AESS N&A Committee

Officers' Slate

Hugh Griffiths Chair, N&A Committee

September 28-29, 2018 Rome Marriott Park Hotel





AESS Board of Governors elected for 3-year term 2019-2021



Yonina Eldar



Michael Rice



Alfonso Farina



Marina Ruggieri



Maria S. Greco



Roy Streit



Michael Noble



Michael Wicks



AESS Officer Election Process

At a meeting of the Board of Governors, normally held before the First of November of every year, the Board of Governors shall appoint, from among current members, all Vice Presidents as defined in the Constitution who will take office on the First of January of the Following year. Such appointment shall occur after selection of their preferred candidate from the proposed slate. The President shall annually appoint, with the concurrence of a majority of the Board of Governors, a Secretary and a Treasurer.

We will elect each VP one at a time. Each candidate will have 5 minutes to address the board, followed by 5 minutes for questions.



Proposed Slate

VP Pubs - Sabrina Greco and VP Finance - Jose Bolanos, elect by acclamation.

VP Conferences – Michael Braasch

Alfonso Farina

VP Member Services – Fabiola Colone

Mike Wicks

VP Technical Operations – George Schmidt

*Michael Braasch

VP Education – Lorenzo Lo Monte

*Fabiola Colone

VP Industry Relations – Darin Dunham



VP Conferences

Michael Braasch

Alfonso Farina



VP Conferences – Michael Braasch



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).

Mike is internationally recognized for his work in characterizing the effects of GPS multipath. In addition, 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 also conducted research in the design, development and flight-testing of peripheral vision display systems for general aviation aircraft. 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 and has lectured for NATO AGARD in Russia, Turkey and Ukraine. Mike has served as an associate editor for navigation and technical editor for navigation for the TAES. Since 2014 he has served as the IEEE/AESS liaison to the ION/IEEE Position, Location and Navigation Symposium (PLANS). Since 2015, he has served as the associate editor for navigation for SYSTEMS. Since 2017, he has served as the founding Chair of the AESS Navigation Systems Panel.

VP Conferences – Michael Braasch

Statement: Over the course of my two years of service on the BoG and the Conference committee, I have been struck by the high impact achieved by a very dedicated group of professionals. The IEEE brand, and the quality that the brand implies, is highly sought after by many technical conferences. In addition to the numerous IEEE financially sponsored/co-sponsored conferences under the purview of AESS, the Conference committee is routinely asked to approve technical co-sponsorship of outside conferences. Technical co-sponsorship allows the outside conference to advertise itself as being sponsored by IEEE. Ensuring that meaningful IEEE/AESS involvement exists on a given conference's organizing committee is essential to maintaining the quality that the IEEE brand conveys. addition, the Conference committee must learn from the best practices of our existing high quality conferences and use them to provide assistance to newly established conferences and/or those in need of improvement. elected, I will vigorously pursue these goals.



VP Conferences – Alfonso Farina



Alfonso FARINA, LFIEEE, FIET, FREng, FEURASIP. Electronic Engineering Degree, Rome University, 1973. 1974: joined Selenia, then Selex ES. Director of Engineering of Large Business Systems Division. 2012: Senior VP & Company CTO, reporting directly to President. Retired in October 2014. 1979 – 1985: professor of "Radar Techniques", University of Naples. Author of 800 peer-reviewed technical publications and of books and monographs (published worldwide), some of them also translated in to Russian and Chinese. Awards: (2004) Leader of the team that won the First Prize of the first edition of the Finmeccanica Award for Innovation Technology; (2005) International Fellow of Royal Academy of Engineering, U.K., fellowship was presented to him by HRH Prince Philip, the

Duke of Edinburgh; (2010) IEEE Dennis J. Picard Medal for Radar Technologies and Applications for "Continuous, Innovative, Theoretical, and Practical Contributions to Radar Systems and Adaptive Signal Processing Techniques"; (2012) Oscar Masi award for the AULOS® "green" radar by the Italian Industrial Research Association (AIRI); (2014) IET Achievement Medal. (2015) Visiting Professor at University College London (UCL), Dept. Electronic and Electrical Engineering, Distinguished Lecturer (DL) of IEEE AESS.

(2017) IEEE SPS Industrial Leader Award.

(2017) Chair of Italy Section Chapter, IEEE AESS-10.

(Jan 2018-Dec2019) IEEE Signal Processing Society 2018, Distinguished Industry Lecturer.

(Jan 2019-Dec 2021) Member of IEEE AESS BoG.

(2018): Associate Editor, IEEE Signal Processing Magazine.

(2018-2019): Visiting professor at Cranfield University, UK.

Consultant to Leonardo S.p.A. "Land & Naval Defence Electronics Division", Rome.



VP Conferences – Alfonso Farina

Statement: I have more than 40 year experience attending conferences as speaker, session chairman, session organizer, invited speaker, plenary speaker, executive chair of IEEE Fusion conference 2006, general chair of IEEE Rome conference 2008 and honorary chair of the forthcoming IEEE Radar Conf. Florence 20.

It would be an honor to offer my experience as VP for Conferences at the IEEE AESS. The purpose is to gain experience also on the many other conferences organized by AESS, find synergies, encourage conferences in Europe, generate opportunities to recruit IEEE AESS new members especially from industries.



VP Member Services

Fabiola Colone

Mike Wicks



VP Member Services – Fabiola Colone



Fabiola Colone is an Associate Professor at the Faculty of Information Engineering, Informatics, and Statistics of Sapienza University of Rome, Italy. She teaches courses on Communication and Radar systems and actively contributes to the development and monitoring of ICT Engineering programs within dedicated committees.

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 120 publications in international technical journals, book chapters, and conference proceedings.

She is member of the IEEE AESS Board of Governors since 2017 and served on several committees including Member Services, Education, and Publications. She is Chair of the AESS Professional Networking and Mentoring Program and Editor in Chief for the IEEE AESS QEB Newsletters. She is Associate Editor for the IEEE Transactions on Signal Processing and member of the Editorial Board of the Int. Journal of Electronics and Communications (Elsevier). She has been recently elected to the AESS Radar System Panel. She was in the organizing committee, as the Student Forum Co-Chair, ofthe IEEE 2008 Radar Conference, Rome, Italy, and she is currently in the organizing committee, as Special Sessions Co-Chair, of the IEEE 2020 Radar Conference. She served in the technical committee of many international conferences and she is frequently reviewer for a number of international technical journals.



VP Member Services – Fabiola Colone

Statement: It is with profound gratitude and great humility that I accept this nomination for the office of AESS VP Member Services, as I fully understand the responsibilities that go with it.

Although I have been in the AESS BoG only for the past two years, I have been involved in several activities that lead me to work with different committees, thus endorsing their missions. I took these roles very seriously, always trying to bring new ideas to the table.

Cooperation and Innovation: if elected, this will also be the leitmotif of my tenure that will be energetically steered toward the goal of broadening and actively engaging the membership of AESS. I will explore new ventures to meet the needs and expectations of Millennials, as recruiting young members is an essential condition for our Society's continuation. At the same time, I will propose joint VP initiatives aimed at showing tangible value to members or potential new members that, I am convinced, can be found among many professionals and scientists that routinely publish in our journals, attend our conferences, and follow our educational programs.



VP Member Services – Mike Wicks



Dr. Wicks is a leading research scientist in remote sensing, signal processing and systems engineering, with a current focus on distributed systems and radio frequency tomography. He is the Endowed Chair for Sensor Exploitation and Fusion at the University of Dayton, and Professor of Electrical Engineering. Dr. Wicks retired from the U.S. Air Force as an executive with thirty years of systems engineering, radar, electronic warfare, navigation and radio frequency communications experience. His expertise combines theory and technique, producing new and novel radio frequency sensors and systems that address

urgent as well as future needs. He pioneered the concept of knowledge-based signal processing and waveform diversity, and has led national and international research teams on the design, development and fielding of novel algorithms, architectures and systems for remote sensing from space, air and surface platforms.

Dr. Wicks conducts research in the MUMMA Radar Lab at the University of Dayton, an experimental and teaching facility he founded in 2013, where he offers graduate courses including: Introduction to Radar, Advanced Radar, Radar Signal Processing, Radio Frequency Tomography, Multistatic Sensing, Introduction to Electronic Warfare, and Sensor Exploitation. Dr. Wicks has many published books, chapters, journals and conferences papers, patents and reports. His IEEE honors include the 2013 Dennis J. Picard Medal for Radar Technologies Applications, IEEE Fellow, 2017 AESS M. Barry Carlton Award, 2016 IEEE AESS Pioneer Award, 2009 IEEE AESS Warren White Award for Excellence in Radar Engineering, and the 1998 AESS Nathan Award to the Young Engineer of the Year.



VP Member Services – Mike Wicks

Statement: If elected VP Member Services, I am committed to providing the highest level of service to our members and affiliates. I will continue to support Chapter formation, and the advancement of the AESS strategic plan with focus on current BOG priorities. Especially important is recruitment and retention. Critical to this goal is wide dissemination of Society information, e.g. the quarterly e-mail blast highlighting AESS-sponsored conference and workshops, specialized educational opportunities including tutorials and distinguished lectures, and most importantly, Standards, our Transactions and the Magazine. Visibility of these activities, in academia, industry and governments worldwide, but especially at our conferences and workshops, has an impact on participation, and I will support and contribute to this important process. I will attempt to create a lessons learned work space from across the BOG to document and share best Member Services practices. I am well positioned to do this and fill the role of VP Member Services through my continued participation in the AESS BOG and Radar Systems Panel, and will maximally leverage this activity.



VP Technical Operations

*Michael Braasch

George Schmidt



VP Technical Ops – George Schmidt



George T. Schmidt is a Distinguished Lecturer, member of the AESS Board of Governors (VP Technical Operations), and the founding AESS representative to the annual Saint Petersburg Russia International Conference on Integrated Navigation Systems now in its 25th year. Since 1968, he has participated in the panels of the NATO Science and Technology Organization (STO), formerly AGARD. In 2005 he received the STO's highest technical award, the von Kármán Medal. In 2013, he retired after 17 years as Editor-in-Chief of the American Institute of Aeronautics and Astronautics (AIAA) Journal of Guidance, Control, and Dynamics. He managed the peer review of more than 6500 papers in a period

of unprecedented growth for the journal and its consistent ranking as the number 1 journal in its specialty area. In 2001, he received the AIAA International Cooperation Award. For many years he was a Lecturer in Aeronautics and Astronautics at MIT, retiring in 2010. In 2007, he retired after 46 years at the MIT Instrumentation Laboratory and the Draper Laboratory, Cambridge, Massachusetts. His final position was as the Draper Director of Education. Prior to that position he was the Leader of the Guidance and Navigation Division and Director of the Draper Guidance Technology Center.

He is a Life Fellow of the IEEE and an AIAA Fellow. He is author or contributing author of over 100 technical papers, reports, encyclopedia articles, and books. He received his SB and SM degrees in Aeronautics and Astronautics from MIT and his ScD in Instrumentation also from MIT.



VP Technical Ops – George Schmidt

Statement: As VP Technical Operations for the past nine months, I have enjoyed working and collaborating with the other Board members and Panel officers in improving technical activities for the members of our Society. I developed a Strategic Plan in January and have closely followed it. As I described yesterday at the September Board meeting, there has been significant progress in meeting all the 2018 objectives: (1) review of all Panels for activities and relevancy, (2) develop plans for a new conference, (3) involve Panel members by writing state-of-the art articles in Systems, (4) develop a Panel Best Practices Policy and Procedures document beginning with new panel proposals, and (5) involve Panels with DLs. I envision that the Panels will become the technical engines that create knowledge in our areas of interest and lead to further engagement of our members. I have very relevant technical experience and contributions in the Panel technical areas so I am very comfortable in leading the effort to meet these objectives.



VP Education

*Fabriola Colone

Lorenzo Lo Monte



VP Education – Lorenzo Lo Monte



Dr. Lo Monte has experience in applied Radar, RF, DSP, EW system design and prototyping, from small companies, consulting, academia, research institutions, to large defense contractors and government agencies worldwide. He serves as the **Chief Scientist** at Telephonics, a top-100 defense corporation specializing in ISR, with the role of translating research innovations into commercial products. Prior to that, he was an **Associate Professor** at the University of Dayton, and the **Executive Director** of the Mumma Radar Laboratory. Dr. Lo Monte has published over 70 journal and conference papers and two book chapters.

IEEE Roles

Dr. Lo Monte is very active in the IEEE community. For the AES, he serves on the **AES Board of Governors**, filling the roles of the **Sensors Council** and the **Young Professionals representative**. He helped in establishing the **AESS Mentoring Program** and the **AESS Short Course Initiative**. He is also an **AES Distinguished Lecturer** and **AES Short Course Instructor**. He is serving on the Education Committee and is familiar with its objectives.

Other notable roles in the IEEE include serving as **Topical Editor** of the IEEE Sensors Journal, **Vice Chair** of the Dayton Section, and holding multiple appointments between the **Long Island Section**, **IEEE-USA** and **Region 1**.

On behalf of the IEEE, he taught many short courses in radar and EW worldwide, with a focus on underserved areas. Dr. Lo Monte also served as a technical panel member, steering committee member, judge, tutorial instructor, special session organizer, and session chair in many international IEEE conferences.



VP Education – Lorenzo Lo Monte

Statement: Education is paramount to our society's mission and serves to motivate interest and enable activities in the AESS's technical areas of interest. It is a vehicle that serves to reach more people that benefits each person who participates. My experience as an educator both in the academia and in industry, and my continued contribution to AES educational activities, should benefit the role of VP Education. If elected, I will build upon the path undertaken by the current VP committee, focusing on:

- Increasing DLs worldwide while reducing costs. Increase the awareness of this program, with a focus on underserved areas.
- Bring to fruition the AES Short Course initiative.
- Increase the awareness and number of applicants of the Robert Hill educational award
- Increase the awareness and participation of the AES Mentoring Program
- Work closely with YP to provide targeted resources and events
- Increase the awareness, quantity, and content of the AES Resource Center
- Upgrade the website.
- Form a committee with senior and junior members, or limiting their rotations, so that the knowledge is preserved each year.



VP Industry Relations

Darin Dunham



VP Industry Relations – Darin Dunham



Darin Dunham graduated from Carnegie Mellon in 1991 with a Bachelor's Degree in Electrical Engineering. He also earned a Master's Degree in Electrical Engineering from the Naval Postgraduate School in 1997. He served almost 10 years as a Marine Corps officer, leaving the USMC in March 2001. He served a variety of positions including infantry platoon commander and company executive officer in Third Battalion, Third Marines. He also served as a project officer and aide-de-camp at the Marine Corps Systems Command. Following his service to the United

States, Darin started and ran Vectraxx, Inc. for 13 years. In 2014, he accepted a position with Lockheed Martin on the Command, Control, Battle Management, and Communications (C2BMC) program working missile defense. He currently works algorithm develop on the C2BMC program specializing in target tracking and discrimination. Darin has been an active member of AESS and IEEE for most of this century. He co-chaired the Fusion Conference in Chicago in 2011, has been a session organizer since 2006 and a track organizer since 2015 at the Aerospace Conference. He serves on the ISIF Board of Directors and is a past President of ISIF as well.



VP Industry Relations – Darin Dunham

Statement: With experience in industry, first as a small business owner, and now as an employee of a large corporation, I have plenty of experience to draw upon if elected to the VP of Industry Relations. My intentions are to hold Industry Relations committee meetings at least twice in between the AESS Board Meetings. In these meetings, we will brainstorm of ideas, assign tasks, and ensure we are at least attempting to meet some of the needs of industry.



Backup Slides



VP Technical Ops – Michael Braasch



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).

Mike is internationally recognized for his work in characterizing the effects of GPS multipath. In addition, 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 also conducted research in the design, development and flight-testing of peripheral vision display systems for general aviation aircraft. 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 and has lectured for NATO AGARD in Russia, Turkey and Ukraine. Mike has served as an associate editor for navigation and technical editor for navigation for the TAES. Since 2014 he has served as the IEEE/AESS liaison to the ION/IEEE Position, Location and Navigation Symposium (PLANS). Since 2015, he has served as the associate editor for navigation for SYSTEMS. Since 2017, he has served as the founding Chair of the AESS Navigation Systems Panel.

VP Technical Ops – Michael Braasch

Statement: My recent experience in helping to create and lead the AESS Navigation Systems Panel, as well as service on the Technical Operations committee, has provided me with a deep appreciation for the importance of the AESS technical panels. I will not address every panel but some highlights include: most of the panels have significant responsibility for a major portion, if not all, of a prestigious international conference; the Gyro and Accelerometer Panel is responsible for shepherding IEEE standards; and the Unmanned Aerial Vehicles Panel is spearheading AESS' engagement in that extremely important sector. The Technical Operations committee must maintain close contact with each of the panels in order to ensure they have the support needed for continued success. As the need arises, the Technical Operations committee must also be the advocate for the creation of new panels. Occasionally panels need to be abolished and the committee must oversee this process as well. If elected, I will work with the committee to accomplish these objectives.



VP Education – Fabiola Colone



Fabiola Colone is an Associate Professor at the Faculty of Information Engineering, Informatics, and Statistics of Sapienza University of Rome, Italy. She teaches courses on Communication and Radar systems and actively contributes to the development and monitoring of ICT Engineering programs within dedicated committees.

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 120 publications in international technical journals, book chapters, and conference proceedings.

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VP Education– Fabiola Colone

Statement: I am honored about the opportunity to serve as VP Education. As a member of the Academia, Education is my everyday mission and I am thrilled at the prospect to extend such mission on a global scale.

Recently, several activities dedicated to the youngest members of our Society have been proposed and undertaken and I am convinced that we are heading in the right direction. However, I believe it is important to increase and strengthen the support work for these initiatives for them to be presented in a solid and engaging way to the broader membership.

To this end, I am willing to take up the challenge of the Resource Center and to plan, with your help, the most effective offers for the different parties that are potentially interested and to expand it to include new and attractive content.

I would also like to renovate the Distinguished Lecturers program and to enrich initiatives such as the Summer Schools, by increasing the number of lecturers, introducing innovative teaching methodologies, and encouraging cross-fertilization among different technical fields.

