposed to 21 percent with no familiarity.

Similarly, those with high manufacturing familiarity have much more positive views toward manufacturing. Specifically, 64

percent of those with high familiarity agree or strongly agree that manufacturing jobs are interesting and rewarding versus 40 percent of those with no familiarity.

While only 36 percent of respondents agreed or strongly agreed they would know how to secure a job if interested, 57 percent of respondents with high familiarity agreed or strongly agreed with the statement that they would know how to find a job if interested versus only 21 percent with no familiarity.

Increasing manufacturing familiarity is critical in order to increase positive perception, industry interest, and successful manufacturing job pursuits, the study said.

JOIN THE STEM TIDE

An ongoing national education effort to emphasize science, technology, engineering and math (STEM) careers is placing the spotlight on manufacturing as STEM skills drive innovation. While jobs overall are expected to grow just shy of 10 percent by 2018, STEM jobs are predicted to grow by 17 percent.

As labor projections show 21st Century technology leading the way in medical, aeronautical, automotive and energy research and development, more high school age talent are curious about STEM-related careers linked with engineering and manufacturing.

TMA DOESN'T JUST TALK

TMA is working hard to attract and train the next generation of manufacturing professionals.

TMA's Education Foundation is reaching out to elementary schools with the Girl Scouts STEMapaloozas held around the state. Along with the Education Foundation, TMA's Training Department is touching base with high schools to develop their technology programs to offer metal working competitions among area high schools.

The Education Foundation is also assisting high schools with grants to expand their hands-on training programs.

And TMA is reaching out to develop workforce opportunities with adult education and advance technology certification programs for manufacturing professionals.

TMA isn't just talking about what needs to be done to keep up with America's resurging demand for skilled workers and innovative talent.

It's DOING something about it.





tma PROFILE

Jack Krikorian

TMA's LEAD CNC PROGRAMMING INSTRUCTOR

By Fran Eaton

"Now that you're graduating, make sure you never stop learning. Keep that same drive you showed in class. You truly have a bright future ahead of you," TMA instructor Jack Krikorian said, just before handing certificates to graduates of TMA's 2016 CNC Programming course.

The 2016 CNC Programming graduates Krikorian was encouraging were the latest in a line of machinists, mold makers and tool & die makers in whose training he has played a crucial part.

Thirty-one years ago, Krikorian himself enrolled in TMA's Tool & Die Apprenticeship program after graduating from high school and working for MIK Tool & Die.

He says his early interest in tool making was sparked when his father would take him along to visit his work on weekends.

"My dad was a model maker in the trade. I would go with him on weekends to his shop at Hughes Aircraft," Krikorian said. "The machines fascinated me even as a kid. I was always interested in tinkering on things – I even worked in a bicycle shop during high school."

After completing his TMA apprenticeship, Krikorian built rubber molds for the automotive industry at Sarkol. He then began mold making at Rexam Mold Manufacturing, where he built and supervised high cavitation plastic injection mold projects for 18 years.

After spending some time in supervisory positions, Krikorian returned to Rexam's shop floor, following a passion to build an in-house model apprenticeship program for mold makers.

Four and a half years ago, Krikorian joined TMA to update and upgrade the association's apprenticeship program. TMA's training program now boasts 150 students in three major lines of coursework - CNC programming, tool & die making, and mold making.

continued on page 18...

tma | investing in the future

TMA EDUCATION FOUNDATION CELEBRATES 25TH ANNIVERSARY





On May 14th, TMA members gathered at the Drake Oak Brook Hotel to celebrate the TMA Education Foundation's 25 years of promoting manufacturing education and careers.

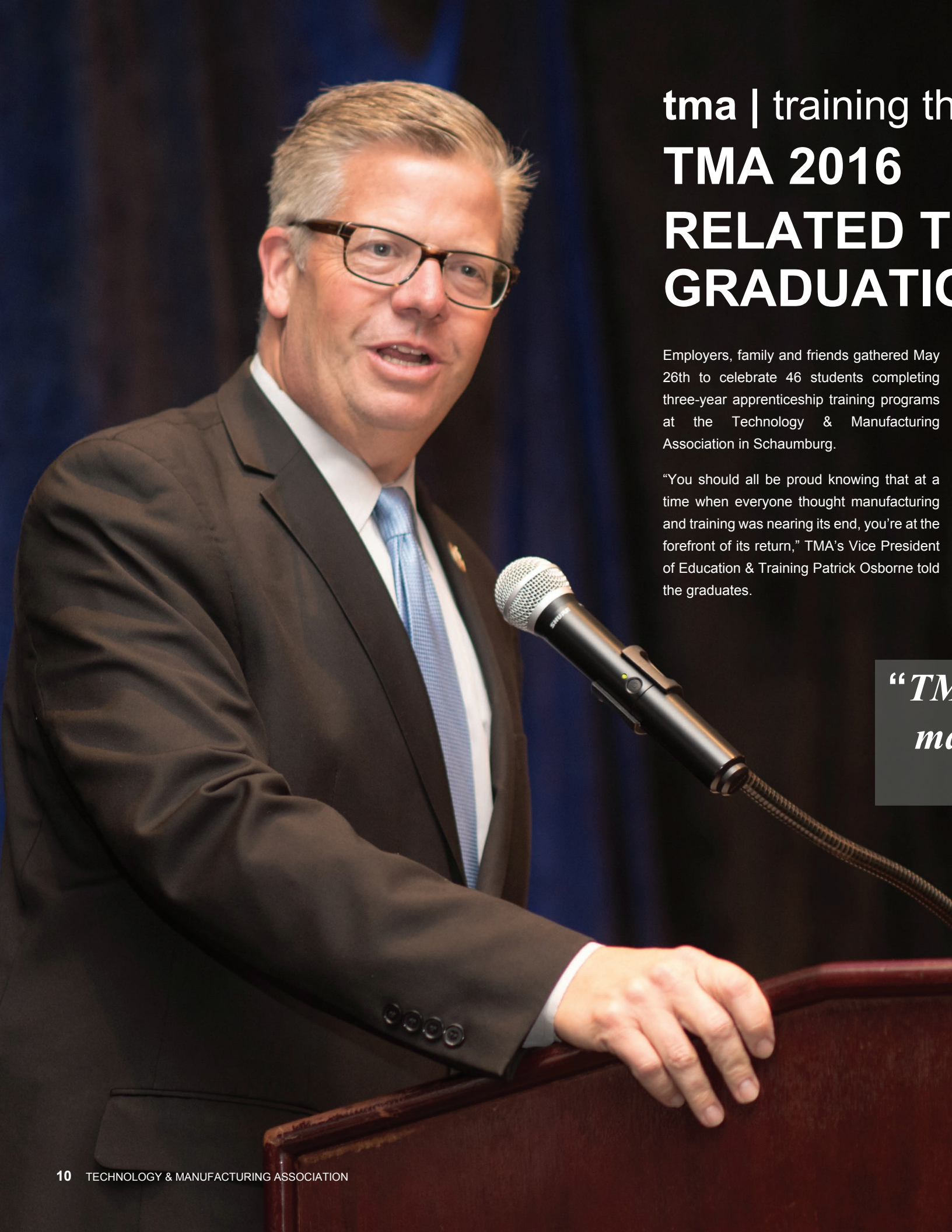
Since its founding in 1987, the Foundation has donated over \$1.3 million to purchase machinery, software, and equipment and to subsidize awards, competitions, research and scholarships as well as industry instruction. Thus far, the foundation has invested in over 70 manufacturing education programs throughout the Chicago area.

The Foundation, whose newly elected president is Robert Clifford of Acme Industries, is committed to strengthening and preparing the next generation of manufacturers, and supporting trade and outreach programs in schools.

Board trustees include, Jim Carr of CARR Machine & Tool, Inc, Tim Doran of Tristate Machinery, J.R. Hommer of Hommer Tool & Mfg., Keith Krutz of IMS Buhrke Olson, LLC, Mike Warren of Rieke Office Interiors and Nicole Wolter of H.M. Manufacturing, Inc.

The Board's Executive Committee is led by President Clifford, Treasurer Ryan Wiegel of Wiegel Tool Works, Inc., Secretary Steve Rauschenberger of TMA, and Chair Carol Ebel of Janler Corporation.

TMA's Associate Director of Education Foundation Services is Greta Salamando. ●



tma | training the TMA 2016 RELATED TO GRADUATION

Employers, family and friends gathered May 26th to celebrate 46 students completing three-year apprenticeship training programs at the Technology & Manufacturing Association in Schaumburg.

“You should all be proud knowing that at a time when everyone thought manufacturing and training was nearing its end, you’re at the forefront of its return,” TMA’s Vice President of Education & Training Patrick Osborne told the graduates.

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the future

THEORY ON

TMA instructors Jack Krikorian, Rich Nielsen and Joe Genc awarded completion certificates during a ceremony and dinner held at the Stonegate Conference Center in Hoffman Estates.

The training of each of the eight completing coursework in CNC Programming, 12 in mold making and 26 in tool and die making was sponsored by their individual TMA member employers.

"I know you're aware of how fortunate you

are to work for companies who value having highly-trained employees and who are willing to invest in their workers," Krikorian said. "They sent you here for a reason. Make sure that you never stop learning. Keep the same drive you showed in class. You truly have a bright future."

Congressman Randy Hultgren (IL-14) and Albert Raczynski, the 34-year-old founder of Machined Concepts, Inc. challenged the graduates as they stepped into the next phase of their manufacturing careers.

"You are here because you enjoy making things. It's hard to enjoy making things and not take pride in what you do. This is the spirit that embodies American manufacturing. It's this same pride that motivated me to start my own business," Raczynski told the graduates. "You've made a great career choice to head into manufacturing. It is the backbone of this country. Be proud of that choice."

Congressman Hultgren agreed with Raczynski. As a member of the U.S.

House Committee on Science, Space and Technology, Hultgren said he's convinced that a crucial part of America's greatness is that it is a nation that makes things.

"When we're not innovating, when we're not discovering or making things, we're in trouble, we're on our way down," Hultgren said. "My fear is there's a lot of countries in the world that are ready to take the lead if we fail, so we have to be as aggressive as we possibly can to lead the world. You're a key part of that in manufacturing."

Hultgren asked the graduates, their families, friends and employers to help get the word out that manufacturing offers viable successful career opportunities and to encourage young people to focus on STEM education and be willing to mentor a new generation of manufacturers.

CNC Programming 2016 Graduates

Timothy S. Chung, Ehren R. Gemeinhardt, Alfredo N. Gonzalez Hernandez, Pedro Plata, Kip Powell, Joshua A. Tafolla, Ross A. Urso, Jr. and Daniel N. Ybarra.

Tool & Die Making 2016 Graduates

Benjamin P. Adkins, Kenneth Amaning, Seth K. Bahr, Nicholas R. Baum, Brandon L. Becker, Degger A. Ciesemier, Joseph N. Clemente, Edgar A. Corona, Brock T. Daehler, Mike A. Ducato, Jonathon T. Frantz, Leopoldo Idrogo, Jerry B. Jones, Darryl F. Kozel, Kevin J. Malloy, Robert Paczuska, Aaron J. Pfaff, Michael A. Pisciotto, Juan G. Puga, Joshua D. Rackley, Jonathan D. Stasi, Pawel P. Trznadel, Ryan W. Turnbull, Gustavo Villa, Octavio Villegas and Patrick J. Walton

Mold Making 2016 Graduates

Michael J. Barnas, Tyler J. Binning, Timothy C. Castonguay, Alejo J. Castro, Daniel J. Falk, Gonzalo Lechuga, Adrian M. Naploszek, Jerrod M. Niggemann, Patrick J. Paleczny, Christopher V. Palminteri, John Paul Provenza and Todd M. Smith. ●

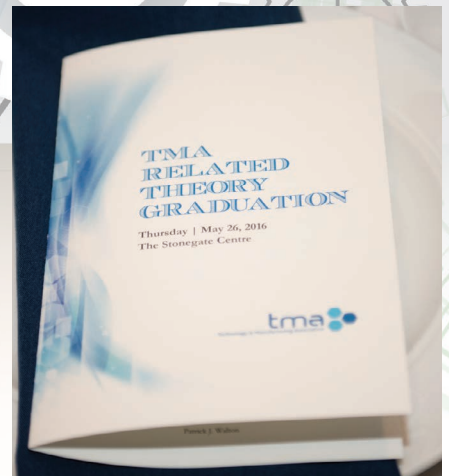
PHOTOS ON NEXT PAGE...

TMA graduates are the innovators and makers who keep our country strong."

~ U.S. Congressman Randy Hultgren

TMA 2016 RELATED THEORY GRADUATION IN PICTURES





FIND MORE PHOTOS ON TMA'S FACEBOOK PAGE

tma | developing the future

PRECISION MACHINING COMPETITION

PARTICIPATION SURGES AS EVENT CELEBRATES 25 YEARS

The 25th annual awards competition held by the Technology & Manufacturing Association accentuated re-emerging interest in manufacturing careers among high school students. Over 200 Chicago region students participated in this year's precision machining competition on May 12th.

Students from 12 different high schools, including four schools more than participated last year, submitted projects

they completed in hands-on training programs under their local instructors.

This year, students entered 226 projects, compared to 95 last year. In 2016, 125 more students participated than in 2015.

Liz McCabe, associate director of TMA's Training and Education, told the News Bulletin the staggering increase in interest is likely due to more schools realizing the unlimited career potential in manufacturing.

"Schools are bringing back shop programs they eliminated years ago, and the schools that kept their programs running are seeing an increase in their numbers," she said. "They're not called 'metal shop' classes anymore, but 'industrial technology' or 'manufacturing technology' classes, which emphasizes the focus on the high-tech, high-skilled aspects of the industry, and helps to attract kids into the programs."

Before the award ceremony held at TMA headquarters in Schaumburg, students, instructors and parents viewed student's entries and spoke with representatives from TMA member area companies such as Scot Forge, Swiss Automation and Wiegel Tool Works.

With the help of TMA's Vice President of Training and Education, Patrick Osborne, Wiegel Tool Works' President Aaron Wiegel presented awards after encouraging the high schoolers to seriously consider rewarding, productive careers in



manufacturing.

“Manufacturers are looking for employees like you to carry on the work the retiring Baby Boomer Generation is doing now,” he said. “Manufacturing has a bright future and we’re happy you’re interested in this important field.”

Three students from Harvard High School - Erik Fuentes, Humberto Hernandez and Jacob Kraus - tied for first place in Division I – Drop Punch. Jacob Kraus of Harvard High School also won first place in Division 1 – Balancer, and Cody Le Grand and Adrian Ziemkiewicz from East Leyden High School took top honors in Division 1 – U-Block.

Kelsey Strand of Streamwood High School won first place in Division II – Tap Wrench and Ronnie Raffanti of South Elgin High school took first in Division II – Angle Plate. South Elgin’s Riley Horkman won top honors in Division II – Bench Block.

Jefferson High School’s Andrew Carlsson took first place in Division III – Grinding Vise and first place in Division III – Indicator Stand. Sunny You from Streamwood High school won Division III – Sine plate.

South Elgin High School’s Dylan Rasmussen took first place in the NIMS Intermediate Division and Streamwood High School’s Sunny You took first in NIMS Advanced Division.

Woodstock High School’s Devon Halper took first place in CNC NIMS Intermediate Division for CNC Milling and East Leyden’s Liam Nydam won first in CNC Turning.

And Wheeling High School’s Marcin Sobas won first place on the most advanced milling project in the CNC NIMS Advanced Division while Devon Halper of Woodstock High School won first place for his turning project.

Participating high schools this year included East Leyden, Elk Grove, Harvard, Jefferson, Lake Park, McHenry, Rolling Meadows, South Elgin, Streamwood, West Leyden, Wheeling and Woodstock.

TMA’s Manufacturing Education and Careers Committee oversaw the competition, led by Chairman Tom Hacker of C&L Supreme. Others on the committee include consultant Mike Chester, Jeff Curtin of Sko-Die, Inc., Steven Lowery of Tower Oil & Technology, Jonathan Martinez of X-L Engineering, Rich Nielsen of IMS Buhrke-Olson, Walt Oakley of Oakley Consultants, Rocco Palmi of Ramcel Engineering, Tim Roth of Craftsman Tool & Mold, Ron Sandy of Sterling Engineering, Tom Simeone of Manor Tool & Mfg., Lee Waller of Genesis 1 Technology, Larry Waltz Jr. of Waltz Bros. and John Winzeler of Winzeler Gear.



**ADDITIONAL PHOTOS ON
TMA’S FACEBOOK PAGE**

tma | training

JUNE - JULY - AUGUST

COMING FALL 2016

RELATED THEORY APPRENTICE TRAINING



The TMA Related Theory Apprentice Training Program has been assisting member companies in training their apprentices for over 75 years. It has been one of the largest, most recognized precision metalworking apprenticeship programs in the United States.

The first year course, which is the cornerstone of the Apprentice Program, covers math, print reading, the basics of machine tool technology, and now includes hands-on training.

Registration is now open for first year classes. You must register by August 1, 2016. Entrance exams must be completed prior to enrollment, and a copy of the apprentice's high school diploma or GED is required.

Please contact the TMA Education Department at 847-825-1120 or education@tmaillinois.org with questions or to register.

Classroom Instruction at TMA
1651 Wilkening Road | Schaumburg, IL 60173

Mondays & Wednesdays
OR
Tuesdays & Thursdays

6:00pm – 9:00pm

Class begins September 6th, 2016

JUNE 2016

Introduction to Mastercam - Lathe

Mondays & Wednesdays

6/27 – 7/25

6:00pm – 9:00pm

This introductory class will cover all aspects of operation, system orientation, operator interface, configuration, and 2D geometry construction for the CNC lathe.

JULY 2016

Forklift Safety

7/11

1:00pm – 4:00pm

This 'Train the Trainer' program will help clarify OSHA regulations covering forklift safety and operation. Participants will leave the session equipped with the knowledge and resources to train their forklift operators.

AUGUST 2016

Intro to Swiss CNC

Mondays & Wednesdays

8/8 – 9/19

6:00pm – 9:00pm

Have an employee who needs to learn the basics of Swiss-type CNC machining? TMA is proud to announce a new session of its 6-week "Swiss 101" class. Course content includes the principles of Swiss-type machining, programming overview, machine setup & operation, and more.

Introduction to Mastercam - Mill

Mondays & Wednesdays

8/8 – 8/31

6:00pm – 9:00pm

This introductory class will cover all aspects of operation, system orientation, operator interface, configuration, and 2D geometry construction for the CNC mill.

tma | events

JUNE 29

Member Breakfast

We invite all 2016 members to join us for breakfast and a tour of the new TMA facility. This breakfast is for new members and staff of existing members. Come meet your TMA staff and fellow members.

TIME: 7:30am - 9:00am

COST: Free

LOCATION: TMA Schaumburg

JULY 7

IT Peer Group

Join other IT professionals in the manufacturing industry to discuss issues and solutions within manufacturing IT.

TIME: 11:30am - 1:30pm

COST: Free

LOCATION: Itasca, IL

JULY 13

Roundtable with TMA Chairman Carr

Join other Chicago manufacturers at Lagunitas Brewery for cocktails and a group discussion around relevant issues of being a smaller manufacturer in Illinois.

TIME: 2:30pm - 4:00pm

COST: Free

LOCATION: Chicago

JULY 14

Lunch & Tour: Superior Joining Technologies

Superior Joining Technologies is excited to host TMA members in celebrating the redefining of their workplace in the newly renovated 55,000 sq. ft. facility in Machesney Park.

TIME: 11:30am - 1:30pm

COST: \$35/person

LOCATION: Machesney Park, IL

AUGUST 3

Odyssey Boat Cruise

The TMA Supplier Network is proud to be hosting TMA members on its annual Lake Michigan boat cruise. Join fellow TMA members for networking, dinner, dancing and fireworks watching from the deck.

TIME: 6:00pm - 10:00pm

COST: \$120/person

LOCATION: Navy Pier

AUGUST 9

Roundtable with TMA Chairman Carr

Join other Chicago manufacturers at Revolution Brewing for lunch and a group discussion around relevant issues of being a smaller manufacturer in Illinois.

TIME: 11:30am - 1:00pm

COST: Free

LOCATION: Chicago

AUGUST 12

4th Annual TMA Bike Ride

Join fellow TMA members for a 30-mile social bike ride. All levels of riders are welcome. Rolling average speed of 14 mph. Food and beverages will be enjoyed at the end of the ride.

TIME: 1:00pm departure

COST: Free

LOCATION: Elgin, IL

tma | new members

Cap & Seal Company

Elgin, IL

www.capseal.com

McCullough, Rossi & Co., Ltd.

Hoffman Estates, IL

www.mrclrd.com

Service Sheet Metal Works

Bedford Park, IL

www.servicemetalworks.com

SmaTec International

Lisle, IL

www.smaltec.com

Suburban Industries

Franklin Park, IL

www.sub-ind.com

tma | june calendar sponsor



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INSURANCE *for*
MANUFACTURERS

TMA Benefit Services, Inc. (TMA-BSI) is the only insurance agency in Illinois that is owned by the manufacturing community. A full service agency, TMA-BSI is uniquely qualified to meet the particular needs of manufacturers.

To find out more, call Chris Leyba at:
847.825.1120

tma profile

Jack Krikorian

continued from page 7

At the May 2016 graduation, 46 of those students completed their apprenticeships.

While Krikorian urged the TMA graduates to continue learning and honing their skills, he wasn't telling them to do anything he hasn't done himself. Krikorian now holds 26 National Institute for Metalworking Skills certifications – more than any other known American.

After 30 years in the industry, Krikorian still gets excited when he talks about manufacturing and encouraging another generation into the trade.

"The work is never boring. It's very different from week to week. I loved the challenge itself," Krikorian said. "We take a blueprint, order the materials the project requires, then determine the process we have to go through. I visualize the finished piece from a two-dimensional sheet of paper to the end result. It's never boring."

Krikorian attributes the current and growing shortage of skilled machinists to a couple of things – the short-lived mindset that manufacturing could be done cheaper overseas and the 2008-2009 economic



Jack Krikorian (center, behind podium) congratulates a 2016 Related Theory Graduate.

downturn, when companies cut back and laid off workers.

"Many of those laid off weren't able to wait it out and didn't come back into the industry, instead they moved into other fields like truck driving. We lost a lot of good people," he said.

Since then, things have changed dramatically. Manufacturers are beginning to re-shore, the economy continues to recover and with it, the demand for skilled

workers grows everyday.

Krikorian says skilled workers will be in demand always, even as manufacturing becomes more automated.

"When some of my students get concerned that their company is bringing in a robot, I tell them not to be afraid. I tell them 'That's fine, let the robots do the pick and place. We'll do the smart stuff,'" Krikorian said. "We're the ones that will program them to do the monotonous work."

That confidence in the future of manufacturing and the willingness to take on technological advances exudes when Krikorian is in front of a class.

"I wouldn't be here if I didn't believe you could do this," he told a class of adults just beginning their studies at TMA in the end of May. "Don't be discouraged with all this new information you're learning. As I always say, we take two steps forward and one step back. We're moving forward."

And with any luck and persistence, that class of beginners and many others will be graduating and embarking on new manufacturing careers – "moving forward" with Jack Krikorian cheering them on. ●

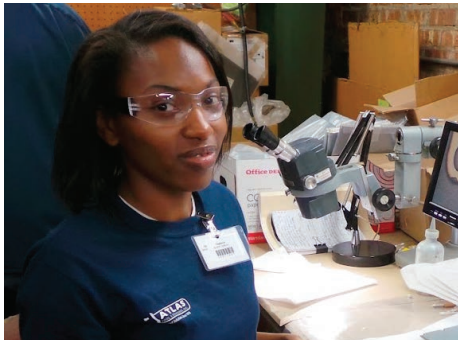


Krikorian (right) explains TMA training to State Representative Michelle Mussman (center)

WHERE ARE THOSE TMA GRADUATES NOW?

UPDATE ON FOUR TMA GRADUATES

ASHLEY AGNEW



Ashley Agnew trained as a fashion designer before she turned to Bethel New Life's training program and earned NIMS certification in CNC turning and milling with TMA.

While studying at TMA in 2014, she started with Atlas Tool Works in Lyons, where the 28 year old is still working today, and doing well, her supervisor Hilary Mottl told the News Bulletin.

"Every day she is learning and contributing more to the team and we are happy to have her here with us," Mottl said.

Since hiring Ashley, more ladies from Bethel New Life's training program have been added to the Atlas Tool Works' team.

CARLOS SANTILLAN



Carlos Santillan started community college to focus on business administration, and

decided to take a job at Craftsman Tool & Mold. Craftsman sent him to TMA, where he studied CNC programming.

Carlos' boss, Tim Roth, said Carlos is still working at Craftsman and is "still very successful."

His excellent example in the workplace and classroom earned Carlos recognition as one of 11 nominees for 2015 American Mold Builders Association Apprentice of the Year.

Carlos was Craftsman's second TMA graduate.

"Without TMA's help in this education, bringing up the skills workforce would be darn near impossible for us to take on by ourselves," Roth told News Bulletin.

AMBER NIGGEMANN



Amber Niggemann was the only female among TMA's 2015 Moldmaking graduates this year. As a delivery driver for her dad's company, Amber was hired on at Helm Tool Company where while working on the loading dock, she started learning how to work with molds.

A graduate of Burlington Central High School in Burlington, Illinois, Amber said it was that love of working with her hands

that pointed her to TMA's mold making class, instead of college.

After a year, Amber is now working for Helm Tool's sister company, American Injection Molding in Des Plaines, Michael Smith at Helm Tool told News Bulletin.

ISMAEL SANTAOLALLA



Ismael Santaolalla graduated with the highest grade in TMA's 2015 Tool & Die class.

Ismael, 38, is still employed at ODM Tool.

"It's tough to find skilled workers now that the automotive business has picked back up," Jay Michaelson said. "Graduates like Ismael will have lots of offers after their graduation."

Ismael said last year that he planned to stay on at ODM Tool because he was optimistic about advancing in his field there.

"Yes, Ismael is still at ODM and doing well," Michaelson told News Bulletin. "He has also stepped up to be the steward for the employees' union." ●



TMA 2016

MAYORS FOR MANUFACTURING

SOUTH SUBURBAN MAYORS DISCUSS CHICAGO MANUFACTURING RENAISSANCE

For the second straight year, TMA's Government Relations Committee convened political officials and local government leadership directly with manufacturers to discuss issues that overlap their two circles. On May 10th, 100 mayors, village managers, county staff and manufacturers gathered at south suburban Prairie State Community College.

"We're entering a time of manufacturing renaissance, where we produce more than we did 20 years ago with more effectiveness than ever before," TMA President Steve Rauschenberger told those attending.

Rauschenberger said the key to any society's economic vibrancy is the way it produces and creates wealth, and the Chicago area has historically been a key manufacturing hub for the nation.

The benefits and needs of Chicago area manufacturers were discussed during a forum featuring Zach Mottl of Atlas Tool Works and Al Raffin of Raffin Construction, along with local government officials Hanover Park Mayor Rodney Craig and Reggie Greenwood, Economic Development Director of South Suburban Mayors and Managers.

One critical need, the panel discussed, is for the community to be more aware of career opportunities available in manufacturing. Nearly 275,000 high-skilled jobs remain unfilled now nationwide, and with Baby Boomers retiring, the numbers are soon to skyrocket.



Cook County Board President Toni Preckwinkle was the keynote speaker at TMA's Mayors for Manufacturing

The good news is that more students and their parents are recognizing that good-paying jobs in the industry await those interested, the panel said, jobs that do not require expensive college educations.

"Many young people are looking for a career pathway other than going to college," Mayor Craig said. "Manufacturing is a career more should consider."

And a job in manufacturing is not taking a second-class career path, Mottl said.

When Atlas Tool Works hires young talent ready to work, the company rotates them around to different locations to discover

their aptitudes. Then the company sends them to TMA training, he said.

"Some of the people we're hiring have already started training. If they're committed to the company, we'll pay for their training," Mottl said.

Currently in the Chicago area, community colleges are working with manufacturers and high schools in the Southland to get the message out about career opportunities, Greenwood said.

But then he pointed back to manufacturers, saying, "You have an opportunity and a responsibility to help us get the next



TMA President Steve Rauschenberger (left) leads a panel discussion with (L-R seated) Al Raffin of Raffin Construction, Mayor Rod Craig of Hanover Park, Zach Mottl of Atlas Tool Works, and Reggie Greenwood, Director of Development for South Suburban Mayors & Managers Association.

generation interested. We all need to reach out to the potential work force.”

Rauschenberger asked the panel what obstacles are stifling industry growth, especially in south suburban Cook County.

“What are we doing wrong? Is it the tax policy, political instability, real estate prices?” he asked the panel. “What are the challenges we face in areas with great resources like the Southland area?”

Mottl said property taxes are a drag on the bottom line, but that was not the biggest deterrent.



“We have a lot of square feet in Cook County, and it affects our budget,” Mottl said. “But being in Illinois, we actually pay more for workmen’s compensation than property tax.”

With big bills like high property taxes and high workmen’s comp rates, it is tougher to get work and compete with lower expense states and countries, Mottl said.

Greenwood said that the Southland region centered at the nation’s transportation hub is an asset of lower logistics cost that balances some of the other expenses such



as those Mottl mentioned.

“We have had \$180 million in investment in the past few months, a huge influx of prosperity into the area,” Greenwood said.

Cook County Board President Toni Preckwinkle agreed during a keynote speech following the forum that the economic development in the county’s south suburbs was encouraging, and offered an optimistic outlook to the mayors and manufacturers that attended the event.

“We’re pleased to bring mayors and manufacturers together so they may work towards making Illinois a better place for business,” Rauschenberger said. “Local officials should be in tune with those that provide jobs and wealth in their communities.” ●



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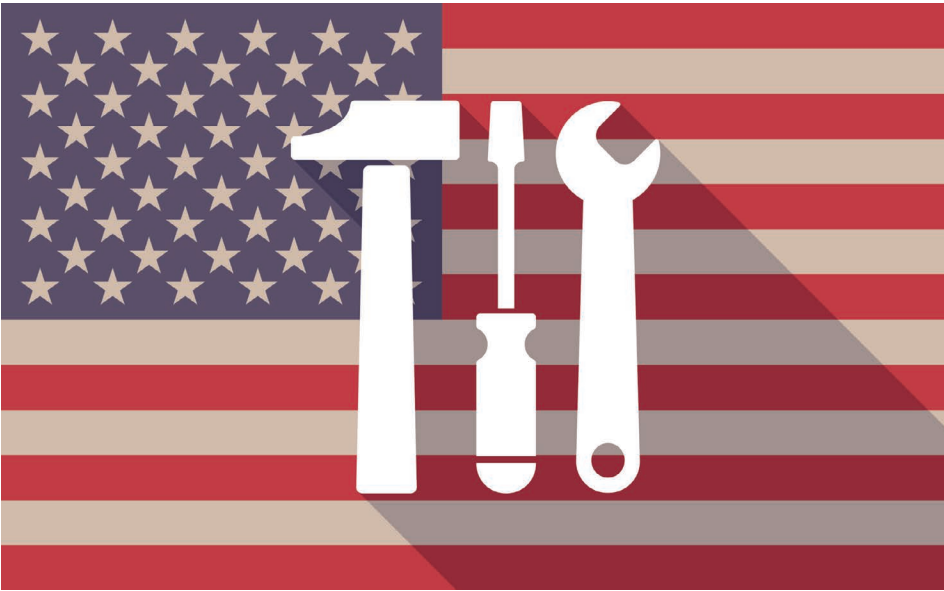
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TOP 20 FACTS ABOUT U.S. MANUFACTURING

1. In the most recent data, manufacturers contributed \$2.17 trillion to the U.S. economy. This figure has risen since the second quarter of 2009, when manufacturers contributed \$1.70 trillion. Over that same time frame, value-added output from durable goods manufacturing grew from \$0.86 trillion to \$1.17 trillion, with nondurable goods output up from \$0.84 trillion to \$0.99 trillion.

2. For every \$1.00 spent in manufacturing, another \$1.40 is added to the economy. That is the highest multiplier effect of any economic sector.

3. The vast majority of manufacturing firms in the U.S. are quite small. In the most recent data, there were 256,363 firms in the manufacturing sector, with all but 3,626 firms considered to be small (e.g., having fewer than 500 employees). In fact, three-quarters of these firms have fewer than 20 employees.

4. Almost two-thirds of manufacturers are organized as pass-through entities. Looking just at manufacturing corporations and partnerships in the most recent data,

65.6 percent are either S-corporations or partnerships. The remainder are C-corporations.

5. There are 12.33 million manufacturing workers in the United States, accounting for 9 percent of the workforce. In addition, manufacturing supports an estimated 18.5 million jobs in the United States—about one in six private-sector jobs.

6. In 2014, the average manufacturing worker in the United States earned \$79,553 annually, including pay and benefits. The average worker in all industries earned \$64,204.

7. Manufacturers have one of the highest percentages of workers who are eligible for health benefits provided by their employer. This is significantly higher than the 79 percent average for all firms.

8. Manufacturers have experienced tremendous growth over the past few decades, making them more “lean” and helping them become more competitive globally. Output per hour for all workers in the manufacturing sector has increased by more than 2.5 times since 1987.

9. Over the next decade, nearly 3.5 million manufacturing jobs will likely be needed, and 2 million are expected to go unfilled due to the skills gap. Moreover, according to a recent report, 80 percent of manufacturers report a moderate or serious shortage of qualified applicants for skilled and highly skilled production positions.

10. Exports support higher-paying jobs for an increasingly educated and diverse workforce. Jobs supported by exports pay, on average, 18 percent more than other jobs.

11. Over the past 25 years, U.S.-manufactured goods exports more than quadrupled. In 1990, for example, manufacturers in the United States exported \$329.5 billion in goods. By 2000, that number had more than doubled to \$708.0 billion.

12. Manufactured goods exports have grown substantially to our largest trading partners since 1990, including to Canada, Mexico and even China. The U.S. enjoys a \$55.0 billion manufacturing trade surplus with its trade agreement partners, compared with a \$579.2 billion deficit with other countries.

13. Nearly half of all manufactured goods exports went to nations with which the U.S. has Free Trade Agreements (FTAs). In 2014, manufacturers in the United States exported \$674.9 billion in goods to (FTA) countries, or 48.1 percent of the total.

14. World trade in manufactured goods has more than doubled between 2000 and 2013—from \$4.8 trillion to \$12.2 trillion. World trade in manufactured goods greatly exceeds that of the U.S. market for those same goods. U.S. consumption of manufactured goods (domestic shipments and imports) equaled \$4.1 trillion in 2014, equaling about 34 percent of global trade in manufactured goods.

15. Taken alone, manufacturing in the U.S would be the ninth-largest economy in the world. Only eight other nations (including the United States) would rank higher in terms of their GDP.

16. Foreign direct investment in manufacturing exceeded \$1 trillion for the first time ever in 2014. Moreover, that figure is likely to continue growing, especially considering the number of announced ventures that have yet to come online.

17. U.S. affiliates of foreign multinational enterprises employ more than 2 million manufacturing workers in the United States, or almost one-sixth of total employment in the sector. Given the increases in foreign direct investment since 2012, these figures are likely to be higher now.

18. Manufacturers in the U.S. perform more than three-quarters of all private-sector research and development (R&D) in the nation, driving more innovation than any other sector. R&D in the manufacturing sector has risen from \$126.2 billion in 2000 to \$229.9 billion in 2014.

19. Manufacturers consume more than 30 percent of the nation's energy consumption. Industrial users consumed 31.5 quadrillion British thermal units of energy in 2014, or 32 percent of the total.

20. The cost of federal regulations falls disproportionately on manufacturers, particularly those that are smaller. Manufacturers pay \$19,564 per employee per year on average to comply with federal regulations, or nearly double the \$9,991 per employee per year borne by all firms as a whole. ●

SOURCE: NATIONAL ASSOCIATION OF MANUFACTURERS

TMA's AL PANICO TAKES TO THE AIR WAVES FOR MANUFACTURING



Al Panico (left) with radio host Dan Proft (right)

Al Panico, President of The Line Group, and a member of the TMA Board of Directors, took to the radio air waves recently to preach the message of Illinois manufacturing.

Appearing on "Illinois Rising," Panico was joined by radio talk show host Dan Proft and Cole Lauterbach, a reporter with The Illinois News Network.

The discussion topics included new tax hike proposals from state legislators, the stress on manufacturers, and how Illinois' failed policies affect all businesses across the state.

Originally aired on AM560 WIND, the program can be found on the WIND YouTube page.

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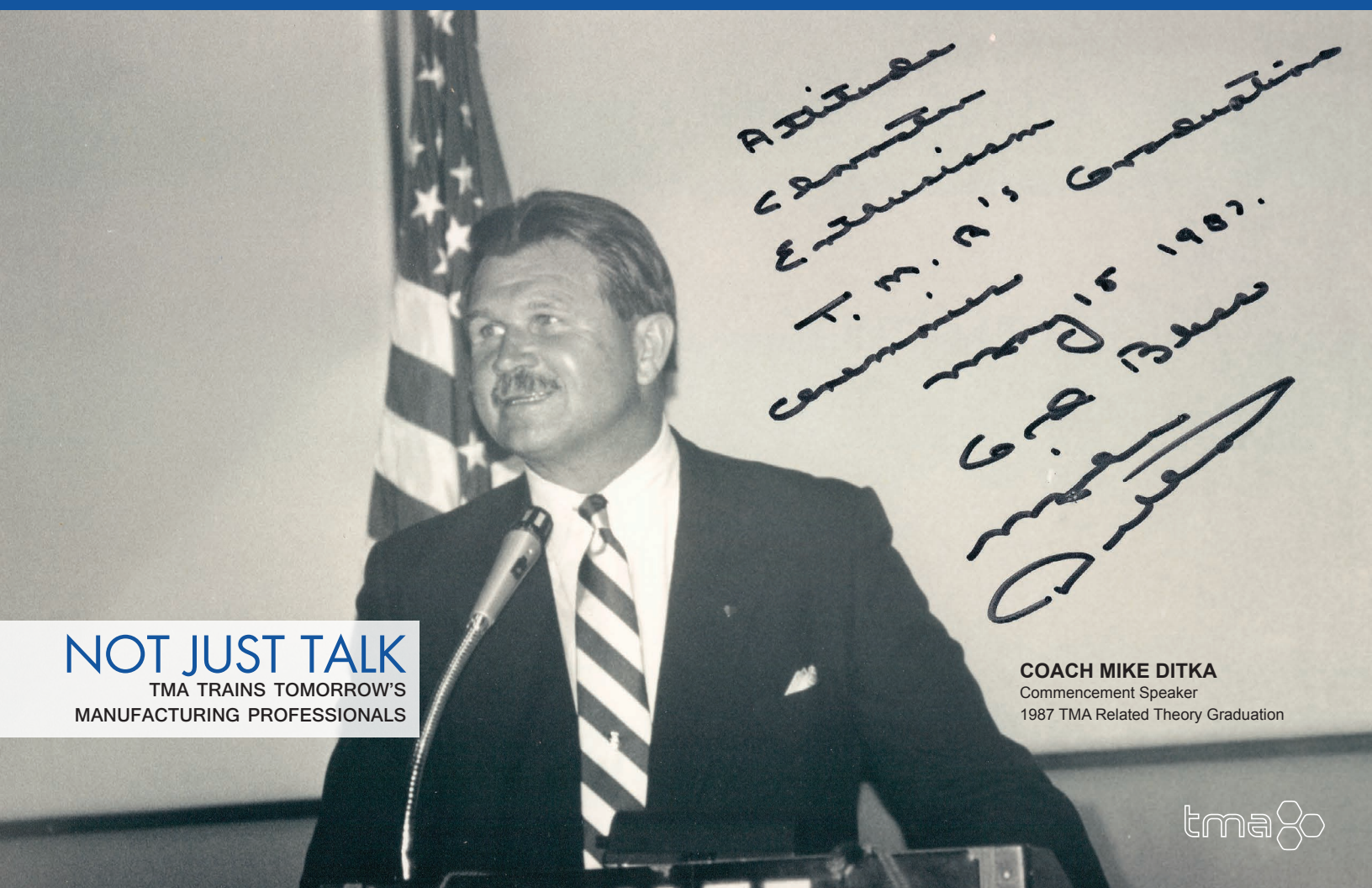
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