



IEEE AESS BOG
NOMINATIONS
Term: 2024 - 2026



2024-2026 AESS BoG Candidates

Laura Anitori
Michael Braasch
Steven Butler
Alexander Charlish
Fabiola Colone
Steven Harbour
Braham Himed
Kumar Vijay Mishra
Michael Rice
Avid Roman-Gonzalez
Barry C. Tilton



Laura Anitori

laura.anitori@tno.nl

Region 8 (Africa, Europe, Middle East)

Statement

I would like to continue supporting AESS in strengthening and further diversifying its services so that all its members can find what they require to advance their professional career, regardless of their seniority, gender or professional sector (academy, industry or government).

I believe AESS can capitalize on its diverse membership profile to support its young and student members in shaping their future by providing them coaching, networking opportunities, and courses for further developing their technical (as currently done in the DL) as well as soft skills. Furthermore, I would like to cultivate AESS as a platform where members from academia, industry and government can meet and share their vision on future trends at all professional levels.

I would be honored to continue my service as a member of the AESS BoG and, if elected, I would work on growing AESS outreach to provide tangible benefits to all its affiliates through participation in the AESS committees focusing on education, industrial relationship, member services and awards.

Bio

Dr. Laura Anitori received her Master of Science degree (cum laude) in Telecommunication Engineering from the University of Pisa, Italy, in 2005 and her Ph.D. degree (cum laude) in Electrical Engineering from the Technical University of Delft, The Netherlands, in 2013.

From 2005 to 2007 she was a research assistant at the Telecommunication Engineering department at Twente University, The Netherlands, where she carried out fundamental research on Importance Sampling for Space Time Adaptive Processing for radar.

Since 2007 she works at the Radar Technology department of TNO, The Netherlands. She is currently a senior scientist and program manager for the Defense funded radar research program, where she defines and coordinates research on innovative radar techniques and technologies for the development of the new radar sensors suite for the next-generation Integrated Air and Missile Defense frigates of the Dutch Navy. Her work is fully embedded in the “Radar and Integrated Sensor Suite 2030” technology roadmap of the Royal Dutch Navy. As one of the main technical advisors and coordinators within this roadmap, she is responsible to identify new radar system concepts and architectures, innovative waveforms, and emerging signal processing algorithms for naval phased array radars and to ensure that these can further grow from low to high TRLs, in collaboration with national industry and MoD.

She is deeply involved in the international scientific community to support, promote, and organize new and existing activities, in particular to increase participation of young scientists and women in the community. She is a senior IEEE member, member of the IEEE AESS Radar System Panel since 2017 and chair of the panel for the term 2023-2024. She is a member of the European Microwave Association (EuMA) and its Innovation Team, which helps young graduate students get familiar with the microwave community. Within this initiative, she supervises master and PhD students that intern at TNO. She is national representative in the NATO's Sensors and Electronics Technology (SET) Panel, and co-coordinator of the RF focus group. She initiated and chaired several activities in the panel, including the "Woman in SET" working group. Her significant contributions to the SET Panel were recognized with the NATO SET Early Career Award in 2018, the SET Panel Excellence Award in 2019, and the NATO Scientific Excellence Award in 2022. She is governmental expert for The Netherlands in the European Defense Agency Radar Captech. She collaborates with Dutch universities by defining graduate research topics and jointly supervising Master and PhD students. She has written numerous highly cited journal and conference papers. She is a reviewer for several journals and was an Associate Editor for IEEE Sensor Journal (2018-2019). She serves on several technical program committees and student competition committees at international conferences (IEEE (International) Radar Conferences, CoSeRA Workshops, SSPD, European Microwave Week, IRS).



Michael Braasch

braaschm@ohio.edu
Region 2 (Eastern US)

Statement

I am running for the AESS Board of Governors to represent the navigation and guidance professionals in our membership and to advance the interests of all AESS members through the society's conferences, publications, educational opportunities, and other member services. I have had the privilege of serving as the AESS VP-Conferences (2019-2021) and am currently serving as the AESS VP-Technical Operations (2022-2023). If elected, I will also focus on AESS chapter support. It is my belief that the educational and networking opportunities provided through active chapters are some of the best value propositions we have to offer our members. Additionally, there are numerous areas around the world with a large concentration of AESS members, yet with no local chapter. If elected, I will seek avenues to fill these voids.

I confirm that I have the time to undertake this role and to attend the Board of Governor meetings.

Bio

Michael Braasch holds the Thomas Professorship in the Ohio University School of Electrical Engineering and Computer Science and is a Principal Investigator with the Ohio University Avionics Engineering Center (AEC). He has been performing navigation system research since 1985 and has served as a technical advisor both to the U.S. FAA and the International Civil Aviation Organization (ICAO).

For his contributions to the characterization and mitigation of the effects of multipath error in GPS, Mike was elevated to IEEE Fellow in 2023. Mike's research in the application of phased-array techniques to differential GPS ground reference stations laid the foundation for the development of the first-generation prototype antennas for the FAA's Ground-Based Augmentation System (GBAS). In the mid 1990s, Mike led the Ohio University research group that pioneered the GPS software-defined receiver. He has conducted research in mid-air collision avoidance for unmanned aircraft as well as novel flight displays for general aviation. Mike has extensive flight-testing experience with Ohio University's fleet of research aircraft.

Mike has served as a visiting scientist at the Delft University of Technology in The Netherlands, was an Erskine Visiting Fellow at the University of Christchurch, New Zealand and has lectured for NATO AGARD in Russia, Turkey and Ukraine. He has also given invited talks in Australia, Canada, China and France. Mike has served as an associate editor for navigation and technical editor for navigation for the IEEE Transactions on Aerospace and Electronic Systems and has also served as the associate editor for navigation for the IEEE AESS SYSTEMS magazine. Since

2014 he has served as the IEEE/AESS liaison to the ION/IEEE Position, Location and Navigation Symposium (PLANS). Since 2017, he has served as the founding Chair of the AESS Navigation Systems Panel. Mike has served on the AESS Board of Governors since 2017 including service as VP-Conferences and VP-Technical Operations. He is a licensed professional engineer in the State of Ohio in the US, is an instrument-rated commercial pilot and holds an additional rating in helicopters.



Steve Butler

steven.butler@jhuapl.edu
Region 3 (Southern US)

Statement

It has been my pleasure to serve on the Board for the past three years. I have been a strong supporter of all student activities, young professionals, WIE, tutorials, and other activities to make the society more inclusive and diverse. I have contributed to award committees and wherever needed to support the AESS mission. I hope to continue my work on the Technical Activities and Industrial Relations Panels and contribute across the AESS portfolio. The Board has recently elected me to serve as VP Industrial Relations.

I intend to work on improving industry engagement with the IEEE and support for employee professional society participation. I intend to provide opportunities for industry involvement in conference panels and event sponsorship. I will work with local chapters to bring distinguished lecturers to give open to the public lectures at industry facilities. My membership on the BOG is fully supported by the Johns Hopkins University and I commit to active participation and leadership. I would appreciate your vote so I can continue with contribute with demonstrated results.

Bio

Dr. Steve Butler serves as the Senior Advisor for Advanced Development in the Force Projection Sector at Johns Hopkins University Applied Physics Laboratory. Dr. Butler advises the Director in strategic planning, execution, and performance of approximately \$100M in annual funding in programs addressing integrated strike, air dominance, and electronic attack. As the nation's largest University Affiliated Research Center, APL performs research and development on behalf of the Department of Defense, the Intelligence Community, National Aeronautics Space Administration, and other federal agencies. The Laboratory has more than 5,000 staff members who are making critical contributions to a wide variety of nationally and globally significant technical and scientific challenges.

Prior to his current appointment, Dr. Butler served as the Executive Director of Air Force Materiel Command, consisting of about 70,000 employees, where he served in many broad assignments within the military departments with assignments ranging from developing precision guided weapons to senior advisory roles in the Air Force and Office of the Secretary of Defense. He served as the Deputy Program Director for the F-22 and as the Technical Director for most of the Air Force's munitions inventory. He began his career as a scientist and flight test engineer known for hands-on expertise in electro-optical and radar systems.

He also served on the Air Force Scientific Advisory Board where he led science and technology quality reviews of the Air Force Research Laboratory and conducted studies on advanced weapons, autonomy, advanced air surveillance, and Test & Evaluation.

In addition to his work on the US Air Force Scientific Advisory Board, he has extensive international exchange experience through NATO Panel and Working Group activities. He served on the NATO Technical Exchange committees and AGARD and has a broad background in technical leadership in large programs of international impact. He has traveled extensively and is familiar with R&D organizations in many countries.

Dr. Butler is an active member of the U.S. science and technology community and has published papers in the fields of image processing. He holds an adjunct faculty position at the University of Florida where he teaches in the Radar and Systems Engineering. He is published in areas of image processing and is a Fellow of the Institute of Electronic and Electrical Engineers.

Dr. Butler has lectured extensively in the areas of radar, directed energy, systems engineering, infrared physics, and image processing. He has been recognized for sustained contributions by the Office of the Secretary of Defense and the Air Force and is a recipient of the Defense Distinguished Civilian Service and Presidential Rank Awards.

Dr. Butler earned his Bachelor of Science in Physics, Master of Science in Electrical Engineering, and Ph.D. in Aerospace Engineering from the University of Florida. He also has management and business training from the Defense Systems Management College, Federal Executive Institute, Rady School of Business, and the Center for Creative Leadership.



Alexander Charlish

alexander.charlish@ieee.org

Region 8 (Africa, Europe, Middle East)

Statement

While serving on the AESS Radar Systems Panel I have been actively involved in educational initiatives, such as launching the Radar Summer School. During my term on the AESS Board of Governors, I have served on the Education Committee and I currently serve in the role of VP Education. In this role, I have focused on facilitating quality in-person and online educational events while reducing barriers to accessing educational resources. This includes the organization of the current AESS webinars, increasing the number of educational videos that are being offered via the IEEE Learning Network, and most recently leading the launch of the AESS Young Professional Travel Grants. I am running for election as I am a motivated member of the AESS and I am enthusiastic about contributing to the society by serving on the Board of Governors. If elected, my intention is to continue to support the educational activities conducted within the society.

Bio

Alexander Charlish obtained his M.Eng. degree from the University of Nottingham and received his Ph.D. degree from University College London on the topic of multifunction radar resources management. In 2011, he joined the Sensor Data and Information Fusion (SDF) Department at the Fraunhofer Institute for Communication, Information Processing and Ergonomics (FKIE), where he now leads the Sensor and Resources Management Group. In this role, he leads a group of scientists conducting research on intelligent sensing with a focus on cognitive radar and resources management for sensor systems. Additionally, he is a visiting lecturer at RWTH Aachen University, where he has taught estimation and detection theory, information fusion, and machine learning.

Dr Charlish has served as an Associate Editor for Radar Systems for the IEEE Transactions on Aerospace and Electronic Systems between 2015 and 2023. He is currently an Associate Editor for the IEEE Transactions on Radar Systems. He is also currently serving his second term as Subject Editor for Radar, Sonar and Navigation for IET Electronic Letters. He was twice elected for three-year terms on the IEEE AESS Radar Systems Panel in 2015 and 2018, where he chaired the Education Committee between 2018 and 2021 and held the role of Panel Vice-Chair between 2020 and 2022. He is a member of the IEEE AESS Board of Governors for the term 2021 – 2023, where he currently serves as VP Education. He is active in the NATO community, having co-chaired the research task groups on cognitive radar. He has received the NATO SET Panel Excellence Award and the 2019 NATO SET Panel Early Career Award. Dr Charlish is the 2021 recipient of the IEEE AESS Fred Nathanson Memorial Radar Award and a co-recipient of the IEEE AESS 2019 Harry Rowe Mimno Award.



Fabiola Colone

fabiola.colone@uniroma1.it

Region 8 (Africa, Europe, Middle East)

Statement

I have been in the AESS BoG for the past six years during which I have been involved in several activities that led me to work with different committees, thus endorsing their missions. I had the honor to be elected VP for Member Services and I served as Chair of the Mentoring Program and Editor in Chief for the QEB.

I took all these roles very seriously, always trying to bring new ideas to the table, without being afraid to propose changes as they are needed to ensure the relevancy and reinforce the identity of our Society, especially among young generations.

It has been difficult at the beginning to become familiar with the processes and dynamics of different services. Now I feel that I could effectively use the experience gained to devise and implement further improvements, reason why I decided to run for re-election to the AESS BoG. My time and energy are pledged to you should I be granted the opportunity to continue serving.

Bio

Fabiola Colone received the laurea degree (B.S.+M.S.) in Telecommunications Engineering and the Ph.D. degree in Remote Sensing from Sapienza University of Rome, Italy, in 2002 and 2006, respectively. She joined the DIET Dept. of Sapienza University of Rome as a Research Associate in January 2006. From December 2006 to June 2007, she was a Visiting Scientist at the Electronic and Electrical Engineering Dept. of the University College London, London, UK. She is currently a Full Professor at the Faculty of Information Engineering, Informatics, and Statistics of Sapienza University of Rome where she is Chair of the degree programs in Communications Engineering.

The majority of Dr. Colone's research activity is devoted to radar systems and signal processing. She has been involved, with scientific responsibility roles, in research projects funded by the European Union, the European Defence Agency, the Italian Space Agency, the Italian Ministry of Research, and the radar industry. Her research has been reported in over 160 publications in international technical journals, book chapters, and conference proceedings. Dr. Colone is co-editor of the book "Radar Countermeasures for Unmanned Aerial Vehicles", IET Publisher. She has been co-recipient of the 2018 Premium Award for Best Paper in IET Radar, Sonar & Navigation.

She was member of the Board of Governors of the IEEE Aerospace and Electronic System Society (AESS) from 2017 to 2022, and she served as Editor in Chief for the IEEE AESS QEB Newsletters and Chair of the AESS Networking and Mentoring Program. In 2019-2021, she was

elected Vice-President for Member Services and, in that role, she promoted and coordinated initiatives aimed at widening the membership, effectively engaging local Chapters, and enhancing the participation of groups of members currently underrepresented, above all students and young professionals. For her efforts in this and other roles within the IEEE Aerospace and Electronic System Society, she was awarded the Exceptional Service Award in 2021.

Dr. Colone is currently Associate Editor in Chief for the IEEE Transactions on Radar Systems, a newly established journal promoted by AESS and sponsored by a consortium of several IEEE Societies. She was Associate Editor for the IEEE Transactions on Signal Processing and is member of the Editorial Board of the Int. Journal of Electronics and Communications (Elsevier). She is IEEE Senior Member from 2017 and member of the IEEE AESS Radar System Panel from 2019. She was Technical Co-Chair of the IEEE 2021 Radar Conference (Atlanta, USA) and of the European Radar Conference EuRAD 2022 (Milan, Italy) and she served in the organizing committee and in the technical program committee of many international conferences.



Steven Harbour

sharbour@swri.org
Region 4 (Central US)

Statement

AESS needs more representation and involvement in the Dayton Ohio community. I can spearhead and carry the torch for that effort. I have the leadership, experience, and know how skills in order to do it! Moreover, I have the time to perform the work. I live and work in Ohio even though I work for SwRI in San Antonio, Texas. though See:

<https://www.youtube.com/watch?v=G54h9IznS6U>

<https://www.swri.org/podcast/ep51>

<https://www.linkedin.com/in/dr-steve-harbour-phd-74778616/>

Bio

Dr. Steven D. Harbour, Ph.D. Staff Engineer & Scientist, Dayton Engineering Advanced Projects Lab, Tactical Aerospace Department, Defense and Intelligence Solutions Division 16, SwRI. SME in Neuromorphic Engineering, Artificial Intelligence / Machine Learning, Human Autonomy Teaming, Neuroscience, Electrical & Computer Engineering, Avionics, UAS and Autonomous vehicles. Performs fundamental, basic, and applied research (along with prototyping). A senior leader, defense research & engineering professional with several decades of experience in multiple engineering and aviation disciplines & applications. Leads and performs ongoing basic and applied research projects, including the development of 3rd generation spiking neural networks (SNNs), hardware (hybrid processors, memristors, phase change materials, liquid state machines, and reservoir computing with neuromorphic applications). Currently he is the Principal Investigator (PI) for “Neuromorphic Pilot: Flying Autonomously with Neuromorphic Artificial Intelligence” research, the PI for Human Machine Flexible Autonomy Teaming Presidential Directed Internal Research (PDIR), the co-PI for Cognitive Electronic Warfare (PDIR), the Advisor for a Division 10 IR “Real-time, Personalized Cognitive Load Classification on the Edge using Spiking Neural Networks”, and Dr. Harbour has published and or presented on 40 plus topics within the field to include a textbook, while instructing multiple tutorials and has given many talks, and teaches ECE courses for the University of Dayton. He currently holds one US Patent. He has supported the Air Force Research Laboratory Sensors Directorate at Wright-Patterson Air Force Base, Ohio, and at the Air Force Life Cycle Management Center in the ISR / SOF directorate as the Global Hawk Chief of Avionics Engineering and Modernization Programs. QuEST member. USAF flight test pilot with over 5,000 hours total flying time in F-16, F-4, AT-38, T-37, B-52, and EC-135 aircraft. Flew the MIG-29 as part of the US State Department's military to military visit program under the Nunn-Lugar Act. PhD in Neuroscience (Specializations: Computational, Biological, Behavioral, and Neuromorphics), MS in Aerospace Engineering & Mathematics (Specializations: Artificial Intelligence and Machine Learning, Avionics, Controls & Displays), BS in Electrical Engineering (Specializations: Robotics & Feedback Control Systems and

Cognition). Dr. Harbour also teaches at the University of Dayton & Sinclair College and coaches their drone respective UAS teams. A member of AESS and IEEE.
<https://www.linkedin.com/in/dr-steve-harbour-phd-74778616/>



Braham Himed

braham.himed@us.af.mil
Region 2 (Eastern US)

Statement

I was elected to the AESS board of governors 2 years ago and I actively used my experience and expertise to support several committees, including the educational and awards committees. After serving for one year, I was elected as VP-conferences and started coordinating the many different conference applications. We put in place a system identifying the requirements for receiving AESS technical sponsorship. This consists of keeping a high-quality conference with strong peer-reviewed technical contents, the participation of AESS members in organizing committees, inclusion of AESS logo in all conference materials, and offering a booth for promoting AESS, its activities, and conducting membership drives. For financially sponsored conferences, AESS will ensure their well-being by providing attendees with more services such as videos for later viewing (hybrid model). I have also worked with other committee leads to support activities in under-developed regions, by providing grants and attending their meetings, which very well appreciated. Further, summer school should be adopted by all conferences, and make them available to students and young professionals in all regions of the world.

Bio

Dr. Braham Himed received his Engineer Degree in electrical engineering from Ecole Nationale Polytechnique of Algiers in 1984, and his M.S. and Ph.D. degrees both in electrical engineering, from Syracuse University, Syracuse, NY, in 1987 and 1990, respectively. From 1990 to 1991 he was an Assistant Professor in the Electrical Engineering Department at Syracuse University, where he taught graduate courses in analog and digital communications, digital signal processing, probability, and random processes. In 1991, he joined Adaptive Technology, Inc., Syracuse, NY, where he was responsible for radar systems analyses and the design of antenna measurement systems. In 1994 he joined Research Associates for Defense Conversion, Marcy, NY, where he was responsible for radar systems analyses and radar signal processing, including techniques for the detection and estimation of targets in severe clutter and jamming environments. From March 1999 to July 2006, he was a senior research engineer with the U.S. Air Force Research Laboratory, Sensors Directorate, Radar Signal Processing Branch, Rome, NY, where he led scientific and management aspects of airborne and space-borne phased array radar systems. From August 2006 to June 2008, he served as the Chief Research Officer with Signal Labs Inc, in Reston VA, directing R&D for the company. From 2008 - 2018, he served as Technical Advisor for the RF Technology branch with the Air Force Research Laboratory, Wright Patterson Air Force Base, OH. Since January 2019, he serves as Division Research Fellow in the Distributed RF Sensing Branch, Multi-Spectral Sensing and Detection Division, of the Sensors Directorate. His research interests include detection, estimation, multi-channel adaptive signal processing, time series analyses, array processing, adaptive processing, waveform design, diversity, and optimization, distributed MIMO radar, passive radar, and over

the horizon radar. Dr. Himed serves as the US Air Force representative on several international forums, including The Technology Cooperation Program (TTCP), NATO SET panels, and leads several bilateral and trilateral international agreements. Currently, he serves as both the US National lead and Panel Chair of the TTCP Intelligence Surveillance, Target Acquisition, and reconnaissance (ISTAR) Technical Panel -2 on RF Sensing. Dr. Himed has published over 300 peer-reviewed journals and conference papers. He served as the general technical co-chair for the 2010 and 2015 IEEE International Radar Conferences. He served as general co-chair of the 2022 IEEE Radar conference and will serve as general co-chair for the 2024 IEEE radar conference. Dr. Himed is the recipient of the 2001 IEEE Region I award for his work on bistatic radar systems, algorithm development, and phenomenology. He joined the IEEE AESS Radar Systems Panel in 2001, served as vice-chair from 2014-2016, and panel chair from 2016-2018. Currently, he serves the RSP as member, and chairs the Nathanson award. Dr. Himed is a Fellow of IEEE (2007) and a Fellow of AFRL (2013). He was the recipient of the 2012 IEEE Warren White award for excellence in radar engineering. Braham is a member of the AESS Board of Governors, serving as VP of Conferences.



Kumar Vijay Mishra

kvm@ieee.org

Region 2 (Eastern US)

Statement

The 21st century is the era of technology and innovation being major drivers of economic growth. Topics related to remote sensing, navigation, geolocation, aerospace, autonomous driving, signal processing, data sciences, space sciences, and national defense among others, are all IEEE focus areas that will impact engineering, education, and talent demand for the next few decades. The Aerospace and Electronic Systems Society (AESS) is a key link in enabling cutting-edge research for the aforementioned technologies. If elected as a member of the Board of Governors (BoG), I will leverage my background and past leadership to focus on, inter alia, the following thrusts to keep AESS on the pilot seat toward a secure, innovative, prosperous, and inclusive future: promote diversity in responding to the shortage of engineering talent, particularly in AESS topics, by leveraging national/international initiatives; enhancing ways to recruit women and underrepresented groups; organize AESS events/conferences in developing economies; and foster collaboration across disciplines, industry, and IEEE standards committees, wherein I bring two decades of experience across academia, industry, and government.

Bio

Kumar Vijay Mishra (S'08-M'15-SM'18) obtained a Ph.D. in electrical engineering and M.S. in mathematics from The University of Iowa in 2015, and M.S. in electrical engineering from Colorado State University in 2012, while working on NASA's Global Precipitation Mission Ground Validation (GPM-GV) weather radars. He received his B. Tech. summa cum laude (Gold Medal, Honors) in electronics and communication engineering from the National Institute of Technology, Hamirpur (NITH), India in 2003. He is currently Senior Fellow at the United States Army Research Laboratory (ARL), Adelphi; Technical Adviser to Singapore-based automotive radar start-up Hertzwell and Boston-based imaging radar startup Aura Intelligent Systems; and honorary Research Fellow at SnT - Interdisciplinary Centre for Security, Reliability and Trust, University of Luxembourg. Previously, he had research appointments at Electronics and Radar Development Establishment (LRDE), Defence Research and Development Organisation (DRDO) Bengaluru; IIHR - Hydroscience & Engineering, Iowa City, IA; Mitsubishi Electric Research Labs, Cambridge, MA; Qualcomm, San Jose; and Technion - Israel Institute of Technology.

Dr. Mishra is the Distinguished Lecturer of IEEE Communications Society (2023-2024), IEEE Aerospace and Electronic Systems Society (AESS) (2023-2024), and IEEE Future Networks Initiative (2022). He is the recipient of IET Premium Best Paper Prize (2021), U. S. National Academies Harry Diamond Distinguished Fellowship (2018-2021), American Geophysical Union Editors' Citation for Excellence (2019), Royal Meteorological Society Quarterly Journal Editor's Prize (2017), Viterbi Postdoctoral Fellowship (2015, 2016), Lady Davis Postdoctoral

Fellowship (2017), DRDO LRDE Scientist of the Year Award (2006), NITH Director's Gold Medal (2003), and NITH Best Student Award (2003). He has received Best Paper Awards at IEEE MLSP 2019 and IEEE ACES Symposium 2019.

Dr. Mishra is Vice-Chair (2021-present) of the IEEE Synthetic Aperture Standards Committee, which is first standards committee of the IEEE Signal Processing Society (SPS). He is the Vice Chair (2021-2023) and Chair-designate (2023-2026) of International Union of Radio Science (URSI) Commission C. He has been an elected member of three technical committees of IEEE SPS: SPCOM, SAM, and ASPS and IEEE AESS Radar Systems Panel. Since 2020, he has been Associate Editor of IEEE Transactions on Aerospace and Electronic Systems, where he was awarded Outstanding Editor recognition in 2021. He has been a lead/guest editor of several special issues in journals such as IEEE Signal Processing Magazine, IEEE Journal of Selected Topics in Signal Processing, and IEEE Journal on Selected Areas in Communications. He is the lead co-editor of three upcoming books on radar: Signal Processing for Joint Radar-Communications (Wiley-IEEE Press), Next-Generation Cognitive Radar Systems (IET Press Radar, Electromagnetics & Signal Processing Technologies Series), and Advances in Weather Radar Volumes 1, 2 & 3 (IET Press Radar, Electromagnetics & Signal Processing Technologies Series). His research interests include radar systems, signal processing, remote sensing, and electromagnetics.



Michael Rice

mdr@byu.edu

Region 6 (Western US)

Statement

AESS has long been the home of solutions to immensely challenging technical problems. While serving as a senior editor, associate editor-in-chief, and editor-in-chief for IEEE Transactions on Aerospace and Electronic Systems for the past 18 years, I have come to appreciate the diversity of interests in AESS. The diversity is our strength. My technical area home is Communication Systems and Networks (CSN) and I am a founding member of the AESS Glue Technologies for Space Systems Panel. I feel well-positioned to bring a “CSN perspective” to the AESS table.

As a member of the Board of Governors, I would continue to use this complementary perspective to build and strengthen the excellent work that precedes me: I would be open to exploring all ways to improve how AESS simultaneously serves members from industry and academia; continue to strengthen the diverse and international participation in AESS conferences, publications, and other activities; and work to increase the value of society membership to all members.

Bio

Michael Rice (M'82, SM'98, F'17) received the PhD from Georgia Tech in 1991. Dr. Rice was with Digital Transmission Systems, Inc. in Atlanta and joined the faculty at Brigham Young University in 1991 where he is currently a Professor in the Department of Electrical & Computer Engineering. Professor Rice was a NASA/ASEE Summer Faculty Fellow at the Jet Propulsion Laboratory during 1994 and 1995 where he worked on land mobile satellite systems. During the 1999-2000 academic year, Professor Rice was a visiting scholar at the Communication Systems and Signal Processing Institute at San Diego State University.

Professor Rice's research interests are in digital communication theory and signal processing with a special interest in applications to aeronautical mobile telemetry and software defined radio design. He has been a consultant to both government and industry on telemetry related issues. He authored the textbook *Digital Communications: A Discrete-Time Approach*, published in 2009. He was elevated to IEEE Fellow in 2017 “for contributions to communication waveforms, detection algorithms, and channel models for aeronautical telemetry.” He received the Pioneer Award from the International Foundation for Telemetry in 2019.

In the telemetry community, he has served as General Chair of the International Telemetry Conference (ITC) three times (2008, 2016, 2022), ITC Technical Program Chair in 2002, and has won the ITC Best Paper Award eight times.

Professor Rice is a member of the IEEE Communications Society (COMSOC) and the

Aerospace and Electronic Systems Society (AESS). He is past chair of the Communication Theory Technical Committee and has served on several COMSOC conference committees. In AESS, he has served on the editorial board for IEEE Transactions on Aerospace and Electronic Systems (TAES) as Technical Editor for Command, Control, and Communications (2005-2016), Associate Editor-in-Chief (20016-2018), and Editor-in-Chief (2018-2022). In addition, he served as Editor-in-Chief of the AESS Quarterly Email Blast (2016-2017), on the AESS N&E Committee (2022) and the AESS Fellows Committee (2022). He served on the AESS Board of Governors from 2016-2021.

At the local level, he has served as chair of the IEEE Utah Section 1997-1999, IEEE Region 6 Student Activities Chair 2001-2002, an Area Chair in IEEE Region 6 (2005-2006), and as Chair of the Communications and Signal Processing Society Chapter of the Utah Section (2001-2003, 2013-2015).

He has received Phi Kappa Phi Distinguished Faculty Award at Brigham Young University for 2016-2017 academic year and received the Wesley Lloyd Award for Distinction in Graduate Education at Brigham Young University in 2011.



Avid Roman-Gonzalez

avid.roman-gonzalez@ieee.org
Region 9 (Latin America)

Statement

Significant evidence of the impact of the work of Prof. Roman-Gonzalez is the large diffusion to academic and industrial communities related with space activities through more than 200 presentations as ""keynote speaker"" in different national and international events, most of them in South America.

Moreover, he has been promoting the development of aerospace technology in Peru. He was a Regional Coordinator of South America and National Point of Contact for the SGAC (Space Generation Advisory Council) and advises various university initiatives in the aerospace field. He has been co-organizer of the Aerospace Bolivian Conference - ABC (<https://www.facebook.com/AerospaceBolivianConference/>) in the 2014 and 2016 versions, as well as the International Conference on Aerospace and Signals - INCAS (<https://www.facebook.com/INCAS.IEEE/>) in its first edition 2017.

Dr. Roman-Gonzalez is the founder of the AESS & SPS Joint Chapter of the Peruvian Section of the IEEE.

According to the SCOPUS database, Prof. Roman-Gonzalez is one of the top researchers contributing to the topic ""Low Earth Orbits; Space Debris; Orbit"" (T. 61589)

Bio

CEO & Founder at Business on Engineering and Technology S.A.C. (BE Tech). Full professor at Universidad Nacional Tecnológica de Lima Sur (UNTELS). IEEE Senior Member. Electronic engineer from the Universidad Nacional San Antonio Abad del Cusco. Systems engineer from the Universidad Andina del Cusco. Received his M.Sc. Degree in industrial and human automatic, from the Université Paul Verlaine de Metz - France, and he received his Ph.D. Degree in image and signal processing from TELECOM ParisTech. He was a postdoctoral fellow at Universidad Peruana Cayetano Heredia.

His work experience includes research at the French Space Agency (CNES) and German Aerospace Center (DLR), university teaching (UNSAAC, UAC, UNI, UPCH, UCH and UNTELS), consulting engineer at CONIDA, SPECTRUM, EGEMSA, etc.

He participates as keynote speaker and jury of projects in various academic events. He has many international published papers. His areas of interest are Signal and image processing, biometrics,

artificial intelligence, human automation, bioengineering, industrial automatic, control, and aerospace technology.



Barry C. Tilton

barrytilton@alumni.usc.edu
Region 2 (Eastern US)

Statement

I am thrilled at the opportunity to increase my involvement with AESS. I have been a member as long as I have been in IEEE, and have attended the meetings in Colorado before they were moved to Big Sky. My career has been along the boundary of aerospace and geoint. During my 20 years in the USAF I worked on programs in all phases of space operations – launch, satellite protection, navigation, communications, remote sensing, on orbit servicing, and de-orbit. I have also operated systems on board aircraft as diverse as a Twin-Otter up to the NASA Long-Wing WB-57F at 62,000 feet.

I have been passionate about aerospace since I was 7 years old, and greatly desire to give back to the community now that I am in the senior phase of my career. With time split nearly evenly now between government and industry I believe I have a lot to offer the BoG in terms of insight and context for current and future planning and solutions. I would like to focus on industry/government alignment.

Bio

Barry C Tilton, P.E., PMP, SM-IEEE-EKN is the Technology Evangelist for Maxar Technologies. He has over 37 years' experience as an EE in the aerospace field and is a Licensed PE and certified Project Management Professional. He is an Air Force veteran (20 Years), who worked as a Chief Engineer, Scientist, and Program Director while on active duty. He completed assignments at Space Division, NRO, Space Command and NGA. Subsequent to his retirement from the AF in 2005, Barry has worked in industry supporting both air and space programs in remote sensing, space surveillance and resilience and GEOINT for both commercial applications, the NRO and NGA.

Barry earned his BSEE from USC and his MSEE from Northrop University.

Barry C Tilton, P.E. is the immediate Past-Director of IEEE Region 2 (and as a result of MGA and IEEE-USA Region 2 as well). He is a Senior Member of IEEE and AESS, who has both been involved with (and served in positions of leadership in) the organization and community for over 37 years. He has been a member of IEEE since 1985, and has been involved as a member, author, conference attendee and thought leader in the AESS and GRSS for most of that time, in Los Angeles, Colorado and Virginia. Upon retirement from the US Air Force, Mr. Tilton became active in leadership of several technical activities and MGA efforts in Region 2.

He served as the Director-Elect of Region 2 from 2019 -2020. He has been Treasurer, Vice Chair and Chair (twice) of the NoVA Section of IEEE, and was recognized in 2010 as Volunteer of the Year. He Chaired the Joint NoVa/DC SSIT Chapter for two years. He has supported IEEE as representative to the Future Cities finals four times. He has mentored the NoVa Section sponsored (and award winning) Oakton High School Robotics Club. He was the Region 2 Technology Policy coordinator for over 5 years, actively addressed Region concerns in technology management and regulation from his proximity to the National decision makers.

Barry has served as Chair of the IEEE-USA Committee on Transportation and Aerospace Policy, where he took leadership roles in preparing the full technical programs for two successive IEEE-USA annual meetings. He has also run sessions at National and Region gatherings on many occasions. Barry has also actively supported the Government Affairs Committee of IEEE-USA for several years, and is the current Region 2 representative.

In addition to IEEE volunteering, Mr. Tilton has been a certified volunteer and coach for Special Olympics for many years, lead a National-Award winning chapter of the Federation of Galaxy Explorers, and is a member of several other technology organizations, including the American Geographical Society (Fellow) AIAA (Senior Member), ASPRS, SPIE, US Geospatial Intelligence Foundation (Life Member) and the National Space Society.

He is published in several journals and magazines, and is a frequent conference speaker as well. Barry is married to the former Elaine Belen, and has three children.