ADVANCED MANUFACTURING PARTNERSHIP FOR SOUTHERN CALIFORNIA

BI-ANNUAL MEETING PROGRAM

MARCH 9, 2017 • CALIFORNIA SCIENCE CENTER • LOS ANGELES, CA

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Dear Attendees,

It is my pleasure to welcome you to the second Advanced Manufacturing Partnership for Southern California (AMP SoCal) Bi-Annual Meeting. On behalf of the Price School USC Center for Economic Development (CED) – the AMP SoCal lead and co-applicant – I want to thank you for joining us today.

In 2014, CED and the City of Los Angeles joined forces to develop and submit an ambitious proposal to the Economic Development Administration (EDA). Our application to become part of the nationwide Investing in Manufacturing Communities Partnership (IMCP) initiative was selected and Southern California became a federally designated manufacturing community. I am pleased to report that due to the results produced by all of our partners, on September 23rd this designation was extended for an additional two years.

We have four overarching goals: create jobs, increase sales & exports, grow advanced manufacturing technology adoption, and train and educate the manufacturing workforce. Since our designation, our partnership has created 5,154 jobs and retained 2,630 jobs within Southern California’s A&D sector. That’s nearly 7,800 total jobs that have been positively affected throughout the AMP SoCal collaborative! Our educational partners have trained 1,900 workers in A&D skills and placed over 300 of those students in manufacturing businesses throughout the community. We also have several programs underway or in development that will further advance a pipeline of trained workers to businesses in need of a skilled workforce.

AMP SoCal has been directly involved with increasing Southern California’s A&D sales and exports by $15 million through the Centers for International Trade Development, and a California State Trade and Export Promotion Package to manufacturers attending the 2016 Singapore Airshow. AMP SoCal is part of the recently announced Advanced Robotics for Manufacturing Institute that will bring a Regional Robotics Innovation Collaborative to California, headquartered at the new USC Center for Advanced Manufacturing. The collaborative is addressing the skills gap through CAMAC, a federally approved Apprenticeship Program that provides customized training for new or incumbent workers and short-term intensive training programs to prepare entry-level workers. Intelligent Manufacturing Systems and the Aerospace States Association are partnering with us to host Industry 4.0 to include your input on the blueprint for establishing R&D project clusters through the IMS program to share knowledge, provide broader solutions in less time, reduce research costs, and expand networks through building of domestic and international coalitions.

While we are glad to report that AMP SoCal is matching or exceeding its initial goals, we know that there is still much to be done. That’s why it is so instrumental that we have the participation of business and industry leaders like you. At today’s event, we have an outstanding line-up of speakers and panelists. It is my hope that you leave with valuable information and the knowledge that you have AMP SoCal as an asset, advocate and resource for the success of your company and community.

Sincerely,

Leonard Mitchell
Executive Director of USC Center for Economic Development
Principal Investigator for AMP SoCal

SPECIAL THANKS & ACKNOWLEDGMENT TO OUR SUPPORTERS AT THE E.D.A
AGENDA

8:00 AM  Registration and Continental Breakfast

9:00 AM  Opening Remarks and Overview
          Libby Williams, USC Center for Economic Development - AMP SoCal

9:10 AM  Bi-Annual Meeting Welcome
          Thomas Guevara, Deputy Assistant Secretary for Regional Affairs, performing non-exclusive duties of the Assistant Secretary for Economic Development, U.S. Economic Development Administration

9:25 AM  AMP SoCal Welcome
          Deepak Bahl, Program Director, USC Center for Economic Development

9:30 AM  Keynote Address
          Ken Shaw, Vice President, Supply Chain, Boeing Global Services, The Boeing Company

9:45 AM  University Welcome
          Jack H. Knott, Ph.D., Dean, USC Sol Price School of Public Policy

9:50 AM  Featured Speaker
          Moderator: Ken Shaw, Vice President, Supply Chain, Boeing Global Services, The Boeing Company
          General David Petraeus (Ret.), Judge Widney Professor, USC Sol Price School of Public Policy

11:00 AM Panel 1: Industry in Transition - Changes in Aerospace & Defense
          Moderator: Michael Orosz, Ph.D., University of Southern California
          Andrew Duggleby, Ph.D., Virgin Galactic
          David Hwang, Millennium Space Systems
          Robert M. Atkins, Lt Colonel, USAF

12:00 PM Networking Lunch

1:00 PM  Panel 2: Industry 4.0
          Moderator: Jack Harris, Aerospace States Association
          Steve Ray, Ph.D., Intelligent Manufacturing Systems
          Rafael Radkowski, Ph.D., Iowa State University
          Satyandra K. (SK) Gupta, Ph.D., University of Southern California

2:00 PM  Panel 3: New Paths to Growth
          Moderator: Adrienne Lindgren, City of LA Mayor’s Office of Economic Development
          Tomás E. Durán, USC Center for Economic Development - AMP SoCal
          Mayor Patrick J. Furey, City of Torrance
          Abe Nour, Moss Adams

3:00 PM  Panel 4: Aerospace Supply Chain Competitiveness
          Moderator: Camille Geiger, Boeing
          Kellie Johnson, ACE Clearwater
          Mike Riley, AMRO Fabricating Corporation
          Shawn Webb, AeroVironment Inc.
          Scott Wallace, Votaw Precision Technology, Inc.

4:00 PM  Adjourn
EXECUTIVE COUNCIL

CO-APPLICANTS

Leonard Mitchell, J.D., M.B.A., M.A.
Executive Director, USC Center for Economic Development
Lead Co-Applicant & Principal Investigator, AMP SoCal

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City of Los Angeles
Representative:
Adrienne Lindgren
LA Mayor’s Office of Economic Development
Co-Applicant, AMP SoCal
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Administration Manager, Workforce Development Board of Ventura County
Ventura County Alternate, AMP SoCal

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Director, Strategic Initiatives & Cluster Development, Los Angeles County Economic Development Corporation
LA County Alternate, AMP SoCal

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Marissa Rivera
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- The American Institute of Aeronautics and Astronautics (AIAA)
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- The Los Angeles National Tooling and Machining Association (LA/NTMA)

#### Manufacturing Support
- Aerospace & Defense Forum
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- Orange County Workforce Investment Board*
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- Ventura County Workforce Development Board*
- Verdugo Workforce Investment Board*

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- Saddleback College*

* An * indicates an AMP SoCal founding partner.
Libby Williams, Project Manager & Economic Development Specialist
USC Center for Economic Development-AMP SoCal

Elizabeth “Libby” Williams has more than 20 years of economic development experience working in Southern California which includes among other things, over 10 years at the Los Angeles County Economic Development Corporation with the Business Assistance Program. In 2007, Williams became the Executive Director of the Los Angeles Economy and Jobs Committee, a private-sector advisory board created by Los Angeles Mayor Antonio Villaraigosa to work with him on key issues of economic development and quality job creation in Los Angeles. Williams coordinated the committee’s activities to evaluate business attraction and retention efforts in Los Angeles and develop recommendations for action and improvement. Williams has a BA and an MPA from California State University at Long Beach and a Master in Leadership from the University of Southern California.

Thomas Guevara, Deputy Assistant Secretary for Regional Affairs Performing the Non-Exclusive Duties of the Assistant Secretary for Economic Development, Economic Development Administration

During the Presidential transition, Tom Guevara is performing the non-exclusive duties of the Assistant Secretary for Economic Development. In this capacity, Mr. Guevara is charged with leading the federal economic development agenda by promoting innovation and competitiveness to help U.S. workers and businesses compete globally.

Guevara regularly serves as Deputy Assistant Secretary for Regional Affairs, directing and supervising the activities of the Economic Development Administration’s (EDA) Office of Regional Affairs, which includes all six EDA Regional Offices, the Performance and National Programs Division, EDA’s Loan Guarantee Program, the Integrated Economic Development team, and EDA’s Organizational Development team.

Deepak Bahl, Program Director
USC Center for Economic Development

Deepak Bahl serves as the Program Director for the USC Center for Economic Development and Adjunct Associate Professor at the USC Sol Price School of Public Policy. He has more than 18 years of professional consulting experience and has managed federal, state, and local projects in the areas of community and economic development. His work experience includes strategic planning, business development, project management, teaching at USC, and policy research and analysis. He has conducted research projects for the EDA, EPA, FTA, HUD, NSF, OEA, Caltrans, local governments, and private foundations among others. He received Master of Business Administration from the USC Marshall School of Business, Master of Planning from the USC Price School, and Master of Architecture from Clemson University.

Jack H. Knott, Ph.D., Dean, Sol Price School of Public Policy
University of Southern California

Jack H. Knott took the reins of the USC Sol Price School of Public Policy in August 2005 as the C. Erwin and Ione L. Piper Chair and Professor. Before joining USC, Dean Knott served from 1997 until 2005 as professor of political science and director of the Institute of Government and Public Affairs at the University of Illinois at Urbana-Champaign and Chicago. From 1987 to 1997, Dean Knott was a professor in the Department of Political Science at Michigan State University, where he served as departmental chair and director of Michigan State’s Institute for Public Policy and Social Research.

Dean Knott is a leading scholar in the fields of political institutions and public policy, health policy, and public management. He has published three books, including Reforming Bureaucracy: The Politics of Institutional Choice, and numerous journal articles and book chapters. He received his Ph.D. in political science from the University of California, Berkeley, his M.A. in comparative political economy from the School of Advanced International Studies at The Johns Hopkins University, and his undergraduate degree in history from Calvin College.
Kenneth A. Shaw, Vice President, Supply Chain, Boeing Global Services
The Boeing Company

Ken Shaw is the vice president of Supply Chain for Boeing Global Services. This capability coordinates with suppliers worldwide for supply chain execution and parts to support the Government Services and Commercial Services businesses across Boeing Global Services. In this role Shaw is responsible for high-quality, efficient and repeatable delivery of services as well as innovation and technical development for advanced service offerings to the customer.

Previously, Shaw served as vice president and managing director of Boeing Defence Australia (BDA), a position he assumed in September 2015. In that role, Shaw managed all BDA businesses and functions and was responsible for establishing and executing new and existing programs, achieving business objectives, and implementing corporate strategies that positioned Boeing's Australian defence activities for continued success. BDA is Boeing's largest operation outside the United States with more than 2,000 employees across 14 Australian sites and three international locations.

Prior to joining BDA, Shaw served as vice president Supplier Management with Boeing Military Aircraft (BMA) where he was responsible for Platforms and Subsystems Contracting across Boeing Defense, Space & Security. Before joining BMA, Shaw was vice president, Supply Chain Management for Global Services & Support (GS&S). While there, he developed strategic supplier relationships for all GS&S programs while leading an organization with more than 1,400 employees at 10 sites across the United States, Australia, and the United Kingdom.

Shaw has held positions of increasing responsibility across Boeing's defense and space programs. These have included leadership roles in Supplier Management supporting Space & Intelligence Systems – Special Programs, Homeland Security & Services, and Integrated Defense Advanced Systems. Shaw began his career in major subcontracts at Northrop Corporation's B-2 division. In 1992, he moved to Boeing to join the C-17 Globemaster III program. He also was responsible for leading both the Avionics/Flight Controls and Aircraft Systems organization and the Outside Manufacturing and Strategic Contracting organization across multiple Southern California sites.

General (Ret.) David H. Petraeus
Judge Widney Professor at University of Southern California

General (Ret.) David H. Petraeus is a partner at KKR, chairman of the KKR Global Institute, and a Judge Widney Professor at University of Southern California. Prior to joining KKR, General Petraeus served over 37 years in the U.S. military, including command of coalition forces in Iraq, command of U.S. Central Command, and command of coalition forces in Afghanistan. Following his service in the military General Petraeus served as the Director of the Central Intelligence Agency.

General Petraeus graduated with distinction from the U.S. Military Academy and subsequently earned an MPA and Ph.D. degree in international relations from Princeton University's Woodrow Wilson School of Public and International Affairs. General Petraeus has received numerous U.S. military, State Department, NATO, and United Nations medals and awards, and he has been decorated by 13 foreign countries.

General Petraeus is also a Visiting Professor of Public Policy at the City University of New York’s Macaulay Honors College, a Senior Fellow at Harvard University’s Belfer Center, Co-Chairman of the Woodrow Wilson Institute’s Global Advisory Council, Senior Vice President of the Royal United Services Institute, and a member of the boards of the Institute for the Study of War, the Atlantic Council, and seven veterans service organizations.
Panel 1: Industry in Transition - Changes in Aerospace & Defense

Michael Orosz, Ph.D., Assistant Director, Information Sciences Institute, USC Viterbi School of Engineering, University of Southern California

Dr. Michael Orosz directs the Decision Systems Group at the University of Southern California’s Information Sciences Institute, is a Research Associate Professor in USC’s Sonny Astani Department of Civil and Environmental Engineering, and an investigator at the DHS-funded National Center for Risk and Economic Analysis of Terrorism Events (CREATE). Dr. Orosz has over 30 years of experience in commercial and government software development, basic and applied research and development, project management, academic research, and has developed and deployed several commercially successful products. His research interests include decision systems, open source intelligence, data analytics, cyber-security, physical infrastructure protection, predictive analysis, operational risk management and intelligent human-computer interfaces. Dr. Orosz received a B.S. in Engineering from the Colorado School of Mines, a M.S. in Computer Science from the University of Colorado, and a Ph.D. in Computer Science from the University of California, Los Angeles. Prior to joining USC, Dr. Orosz worked in the aerospace/defense/intelligence, motion picture entertainment, engineering consulting, and natural resource extraction (mining) industries.

Andrew Duggleby, Ph.D., P.E., C.W.I, Propulsion Advanced Manufacturing Manager
Virgin Galactic

Andrew Duggleby leads the advanced manufacturing group at Virgin Galactic focusing on hybrid additive/subtractive manufacturing, advanced simulation, metallurgy, special processes, and advanced engine technologies. Since getting his Ph.D. in 2006, he has been a Mechanical Engineering professor for 10 years (Virginia Tech and Texas A&M), CTO/co-founder of Exosent Engineering, a DOT hazardous trailer engineering & manufacturing company. Duggleby is also currently a US Navy Reserve Engineering Duty Officer working with NAVSEA and SSP (Strategic Systems Program).

David Hwang, Director of Manufacturing
Millennium Space Systems

David Hwang has a record of successful deliveries to the International Space Station under his leadership. He uses his expertise in parts, materials and processes and his passion for small, fully capable, satellites to vertically integrate avionics manufacturing at Millennium Space Systems. Hwang optimizes designs, product quality and manufacturing efficiency for the ALTAIR and AQUILA satellite lines. He foresees the small satellite industry playing a pivotal role in space technology now and in future years. Hwang's educational background includes a B.S. in Chemical Engineering from UC Berkeley and an M.S. in Materials Engineering from USC.

Robert M. Atkins, Lt Colonel, Deputy, Generation and Ops Division, Launch Enterprise Directorate
US Air Force

Lieutenant Colonel Robert M. Atkins has 19 years of space system experience in every Air Force Space Command mission area. He is responsible for the procurement, acquisition, and integration of the Atlas V, Delta IV, and Falcon 9 launch vehicles. Highlights of his service include Missile Combat Crew Commander, Education with Industry (EWI) fellowship working with Lockheed Martin focused on program management, manufacturing, mission integration, systems engineering and supply chain management, and Chief of several departments within launch, satellite, and National Reconnaissance Office (NRO) programs. In 2012, he deployed to an NRO position for the Director of Space Forces, USAFCENT, and then served as Chief of Space Situational Awareness and Space Control Assets at headquarters AFSPC. Additionally, Lt Col Atkins founded Space Innovation Academy, a non-profit organization designed to build a bridge between education and the space industry. Lt Col Atkins earned his undergraduate in business management from the University of Oklahoma and graduate degrees in Management Information Systems and Space Systems Operations from the University of Maryland and Naval Postgraduate School respectively.
Panel 2: Industry 4.0

Jack Harris, Manufacturing Committee Vice-Chair, Aerospace States Association

Jack Harris has been engaged in economic development in manufacturing for over 25 years. He has served as the Vice Chairman of the Iowa Innovation Council and was a member of the State’s Technology Commercialization Committee. He holds an AAS and BS in Mechanical Engineering and a MS in Engineering Management. Harris served in the United States Air Force from 1969 to 1973 as part of Headquarters Command. In 1993, he was recognized with the Collins Pioneer Leadership Award for development and implementation of a computer aided engineering strategy for Commercial Avionics Engineering. In September 2011, after over 40 years at Rockwell Collins, Harris retired as the Director of Advanced Manufacturing Technology. After his retirement, Harris helped launch and served as the CEO of the Iowa Innovation Corporation, a not-for-profit chartered to foster economic growth through technology commercialization. Today he serves as General Manager for the PDES Inc., international consortium, and also is the CEO for Parametric Studio Inc. Harris is the Vice Chair of the Advanced Manufacturing Working Group for the Aerospace States Association and also the U.S. Head of Delegation for the global Intelligent Manufacturing Systems program.

Steve Ray, Ph.D., Project Development Coach, Intelligent Manufacturing Systems Program

Dr. Steve Ray serves as the Project Development Coach for the U.S. Region within the Intelligent Manufacturing Systems Program. IMS is an industry-led, international business innovation and research and development (R&D) program established to develop the next generation of manufacturing and processing technologies through multi-lateral collaboration. He is also a Distinguished Research Fellow at Carnegie Mellon University Silicon Valley, where he researches semantics, information interoperability and standards in manufacturing, the smart electrical grid, and the Internet of Things. Formerly, he spent twenty-seven years initiating and leading manufacturing R&D projects at the National Institute of Standards and Technology in Gaithersburg, Maryland. He received his Ph.D. in Mechanical and Aerospace Engineering from Princeton University and his Bachelors in Physics from Bristol University in England.

Satyandra K. Gupta, Ph.D., Professor and Director, Center for Advanced Manufacturing, USC Viterbi School of Engineering, University of Southern California

Dr. Satyandra K. (SK) Gupta is a Smith International Professor in the Aerospace and Mechanical Engineering Department and the Director of the Center for Advanced Manufacturing in the Viterbi School of Engineering at the University of Southern California. Prior to joining USC, he was a Professor at the University of Maryland where he was the founding director of the Maryland Robotics Center and the Advanced Manufacturing Laboratory and also served as a Program Director for the National Robotics Initiative at the National Science Foundation. Dr. Gupta received a Bachelor of Engineering degree in Mechanical Engineering from the University of Roorkee (currently known as the Indian Institute of Technology, Roorkee), a Master of Technology in Production Engineering from the Indian Institute of Technology, Delhi, and a Ph.D. in Mechanical Engineering from the University of Maryland. His research interest is in the area of automation, specifically in automation problems arising in Computer Aided Design, Manufacturing Automation, and Robotics. His current research is focused on physics-aware planning in robotics applications.
**Adrienne C. Lindgren, Business Development Manager**  
*City of Los Angeles Mayor’s Office of Economic Development*

Adrienne Lindgren currently serves as a Business Development Manager at the Office of Los Angeles Mayor Eric Garcetti, handling economic development initiatives for manufacturing and aerospace. Prior to serving under the Garcetti administration, Lindgren’s career has been built around producing deliverables for well-established clients across the public, private, and non-profit sectors. Having worked at the nexus of multiple types of public-private ventures, Lindgren leverages her experience across sectors and industries in the fields of planning and development through her knowledge of project management, community outreach, business development and strategic planning, mix-enterprise real estate development, industrial development and infrastructure planning, and alternative financing structures for public-private development projects. Lindgren received her Master of Planning from the Sol Price School of Public Policy at the University of Southern California, and graduated cum laude with a Bachelor’s in Politics and International Relations from Scripps College, where she focused on International Political Economy and Organizational Theory.

**Tomás E. Durán, Administrator Special Projects**  
*USC Center for Economic Development - AMP SoCal*

Tomás Durán is the Administrator for Special Projects at the USC Center for Economic Development. Durán is also the President of Concerned Capital, Inc. (CC). CC is a social benefit corporation based in Los Angeles, CA. Prior to creating CC, Mr. Durán worked as a Program Manager for the Whittier Redevelopment Agency and Vice President of Real Estate for Genesis LA Economic Growth Corp. Durán serves on the board of Friends of Uptown, a local nonprofit dedicated to promoting the historic business district in Whittier, and on the New Market Tax Credit community advisory boards for Dudley Ventures Community Investment and Lowe Economic Development Corporation. He enjoys coaching his sons’ soccer teams and planning events and school improvement projects as their school’s Dads’ Club President. Durán has a master’s in Planning and has worked in the economic development field in Southern California for almost 15 years. Born in Santa Clara, CA, Durán now resides in Whittier, CA with his wife and children.

**Patrick J. Furey, Mayor**  
*City of Torrance*

Patrick J. Furey was first elected to the Torrance City Council in 2008. He garnered the mayoral seat in 2014. As Mayor, he serves as Chair of the State Legislative Advocacy Committee and Federal Legislative Advocacy Committee. In addition, he serves as a member of the Sanitation District of Los Angeles County, the Southern California Association of Governments (SCAG), and serves as the Chair of the Los Angeles County City Selection Committee. He also is the voting delegate for the National League of Cities. Furey graduated with honors from the UCLA Attorney Assistant Training Program and worked as a legal assistant for nine years prior to attending law school. He holds a juris doctor degree from the University of West Los Angeles and is a member of the California State Bar Association. Prior to being seated as the mayor, he retired from the County of Los Angeles as a Principal Deputy County Counsel assigned to the Children's Services Division.

**Abe Nour, CPA, MBT, MBA, Director**  
*Moss Adams*

Abe Nour is a member of the Transaction Services practice at Moss Adams. He has over 12 years of experience providing financial due diligence and assurance services for a wide types of industries that ranged in value from $55 million to over $100 billion. His experience includes assisting private equities, strategic buyers and corporations through all phases of the audit, acquisition and sell process, including initial deal analysis, restructuring, financial and accounting due diligence and financial statements and internal control audits. Nour holds a Bachelors of Science degree in accounting from the American University, Masters of Business Administration (MBA) from the University of Chicago Booth School of Business and Masters of Business Taxation (MBT) from the University of Southern California (USC). He is a licensed CPA in the State of California.
SPEAKERS

Panel 4: Aerospace Supply Chain Competitiveness

Camille Geiger, Senior Manager, BDS Small/Diverse Business & Strategic Alliances
The Boeing Company

Camille Geiger works with Boeing programs and functions to ensure fulfillment of all contractual obligations through an integrated strategic framework of subcontracting with small and diverse businesses. This effort includes responsibility for small business reporting and regulatory compliance to multiple federal government agencies, as well as the development of initiatives to expand innovative research partnerships in support of Boeing’s business objectives. Geiger also serves as the Small Business Liaison Officer for The Boeing Company. As such, Geiger is responsible for maintaining and improving company relationships with the federal government on matters related to small business subcontracting and supplier diversity. Geiger – the recipient of such honors as the Women of Color’s 2007 Technology All Star Award and one of the National Association of Women Business Owner’s Honorary Remarkable Women of the Year in 2000 – also has served as president and chairman on the board for the Boeing Leadership Association. She has an MBA from the University of Southern California and a bachelor’s degree in management-marketing from the University of Redlands.

Kellie Johnson, President
ACE Clearwater

Kellie Johnson is president of ACE Clearwater Enterprises, a third-generation family business she joined in 1985. Specializing in complex formed and welded assemblies, the Torrance, California-based company has grown to nearly 200 employees. Johnson is on the board of the National Association of Manufacturers and the NAM executive committee. She served as chair of NAM’s small and medium-size manufacturers group and is vice chair of the Manufacturing Institute. She served on the Manufacturing Council in the Bush and Obama administrations until 2012, during which time she chaired the subcommittee on competitiveness. She is currently vice chair of the Catalina Island Conservancy board. Johnson is involved in the local school system, speaking about careers in manufacturing and encouraging educators to promote manufacturing as a career. Her company promotes internship programs, working with community colleges and universities to expose young people to engineering and other manufacturing-related careers. She holds a B.A. in International Relations from the University of Southern California.

Michael Riley, CEO
AMRO Fabricating Corporation

Michael “Mike” Riley is a third-generation member of the AMRO family. Riley has grown up in the aerospace manufacturing world. He spent his summers learning the trade by working in each of AMRO’s shop departments from the time he was a kid until he went to college. After graduating from Northern Arizona University with a BS in Business Administration in 2007, Riley was a program manager for various tooling and ground support equipment projects. In 2012, Riley was named Director of Space Flight Hardware and oversaw the development and production of all SLS and Orion hardware. He recently became the CEO in January of 2017.

Shawn Webb, Director of Operations
AeroVironment, Inc.

Shawn Webb has been Director of Operations of AeroVironment, Inc. in Monrovia & Simi Valley, California since 2009. Prior to that, Webb worked Bombardier Aerospace, Textron and other Aerospace companies, where he served various leadership roles across manufacturing and engineering over 12 years. He brings more than 20 years of successful manufacturing leadership with focus in revitalizing organizational performance in leadership positions, and leading from the front with an orientation toward tangible, measurable results. Webb’s professional experience spans the management of all technical aspects of manufacturing operations including estimating, engineering, manufacturing, and quality.

Scott Wallace, Executive Vice President, Engineered Solutions
Votaw Precision Technologies, Inc.

Scott Wallace started his career at Votaw in 1982 in the program management office and served in many different roles at the company including Vice President of Sales. Wallace served as President of Votaw from 2003-2016. During his time as President the company’s revenues grew from $14M to over $50M. Votaw’s significant growth throughout the years is highly attributed to Wallace’s ability to build and develop strong technical teams and robust business practices that exceed customers’ expectations and promote Votaw’s focus of “Mission Success Starts Here.” Wallace is celebrating 35 years of service at Votaw this year. He received a B.S. in Business Management from Brigham Young University in 1982.
ABOUT AMP SoCal

OVERVIEW

The Advanced Manufacturing Partnership for Southern California (AMP SoCal) is a collaboration that unites government, academia and industry toward the common goal of strengthening the industrial ecosystem throughout Southern California for aerospace and defense (A&D) manufacturers and their supply chain. This unique cooperation benefits communities and businesses by fostering job growth, technological advancement, federal funding and more.

WHO WE ARE

AMP SoCal is led by the University of Southern California Center for Economic Development (CED), an applied research center of the USC Sol Price School of Public Policy, in partnership with the City of Los Angeles, and what has grown to include more than 135 companies and organizations from both public and private sectors. The network leverages the combined knowledge, innovation and political support of its members to accomplish its goals of supporting the A&D industry.

IMCP DESIGNATION

AMP SoCal has the distinct honor of being among the first federally designated regions in the nationwide Investing in Manufacturing Communities Partnership (IMCP) initiative. AMP SoCal represents the southern 10 counties of California with a specific focus on A&D manufacturing. An IMCP designation carries the advantage of preference to $1.3 billion in federal funding, which has been allocated toward bolstering the economic ecosystem of manufacturing across the country. Learn more about the IMCP initiative at www.eda.gov/challenges/imcp/.

This map highlights the designated Investing in Manufacturing Communities Partnership (IMCP) regions. The 2014 designations – which includes Southern California as part of AMP SoCal – are marked in yellow. Map source: Madison Region Economic Partnership (MadREP)
ACHIEVEMENTS

BRINGING PUBLIC & PRIVATE FUNDING TO SOCAL

AMP SoCal has been involved with numerous initiatives that have helped bring more than $135M in federal funding to Southern California’s efforts in improving infrastructure, advancing manufacturing processes, increasing technology adoption and building a trained workforce through technical education. The partnership has supported sixteen companies with successful applications for the California Competes Tax Credit program. Collectively the companies committed to invest $1.2B in growing their presence in Southern California and will receive almost $28M in tax credits.

$15 MILLION INCREASE IN A&D SALES AND EXPORTS

Increase due to the Centers for International Trade Development and a CA State Trade and Export Promotion Package to manufacturers attending the Singapore Airshow.

JOB GROWTH

5,154 created
2,630 retained
7,784 TOTAL

Employment numbers were tracked by partners within the AMP SoCal network as growth that was directly attributed to services offered by AMP SoCal members to aerospace and defense businesses in Southern California.

1,900 existing and future workers trained
300+ placed

AMP SoCal has more than 35 educational institutions within its partnership. They reported that more than 1,900 students were trained in A&D skills and 300+ were placed as workers in manufacturing businesses throughout the community.

THE COLLABORATIVE HAS EXPANDED TO MORE THAN 135 PARTNERS & GROWING
AMP SoCal and its dynamic network of partners have launched a number of exciting projects designed to benefit the aerospace and defense manufacturing ecosystem of Southern California. Through these efforts and more, AMP SoCal addresses needs in workforce and training, advanced technology adoption, research and development and business assistance. If you are interested in more information on these projects or would like to get involved please visit ampsocal.usc.edu or contact us at ampsocal@usc.edu.

MANAGED CAREER PIPELINE

AMP SoCal is partnering community colleges with workforce development boards to create a pipeline of skilled workers for manufacturing firms. The goal is to create a steady stream of skilled workers to fill apprenticeships and job vacancies in manufacturing firms. We have three programs underway with funding from the Office of Economic Development, U.S. Department of Defense that are working with employers that have been adversely affected by reduced Department of Defense procurement and contracting.

- **Advanced Manufacturing Partnership & Employment Support (AMPTES)** - Cerritos College partnered with Southeast Los Angeles County Workforce Development Board and Homeboy Industries to launch a three-phased Advanced Manufacturing training program offering students an opportunity to obtain a Maintenance Mechanic apprenticeship and full time employment with partner companies.
- **Welding I Certification** - MiraCosta College Community Education & Workforce partnered with the San Diego Workforce Partnership to launch an advanced manufacturing training program that provides students a Welding I certificate upon finishing the course to strengthen the talent pipeline for North San Diego County.
- **AeroFlex Pre Apprenticeship** - West LA College in partnership with South Bay Workforce Investment Board, Tooling U-SME, and Training funding partners is developing an employer driven pre-apprenticeship and apprenticeship program to build the South Bay engineering workforce pipeline.

THE UNIQUELY ABLED ACADEMY

A CNC Machinist program for individuals with high-functioning autism is currently being offered at Glendale Community College through the Uniquely Abled Project. Training includes readiness, soft skills, site visits, and open laboratory. Program graduates will qualify for entry-level positions such as machinist apprentice, CNC operator, and CNC programmer. Learn more at: http://uniquelyabledproject.org/

INTRO TO MANUFACTURING TECHNOLOGY BOOTCAMP

AMP SoCal, East Los Angeles College (ELAC) and the University of California, Los Angeles (UCLA) Extension piloted an Intro to Manufacturing Technology Bootcamp in January. This accelerated 5-week certificate program immersed students in the fundamentals of manufacturing procedures and processes. Students became qualified for high-demand, entry-level positions in the manufacturing industry and were interviewed by interested participating employers at the closing graduation and hiring event with assistance from Southern California Goodwill an American Jobs Center of California, SME, IEEE and San Gabriel Valley Economic Partnership.

CALIFORNIA ADVANCED MANUFACTURING APPRENTICESHIP COLLABORATIVE (CAMAC)

CAMAC is a partnership between industry, community colleges, ToolingU, and Goodwill Southern California. The program is a US Department of Labor (DOL) registered apprenticeship that incorporates 16 occupations into a set of standards. The partners agree to the Pattern Standards of Apprenticeship and Goodwill acts as the administrative glue, coordinating activity and ensuring compliance to the program. Visit www.camac.us to learn more.
BUSINESS ASSISTANCE

INNOVATION FORUM SERIES

Every quarter AMP SoCal hosts a workshop that connects small- and medium-sized manufacturers to available research in A&D advanced manufacturing through a series of leading experts and speakers. A growing online library of presentations and videos is available on the AMP SoCal website. Visit ampsocal.usc.edu/events to see upcoming Innovation Forums.

THE RED CARPET SERVICE

AMP SoCal offers a free-of-charge “Red Carpet” service through its economic development partners. This program assists A&D companies in the 10-county Southern California region to expand and succeed through a wide range of services, which include workforce development, job placement assistance, incentives and financing, site searches, permit and plan check assistance and more.

In addition, the Los Angeles Economic Development Council SoCal Aerospace Council convenes stakeholders around current action items for the benefit of the regional economy and businesses and jobs in aerospace and defense. To get involved: http://www.laedc.org/industries/aerospace-analytical-instruments/

EXECUTIVE LEVEL ADDITIVE MANUFACTURING/3D PRINTING CERTIFICATE

A highly interactive distance education program is available that offers business owners and managers the information required to determine if and when to invest in additive manufacturing technology through twelve hours of instruction and guided exercises. For more information, contact Dion Jackson dljackso@usc.edu.

STRENGTHENING COMPETITIVENESS

Strengthening Competitiveness is an AMP SoCal program that matches university expertise in business administration, accounting, engineering or law to provide solutions for your business. The Department of Defense Office of Economic Adjustment has allocated funds for technical assistance for manufacturing firms within Ventura, Los Angeles, Orange and San Diego counties, that have been adversely affected by reduced Department of Defense procurement and contracting. For more information, contact tduran@usc.edu.

FAC-A-THON

The AMP SoCal led Fac-a-thon drafts higher education faculty researchers to collaborate with industry in solving some of A&D’s most pressing research issues while also creating proposals for R&D funding. Areas of interest in composites include which binders offer greatest performance for complex shapes or to withstand high temperatures with reduced brittleness for high production processing volumes. Areas of interest in unmanned aerial vehicles include designing and testing novel materials resistant to decomposition as well as energy storage for batteries. We are currently seeking industry input on these topics or on your research needs. Please contact Dion Jackson dljackso@usc.edu.

SOUTHERN CALIFORNIA SPACE CONSORTIUM

The Air Force Space Command SMC – Space and Missile Systems Center is interested in establishing a consortium-managed “Other Transaction Agreement” (OTA) for prototyping space related requirements. The RFP for the Space Enterprise Consortium Manager is expected this spring. If you want to join the Southern California Space Consortium visit: http://tinyurl.com/ampsocal-space.

MANUFACTURING USA INSTITUTES

AMP SoCal is engaged with both of the Manufacturing USA Institutes that are located in Los Angeles County – the Clean Energy Smart Manufacturing Innovation Institute (CESMII) and the Advanced Robotics Manufacturing (ARM) Institute. USC will host the Regional Robotics Innovation Collaborative for ARM at the new Center for Advanced Manufacturing. As new technologies, training, or opportunities for engagement become available, you will be able to learn more through our newsletter and website.
UPCOMING EVENTS

AMP SoCal Innovation Forum: Industry 4.0
March 10, 2017
9 AM - 3 PM
Rm. 219 - Lewis Hall (RGL), University of Southern California
650 Childs Way, Los Angeles, CA

AMP SoCal Webinar: Episode 2 - California Advanced Manufacturing Apprenticeship Collaborative (CAMAC)
March 2017
Register online at ampsocal.usc.edu

Southern California Aerospace Days
March 20-25, 2017
Various locations throughout the region, visit:
laedc.org/event/socal-aerospace-days/ to learn more

California Aerospace and Aviation Days 2017
March 27-29, 2017
AMP SoCal Booth, California State Capitol
1315 10th St, Sacramento, CA

ExporTech™ - An Export Acceleration System for Achieving Profitable Growth
Session 1 TBD May
Session 2 TBD June
Session 3 TBD July
Location TBD, check ampsocal.usc.edu for more details as they become available

Space Tech Expo USA
May 23-25, 2017
AMP SoCal Booth #2001, Pasadena Convention Center
300 E Green St, Pasadena, CA

AMP SoCal Bi-Annual Meeting
August 2017
Location TBD
PROUDLY SUPPORTING A&D MANUFACTURERS IN THE SOUTHERN TEN COUNTIES OF CALIFORNIA

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