

## ICEAA ASSOCIATION AWARDS

ICEAA thanks everyone who nominated one or more of their colleagues for a 2018 Association Award. The stories shared gave us unique glimpses into what makes our members the best of the best in the cost professions. As you read the summaries of their achievements below, give thought to the dedicated and inspiring members you interact with regularly and consider submitting a nomination for next year at:

#### www.iceaaonline.com/awards

### Junior Analyst of the Year: Marc Stephenson

Since starting his cost analysis career with Technomics in August 2015 upon graduating from Penn State University, Marc Stephenson has consistently demonstrated that he has what it takes to be a future leader in the field.

Technomics prides itself on doing important, impactful work for visible, influential government clients. Marc has been at the forefront of Technomics' work for the Office of the Secretary of Defense (OSD), Cost Assessment and Program Evaluation (CAPE), the department's most powerful cost analysis organization. By taking on progressively challenging and visible assignments, Marc has become a key contributor to CAPE's Cost Assessment Data Enterprise (CADE) program.

As the Deputy Lead for the Defense Cost and Resource Center, Marc facilitates the planning and collection of Cost and Software Data Reports (CSDRs), a deliverable requirement for all Acquisition Category I and IAM program contracts (and major subcontracts) that makes invaluable return cost data available to DoD cost analysts. In this role, he provides guidance and support to a team of 17 analysts responsible for ensuring

program offices and their industry



Marc Stephenson (L) with Rick Collins (R)

partners follow CSDR policies and processes while delivering valid and complete cost data.

Marc also serves as the CADE lead for the FlexFile data initiative, a program intended to revolutionize the way cost data is collected by the DoD without creating undue burden on the contractors. In this role, Marc has been integral to all aspects of FlexFile development. He has been a driving force behind policy and software requirements, training, implementation guidance, and coordination with a diverse community of over 50 stakeholders that includes Industry partners, cost accounting system and earned value management system vendors, and government analysts.

While Marc's accomplishments are impressive, they're only part of the reason he is deserving of recognition. What's more important for this particular award is why

he has achieved significant success early in his career. In addition to the analytical and quantitative skills essential to our profession, he has mastered the critical soft skills for effective collaboration, developing healthy, mutually-respectful working relationships with Technomics colleagues of all experience levels, as well as stakeholders from government and major defense contractor organizations. The fact that he has established a such a strong reputation with senior government and industry representatives so early in his career is a testament to his success on this front.

In the interest of exploring and creating new opportunities for himself and his government clients, Marc is consistently willing to leave his comfort zone. It's one thing to express ambition and motivation; it's quite another to back it up with diligent, thoughtful, selfless action. Marc's expanding role in the CADE project is a direct result of his hard work and a testament to the reality that the best career growth opportunities are earned not entitlements.

Finally, Marc has been mature enough to understand that you have to take the good with the not-so-good. Every project has its frustrations, whether mundane tasks, unresponsive data providers, or tight deadlines, but Marc has learned to overcome those frustrations in order to deliver quality and always learn from the experience.

Marc is well deserving of the 2018 Junior Analyst of the Year Award. However, based on the aforementioned reasons for his early career success, I think Future Leader Award may be more appropriate!

> Nominator Al Leung Technomics, Inc.

# Technical Achievement of the Year: Karen Mourikas

Karen is an Associate Technical Fellow at the Boeing Company focusing on Systems Optimization and Affordability Analysis. Currently, as the Analysis Chief Engineer of the Product Analysis & Teardown organization within Boeing's Research and Technology division, she performs modeling & analysis on parts, products, and programs, throughout their life cycle, leading to more affordable, more reliable and easier to produce solutions.

Throughout her career, Karen has developed a reputation for promoting new and innovative cost analysis methods and tools as well as integrating cost analyses with engineering functions. For instance, she integrated life-cycle cost models into Multi-disciplinary Design Analysis & Optimization (MDAO) frameworks encompassing performance models, reliability data, design options, and sizing models, providing engineers insight into cost impacts of design decisions within the larger trade space. More recently, Karen worked on a Model-based Systems Engineering (MBSE) effort, integrating cost analyses to support system requirements, design analysis, manufacturability, and verification & validation activities within a fully integrated, model-centric cloud environment to optimize life cycle costs.

Most notably, Karen is a pioneer in the use of a machine learning approach called Random Forest Prediction to predict specific program costs across the life-cycle. Although Random Forest Prediction, and machine learning in general, has been widely used in other fields, its application within the cost analysis community has



been slow to catch on.
However, Karen has been
able to bridge the gap
between cost analyses
and machine learning
techniques, in particular
Random Forest Prediction
and Natural Language
Processing, developing
innovative methods to
analyze and predict cost
in multiple domains, such

Karen Mourikas (L) with Denise Nelson (R)

as logistics, manufacturing operations, and product design.

Over the past few years, Karen has been leading and growing the Boeing Enterprise Affordability Community of Practice, including rolling out a new company website that provides information, training, and resources on Affordability analyses. She ardently promotes the use of many standard industry cost analysis tools such as PRICE Systems' True Planning, Galorath's SEER tools, ACEIT suite of products by Tecolote Research, and @Risk by Palisade Corporation, not just in the usual cost areas, but across the entire company, connecting with many "non-traditional" users such as design and manufacturing engineers to promote the awareness of cost impacts of design decisions in all life cycle phases.

Karen is a life-time member of ICEAA, having joined ISPA and SCEA in 2005. She has presented more than 10 papers on many aspects of cost analyses at ICEAA, ISPA, SCEA, MORS, and ACEIT Users Workshop. She has been involved in ICEAA, or its predecessors, in multiple capacities: as presenter, co-chair of

Southern California
Workshops at Boeing,
Southern California
election committee, track
chairs, and conference
papers co-chair. And if
you attended any of the
presentations at the 2018
ICEAA workshop on
Machine Learning, it was
Karen's idea to devote a
track entirely to "newer"

technologies. She hopes that next year there will be even more papers to fill two full days of the Innovation and Technology Track.

Recently, Karen was awarded with selection to the Boeing Technical Fellowship, a highly competitive program of technical experts, limited to the top echelon of engineers within specific domains of expertise. Karen is currently one of only a handful of engineers who perform cost, affordability, and optimization analyses and her fellowship provides opportunities to promote the innovative technical aspects of cost and affordability analyses, including, but not limited to, machine learning.

For these reasons described above, for her years of service to the association, her passion for innovation, and her dedication to expand, promote, and share her expertise to the cost analysis community, ICEAA is honored to award Karen Mourikas with the 2018 Technical Achievement of the Year.

Nominator Denise Nelson The Boeing Company



## Management Achievement of the Year:

#### Capt. Keith O'Donnell

Captain Keith O'Donnell provided outstanding management and leadership as the Cost Chief of the Intelligence, Surveillance and Reconnaissance / Special Operations Forces Program Office within the Air Force Life Cycle Management Center (AFLCMC) at Wright-Patterson Air Force Base in Ohio.

Captain O'Donnell supported the Air Force Cost Analysis Agency and the Office of the Secretary of Defense Cost Assessment and Program Evaluation with their multi-year procurement cost estimate resulting in approval of a 40-aircraft program with a projected savings of \$457.9M. Working through multiple budget drills and analysis of alternatives for the President's FY17 budget totaling \$14B, his efforts led to securing funding for 5 additional aircraft, providing more capability to the warfighter.

Keith facilitated Program Objective
Memorandum cost estimates with solid
execution plans for 3 major commands
totaling \$3.2B across the Future Years
Defense Program securing new technology
for Special Operations Forces. More
specifically, he led four program office
estimates through AFLCMC approval and
oversaw their associated earned value
analysis. In total, Keith oversaw 24 estimates
for the Battlefield Airmen and Guardian
Angel programs totaling over \$85B.

Captain O'Donnell led a nine-person team to develop a flexible military career progression system that will be implemented throughout the Air Force, an effort with direct visibility by the Air Force Chief of Staff. Captain



Capt. Keith O'Donnell

O'Donnell's tactics cut acquisition time by 30%, resulting in a reallocation of 1,000 government hours, equating to \$330K.

From the program office up to the highest government acquisition levels, Keith has demonstrated excellent management and performance every step of the way. His leadership will certainly continue to inspire others for years to come.

Nominator Joe Bauer PRICE Systems, LLC

#### Educator of the Year:

#### Donald Remer

Dr. Donald S. Remer has dedicated his professional career to the cost estimating profession making significant and ongoing educational contributions to our profession not only during the last year but for over 40 years.

Don, until very recently, was the Oliver C. Field Professor of Engineering Economics in the Engineering Department at Harvey Mudd College (HMC). He is also the

President of the Claremont Consulting Group. He is a registered Professional Engineer in the state of California with a BS in engineering from the University of Michigan and an MS and PhD from Caltech in Chemical Engineering and Business Economics.

Don developed and presented courses at HMC in cost and schedule estimation, engineering

economics and project management especially for undergraduates who typically were not exposed to this type of training until after graduation. During the last 40 years, over 1,300 engineering and STEM students at HMC have taken his courses.

In 1979, he cofounded the Claremont Consulting Group to consult and deliver two- to five-day short courses on cost and schedule estimation. He has trained over 14,000 professionals from small entrepreneurs to Fortune 500 companies, government agencies, national R & D laboratories, and universities. Organizations have included, but are not limited to Amgen, Beckman-Coulter, Boeing, Booz-Allen & Hamilton, DIRECTV, Disney, Hewlett-Packard, Northrop Grumman, QAD, Raytheon, St. Jude Medical, TRW, 20th Century Fox; and in the public sector, FAA, the NASA Jet Propulsion Laboratory, Lawrence Berkeley National Laboratory, Lawrence Livermore, Los Alamos, and Sandia National Laboratories, County of San Bernardino, City of Tucson, U.S. Coast Guard, U.S. Air Force; and in the educational arena, UCLA, Caltech,



Donald Remer

and the University of Wisconsin at Madison. His most recent 5-day cost estimating course for practicing professionals was presented in the UCLA Technical Management Program in March of 2018 and will be presented again in September.

Don has contributed widely to the field of cost estimating by publishing, consulting, and doing research on cost estimating with a large number of companies and government agencies. He has over 90 publications with 70

focusing on cost and parametric estimating. Coauthoring with over 90 undergraduate and graduate students has helped train and mentor many future cost estimators. His paper entitled, "Long Range Planning Cost Model for Support of Future Space Missions by Using Major Cost Drivers," was selected as the outstanding paper of the year in the Journal of Parametrics.

His 20 years of consulting and research at the NASA Jet Propulsion Laboratory resulted in 13 NASA/JPL publications. For one of these publications on life cycle cost analysis, he and his coauthors received a NASA outstanding research award. Three of his cost estimating parametric papers were selected to be reprinted and included in the *Encyclopedia of Chemical Processing and Design*, and he also received the Outstanding Speaker of the Year Award from the Occidental Research Corporation Seminar Program for his cost estimating presentation on his oil shale recovery research.

Don has been a very strong advocate for enhancing cost estimating performance



by publishing papers on the certifications available in the field of cost estimating. The first one was entitled, "Certifications Offered by Cost Estimating Organizations," in the National Estimator, the second one was entitled, "Cost Estimating Certifications Offered by Professional Societies in the US and Abroad," in the Proceedings of the American Association for Engineering Education and the most recent one was entitled, "Cost Estimation Certification for Managers and Engineers," in the Journal of Leadership and Management in Engineering.

He has been a prolific researcher in the area of parametric cost scale-up factors, having published research that has included everything from airport construction, to conventional and microscale tools, to commercial jet planes, to air pollution control to chemical process plants. Two of his most recent contributions to the ICEAA's Journal of Cost Analysis and Parametrics were, "Parametric Scale-Up Factors for Conventional and Micro-Scale Tools," and "Economic Survey of the Monetary Value Placed on Human Life by Governmental Agencies in the US."

Don has been on editorial boards and a referee for many costing journals, including: The Engineering Economist, Engineering and Process Economics, Engineering Costs and Production Economics, International Journal of Production Economics, and the Engineering Economics and Engineering Management Divisions' Publications in the Proceedings of the American Society for Engineering Education.

Don's years of effort have enhanced thousands of undergraduate and graduate students' educations and furthered the training of numerous practicing professionals; while his vast body of research, canon of publications, and contributions as an editor and referee for other works have supported the cost estimation field on the whole. While we are honored to name Don Remer as ICEAA's 2018 Educator of the Year, he's been working diligently to earn the title for a lifetime.

Nominator Dr. Dan Nussbaum Naval Postgraduate School

#### Team Achievement of the Year: Air Force Research Laboratory Cost Team

This year is the first fully operational year for the cost team in the Air Force Research Laboratory (AFRL). The team members, Helen Barfield, Tamie Bertke, Katie Kuhns, Zac Newman, Jack Snyder, Debra Walter, and Emily Duke, made enormous improvements to the overarching program management of the Air Force's Science and Technology programs by providing data driven analysis and cost estimates for the center. The cost team spearheaded estimates for multiple directorates, which were critical to planning and programming efforts, led Cost Benefit Analyses (CBA), and built analytical tools to enable analysis across the laboratory.

The team's support during the Program Office Memorandum (POM) process informed budgeting decisions across the Air Force. Within the laboratory, the team provided estimates for over \$1B of development and demonstration programs. They led two CBAs used by the



Air Mobility Command during POM planning choices that identified more than \$130M of savings and documented the benefits of transitioning new technologies from the laboratory to the field. These analysts also supported the Strategic Development Planning and Experimentation office to estimate rapid experimentation efforts and to provide analysis of operational costs for

commercial off-the-shelf light attack aircraft.

To support strategic-level planning decisions, our AFRL team lead the cost analysis for the Multi-Domain Command and Control Enterprise Collaboration Capability team and partnered with thought leaders from multiple emerging

technology areas to ensure all planning decisions evaluated life cycle cost. The resulting campaign plan was submitted to General David L. Goldfein!

At the program level, the team matrixed analysts to science and technology programs to provide ongoing cost expertise, enabling the evaluation of investment and O&S costs with changes to system design, manufacturing methods, and materials at the earliest stage in the development program. For the Low Cost Attritable Aircraft Technologies program, the team estimated an air vehicle that beat the cost-per-flyaway target, quantified a 54% decrease to airframe dollars per pound, and identified significant part reductions when utilizing novel manufacturing methods.

The team formed cross-service partnerships with Army and Navy, international partnerships with analysts in the United Kingdom, and reached out to representatives from the industry to increase collaboration and data sharing. The team demonstrated their research findings at Air Vehicles Technology Symposium, several industry days, and the ICEAA Professional Development &

Training Workshop.

Building a core cost capability from the ground up required the team to create new tools for estimates and analyses as well as establish strong partnerships across science and technology organizations. They engineered an earned value management tool

for Hydrocarbon Boost Program within the Aerospace Systems Technology
Directorate, enabling monthly cost and schedule analyses; initiated a Laboratory
Cost Working Group to improve communication within the lab; developed a cost repository that created higher fidelity estimates while and saving time; and developed a process for estimating low Technology Readiness Level efforts by leveraging commercially available tools.

Organizations within the Laboratory sought out this team's expertise for projects beyond science and technology. The AFRL Enterprise Business Modernization team relied on the cost team's expertise to estimate five alternatives and more than \$800M IT requirements to support a new software acquisition. The Air Force 711th Human Performance Wing partnered with the cost team to analyze impacts of



 ${\it Joe \ Bauer (L) \ with \ team \ member \ Debra \ Walter \ (R)}$ 



having the Air Force Epidemiology Lab perform several million tests currently outsourced to commercial testing facilities. The team was able to build a strong case to recapture the test volume, save \$12M, and provide better patient care across the DOD!

The outstanding cost estimating, analysis, and expertise of each of the members of this team contributed to building a strong cost capability in the Research Laboratory over a very short period of time. The progress made over the last year will posture the team for success in the future, and enable science and technology programs to incorporate cost into programmatic and strategic decisions.

Nominator Joe Bauer PRICE Systems, LLC

Association Service Award: Joe Wagner

It's hard to think of anyone who has done more for ICEAA than Joe Wagner. A long-time volunteer leader for the Society for Cost Analysis (SCEA) Washington Capital Area Chapter, Joe joined the SCEA National Board in 1999 and served continuously through 2013 as Region 2 Director, Vice President, and Treasurer. In

2010, Joe joined the staff of the then-joint office for SCEA and ISPA, the International Society of Parametric Analysts as the editor of ICEAA World's predecessor publication, National Estimator.

Joe was an integral participant in the creation of ICEAA through the merger of SCEA and ISPA, contributing to the drafting and finalizing of the plans and documents that brought the groups together. He has been the steward of ICEAA's finances from day one; maintaining our accounts, budgets, and forecasts. He has even created a predictive model to forecast the success of ICEAA Workshops based on year -to-date registrations and revenue. When ICEAA's Executive Director stepped down in 2013, Joe stepped up to serve as Interim Executive Director for several months to ensure member services continued uninterrupted and the transition of leadership was flawless.

For those who may not be able to conjure a mental image of Joe Wagner: he's the guy who has been busily snapping photos of our sponsors and attendees at the ICEAA Workshops for years. His wife Deb has helped out at many of our events, bringing a warm smile and burst of sunshine along with her.

An Air Force Lieutenant Colonel, Joe spent most of his cost career as an employee of MCR. He started in the field in 1976, which is to say in the before-Excel time of handdrawn and hand-calculated spreadsheets,

formulas, estimates, and all the other things our computers do for us that we take for granted. He has seen the path of cost estimating grow and change for forty years and



Mike Thompson (L), Joe Wagner (C), and Paul Marston (R)



provides the ICEAA International Business Office with invaluable input and perspective on the industry.

ICEAA isn't the only thing that takes up Joe's time. He's actively involved with his local homeowners' association, the National Rifle Association, and most especially, the First Virginia Regiment of the Continental Line, a group of Revolutionary War Reenactors. Joe performs reenactments in full 1700's regalia throughout the year (which means wool and leather in the summer) at events around the Northern Virginia area, most frequently at Mt. Vernon, George Washington's historic home. He and his group provide interactive educational presentations to schoolchildren in their Revolutionary personae about the life of the soldier and civilians accompanying the army during the American Revolution, and even appeared in the 2000 film The Patriot, starring Mel Gibson.

Joe's passion for military history may be either the cause or the result of his extensive antique gun collection, spanning weapons used from the Revolutionary to Vietnam wars, complete with documentation and history of each piece. But that doesn't mean he's stuck in the past: he regularly bowls a 300 on the Nintendo Wii, with or without a beer in his other hand.

ICEAA has Joe Wagner to thank for so much: for his time, for his hard work, and for his unwavering dedication. Granting Joe the Association Service Award will go a long way to show all of our thanks.

Nominators Paul Marston, MCR Federal; Mike Thompson, Galorath Federal; and Megan Jones, ICEAA

# Frank Freiman Lifetime Achievement Award: Peter Andrejev

Peter is worthy of Lifetime Achievement recognition for several reasons: the leadership roles he's held, the client assignments he's performed, the articles and presentations he's composed, the many professionals he's influenced, and the innovations he's introduced to the cost community that we now take for granted.

As a leader, Peter served as a board member for SCEA from 2000 through 2008, and since 2009 has served as the Director of Certification. For the Washington Capital Area Chapter he has held the offices of President, Vice-President, Membership Chair, and Professional Development Chair.

Peter's technical body of work is impressive. He generated several dozen significant deliverables over his career (numbering well over 50 cost-related estimates or analyses). He received commendation from the program manager of an MDAP classified program stating that his work "should be the model used in the government" for developing life cycle cost estimates, cost-benefit analyses, risk management plans, and analysis of alternatives. He conducted the IV&V of the 2000 Decennial Census Cost Model for the Dept. of Commerce that earned Peter the 2000 National Cost Estimator/Analyst of the Year Award in Management from SCEA.

Peter's ability to communicate complex issues in an engaging manner that is meaningful and relevant to his audience shines in the numerous articles and presentations he has authored or co-



authored for various publications and events. Paired with his effective communication methods, Peter is known for "speaking truth to authority." For example, he publicly characterized "cost overruns" as instances of "chronic budget underfunding" as the guest speaker on Federal News Radio's "Off the Shelf" program (sponsored by the Coalition for Government Procurement).

While broadcasts and accolades are important, Peter's greatest contribution in advancing the cost profession resides in how he made cost analysis a viable and important professional trade to the many staff in Booz Allen Hamilton. As an advocate for professional certification, Peter drove Booz Allen to become the first organization to exceed over 100 CCEA®s. He's a true "Johnny Appleseed" for the cost analysis profession, making cost a prevalent topic in venues outside of the cost community.

At the international level, Peter was a fierce advocate for CEBoK® and its predecessor product CostPROF, having served as a technical reviewer of both products. As a key member of the ISPA/SCEA Joint Committee, he crafted the agreement that created the SCEA/ISPA Joint National Office, which eventually led to the merger of SCEA and ISPA into ICEAA (for which he was awarded the 2013 National Cost Estimator/Analyst of the Year team award for Service to the Association).

Peter played a critical role in the reengineering of the certification program in 2009, leading to his current position as Director of Certification. As the certification

czar, Peter Co-chaired the re-write of the Certified Cost Estimator/Analyst (CCEA®) examination, established the Professional Cost Estimator/Analyst (PCEA®) certification for junior practitioners; participated heavily in creating the Parametric Methods specialty certification, and continues to work diligently to promote and enhance ICEAA's certification program.

In summary, Peter has dedicated a lifetime of service to the cost estimating profession through outstanding commitment, technical excellence, leadership, educational development and more. But Peter's real gift to the profession is in his ability to edu-tain: any encounter with Peter results in two things: I learned something, and I was entertained while doing it. He always knows how to toss in a few of his Andrejev-isms such as "some of my best work is other people's..." and "there's a world of difference between doing things right and doing the right thing..." I personally think of Peter has a respected colleague, tremendous mentor, edu-tainer, and a great friend.

> Nominator Jeffrey Moore Herren Associates



Jeffrey Moore (L) with Peter Andrejev (R)

