



113TH RCA AWARDS PRESENTATION

Saturday, November 19, 2022
Atlanta, GA

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113TH AWARDS PRESENTATION

Awards Program Begins.....	7:00 PM
Welcome	Master of Ceremonies: Edward Ryan, Esq.
Georgia Tech Welcome	Dr. Chaouki T. Abdalla
2022 Technical Symposium Awards.....	Presenter: Dr. Jim Breakall
Fellows Presentation	Edward Ryan
Dinner	
Keynote Address	Robert Bell, of SSPI
Award Overview.....	Edward Ryan
Wireless Innovation Award	Arlene Harris
Barry Goldwater Amateur Radio Award	Edward M. Gable
Ralph Batcher Memorial Award	Jim and Felicia Kreuzer
Radio Club of America Special Services Award	Ellen O'Hara
Excellence in Sales and Marketing Award	Patti Ryg
Special Recognition Award	Evan Rolek
Collegiate Achievement Award	Audrey McElroy
Emerging Professional Award	Divyam Mishra
Special Recognition Award.....	Don Root
Radio Club of America President's Award.....	Paul Scutieri
Lifetime Achievement Award	Professor Akhlesh Lakhtakia
President's Remarks	John Facella, P.E. / David P. Bart
Wrap Up	Edward Ryan

KEYNOTE SPEAKER

Robert Bell is the featured keynote speaker at the 2022 banquet and awards ceremony. Mr. Bell is Executive Director for both the Space and Satellite Professionals International (SSPI) and the World Teleport Association (WTA). He is responsible for programs, finances, and operations.

- **WTA** promotes the commercial interests of teleport operators and excellence in their operations, technology and business practices. WTA is the only trade association that focuses on all aspects of the business of satellite communications from the ground up. At the core of its membership are the world's most innovative operators of teleports, from independents to multinationals, niche service providers to global hybrid carriers.
- **SSPI** is the largest membership organization in the industry, which connects the people of the invisible, indispensable industry called space and satellite to fuel the engine of growth and make the case for space technology as a vital contributor to the world. The companies represented in SSPI encompass nearly every sector of the space and satellite industry.

Mr. Bell has over 30 years of experience as an association manager and business consultant for both nonprofit and profit-driven organizations operating in the IT outsourcing, telecommunications, and financial services industries. He has led business development missions and conducted workshops and Master Classes in the Americas, Europe and Asia. A regular blogger, he has written for *The Municipal Journal of Telecommunications Policy*, *IEDC Journal*, *Telecommunications*, *Asia-Pacific Satellite*, *Digital Communities*, and *Asian Communications*. He is a frequent speaker and moderator at industry conferences including SATELLITE, NAB, SATCON, ICF's annual SUMMIT and the Global Forum.

A co-founder of the Intelligent Community Forum, he is also the author of market studies and reports, including *Benchmarking the Intelligent Community*, *Teleports in a Gigabit World*, and *How to Buy Satellite Capacity*. He is the co-author, with Louis Zacharilla, of *B2B Without the BS*, a guide to sales and marketing in the unique business-to-business sector; of *Broadband*

Economies: Creating the Community of the 21st Century; and of Seizing Our Destiny.

Mr. Bell's specialties encompass: trade association management, business-to-business marketing, public speaking, research, and nonfiction writing. As a subject matter expert, Mr. Bell writes frequently for industry journal's including *Via Satellite*, *SatNews*

and *Satellite Executive Briefing*. He has appeared in segments of ABC World News and The Discovery Channel, and he has led business development missions in the U.S. and Asia. He is a frequent speaker and moderator at industry conferences including SATELLITE and Satellite Innovation. At WTA, he manages research activities and edits its reports, including Service Automation and Orchestration for Teleport Operators, The Virtual Teleport, Teleports and the 5G Opportunity, Cloud Services for Teleport Operators, LEO/MEO Constellations and the Teleport and New Antennas, New Opportunities.

Mr. Bell recently spoke as part of the RCA Virtual Interview Series in February 2022. His [interview](#) can be seen online on the [RCA Video Archives](#) under the Interview Series. In July 2022, he presented a panel: ["Why is Space the new frontier for data centers?"](#) for The Edge Computing Channel that is available online. Mr. Bell's keynote speech highlights the importance of RCA's relationships with industry partners. SSPI, as an RCA partner organization, recognizes the important role wireless plays in the controlling, communicating, and telemetering information from rockets, space stations, and satellites. Mr. Bell's keynote speech will touch on this, the history of the space and satellite industry, and what the future holds.



Robert Bell

THANK YOU VOLUNTEERS



Thank you to these individuals for their assistance to RCA committees and/or the 2022 Awards Banquet:

Karen Clark | Mercy Contreras | Christine Facella | Audrey McElroy
Ed O'Connor | Marcel Stieber | Meade Sutterfield | Prof. Mary Ann Weitnauer

BANQUET MASTER OF CEREMONIES



Edward Ryan, Esq.

Edward Ryan, Esq. is a patent attorney and an amateur radio operator. He joined the RCA in 2016, with the twin goals of networking and staying current with developments in the wireless industry. His professional work has dealt with electronics, semiconductors, and wired and wireless network technologies, as well as trademarks and other intellectual property matters.

Edward has a B.S. in Physics from Carnegie Mellon University (2005) and a J.D. from Fordham University School of Law (2008), and has been

registered as a patent attorney since 2009. His experience with volunteer-run organizations spans two decades, including social organizations and a local civic organization.



2022 WELCOMING SPEAKER



Dr. Chaouki T. Abdallah

Dr. Chaouki T. Abdallah is the Executive Vice President for Research (EVPR) and a professor of Electrical & Computer Engineering at the Georgia Institute of Technology. Dr. Abdallah serves as chief research officer for the Institute, providing overall leadership for the research, economic development, and related support units within Georgia Tech.

Abdallah received his M.S. and Ph.D. in electrical engineering from Georgia Tech in 1982 and 1988, respectively. He joined the Electrical and Computer Engineering (ECE) Department at the University of New Mexico (UNM), where he served as professor of Electrical and Computer

Engineering. Between 2005 and 2011, Abdallah was the ECE department chair, and he served as provost and executive vice president of academic affairs at UNM from 2011 to 2016. In 2017-18, he served as acting president, interim president, and finally the 22nd president of UNM.

He has published eight books and more than 300 peer-reviewed papers. His research interests include systems theory with a focus on control, communications, and computing systems. Abdallah, who is fluent in English, French, and Arabic, is a senior member of IEEE and a recipient of that organization's Millennium Medal.



RCA Mentorship Program

A way to share your knowledge and experience, or learn from the best!

The new RCA Mentorship Program is designed to pair RCA members together, providing opportunities for young professionals to learn and emulate the experience of more seasoned RCA members. Several mentoring pairs have already been formed and more are being formed. Learn more on the RCA website.



Mentor Program

radioclubofamerica.org/mentor-program

2022 HONORS & AWARDS

LIFETIME ACHIEVEMENT AWARD

Professor Akhlesh Lakhtakia — For very significant achievements and a major body of work accomplished over a lifetime that has advanced the art and science of wireless technology.



Professor Akhlesh Lakhtakia has had a 40+ year career in wireless. Currently he is an Evan Pugh and Charles Godfrey Binder Professor of Engineering Science and Mechanics at Pennsylvania State University. He is an expert in materials and electromagnetic wave modeling that

are used in RF stealth applications, as well as in lasers, green engineering, and biologically inspired design. Elected a fellow of eight learned societies, he currently works on: electromagnetic fields in complex and nanomaterials, thin-film solar cells, biologically inspired design, and forensic science. He has received more than 40 honors and awards, is a U.S. State Dept. Jefferson Science Fellow, has authored or edited more than 25 books, and refereed over 900 journal papers.

Dr. Lakhtakia was born in Lucknow, India in 1957. He obtained a Bachelor of Technology degree in Electronics Engineering from the Banaras Hindu University, Varanasi, India; Master of Science and Doctor of Philosophy degrees in Electrical Engineering from the University of Utah, Salt Lake City; and a Doctor of Science degree in Electronics Engineering from the Banaras Hindu University.

In 1983, he joined the faculty of the Pennsylvania State University, where he was elevated to the rank of Distinguished Professor of Engineering Science and Mechanics in January 2004. In 2006, he became the Charles Godfrey Binder (Endowed) Professor of Engineering Science and Mechanics. In 2018, he received the highest rank at Penn State: Evan Pugh University Professor.

Dr. Lakhtakia has published more than 930 journal articles; has contributed 34 chapters to research books and encyclopedias; has edited, co-edited, authored or co-authored 27 books and 32 conference proceedings; has authored or co-authored 420 conference papers; has reviewed for 183 journals; serves on the editorial boards of five electromagnetics journals; and was the first Editor-in-Chief (2006–2013) of the *SPIE Journal of Nanophotonics*. He serves as an international lecturer for the International Commission for Optics, SPIE, and the Optical Society of America; was twice a Visiting Professor of Physics at Universidad de Buenos Aires, a Visiting Professor of Physics at the University of Otago, a Visiting Professor of Physics at Imperial College London, a Visiting Fellow in Mathematics at the University of Glasgow, and Honorary International Professor National Taipei University of Technology; and headed the IEEE EMC Technical Committee on

Nonsinusoidal Fields from 1992 to 1994. He also advised the ASME Press during the first decade of this century for five years.

Dr. Lakhtakia was elected a Fellow of the Optical Society of America (1992), SPIE (1996), the UK Institute of Physics (1996), the American Association for the Advancement of Sciences (2009), the American Physical Society (2012), the Institute of Electrical and Electronics Engineers (2016), the Royal Society of Chemistry (2016), and the Royal Society of Arts (2017). He was named to the inaugural class of Outstanding Reviewers by the Optical Society of America in 2012. He also served as the 1995 Scottish Amicable Visiting Lecturer at the University of Glasgow. He received the PSES Outstanding Research Award in 1996, the PSES Premier Research Award in 2008, and the PSES Outstanding Advising Award in 2005. For his research on sculptured thin films and complex-medium electromagnetics, he received the Faculty Scholar Medal in Engineering in 2005 from the Pennsylvania State University, and he was the sole recipient of the 2010 SPIE Technical Achievement Award. Nanotech Briefs recognized him in 2006 with a Nano 50 Award for Innovation. The University of Utah named him a Distinguished Alumnus in 2007 and the Indian Institute of Technology (BHU) in 2014. In 2019, he was one of two scientists named by IIT (BHU) as an Alumnus of the Century in Making. The U.S. National Academies named him a Jefferson Science Fellow for 2022-23. Sigma Xi, The Scientific Research Honor Society bestowed on him the Walston Chubb Award for Innovation in 2016. In 2022, he received the Smart Structures and Materials Lifetime Achievement Award, the IEEE Antennas and Propagation Society Distinguished Achievement Award, and the Radio Club of America bestowed the Lifetime Achievement Award.

His current research interests lie in the electromagnetics of complex materials including chiral and bianisotropic materials, sculptured thin films, chiral nanotubes, nanoengineered metamaterials, surface multiplasmonics, engineered biomimicry, bone nano-refacing, and forensic science. His principal research contributions encompass frequency and time domain scattering, bianisotropic materials, isotropic chiral materials, sculptured thin films, composite materials, negative refraction, surface-wave propagation, surface multiplasmonics, solar cells, machine control, bioreplication, mimics and multiconrollable materials, forensic science and bone nanosurfacing.

He has more than 18,300 citations on the Web of Knowledge and his Hirsch index is 54. According to Google Scholar, the number of citations exceeds 30,500 and his Hirsch index is 75. His research accomplishments have been discussed on CNN and in a NOVA movie. His recent research has been covered on several scientific media outlets.

2022 HONORS & AWARDS

WIRELESS INNOVATION AWARD – NEW IN 2022

Arlene Harris — For creating a new concept or product to be used in the wireless industry.



Arlene Harris is an accomplished entrepreneur, inventor, investor, and policy advocate in the telecommunications industry. She is the president and co-founder of Dyna LLC, an incubator for start-up and early-stage wireless ventures. Between 1986 and 2013, Ms. Harris was awarded six

patents and one as co-patentee. She founded three wireless companies, including one that originated the concept of the “Jitterbug” cell phone for seniors. She was also a co-founder of the Wireless History Foundation.

Ms. Harris has decades of experience as an innovator, entrepreneur, board member, and as an investor in a number of successful companies in wireless related businesses. Most recently, through her incubator Dyna, Ms. Harris has launched Wrethink, a new broadband solution for families to help families manage and preserve their cherished stories, and Wrethinking, the Foundation, to support consumer digital safety through the Internet Safety Labs, to help fund female technology founders and other solutions.

Ms. Harris entered the wireless field by helping lead her family’s Los Angeles-based wireless business, ICS (now USA Mobility). In addition to providing early mobile telephone service and becoming the world’s largest paging system, ICS was developer of LifePage, the world’s first health related

application of wireless technology for consumers.

In 1983, Ms. Harris helped found billing and CRM market leader Cellular Business Systems, Inc. (now Netcracker). In 1986, she started Subscriber Computing (now Verisign) and invented the first management systems to support prepaid cellular service and the first niche cellular offering founding Cellular Pay Phone, Inc.

In 1994, Ms. Harris founded SOS Wireless Communication that became GreatCall in 2006. While at GreatCall, she launched its Jitterbug offering in 2006 in partnership with Samsung to create a simple and personalized cell phone experience. With almost a million customers, GreatCall was sold to a private equity company in 2017 and is now the foundation of retailer Best Buy’s consumer health offering.

Ms. Harris holds several issued patents. She received the PCIA Foundation’s distinguished Chairman’s award, is a Fellow in the Radio Club of America, has served on several committees of the FCC, EIA/TIA, and PCIA, and became the first female inductee into the Wireless Hall of Fame. She is one of few women in the Consumer Technology Hall of Fame and has been honored with Stevie, Athena, and Girl Scouts awards. She is on the advisory boards of Illinois Institute of Technology’s Institute of Design and Stuart Business School and the University of California San Diego’s Engineering School and Design Lab. In 2019, she earned a UCSD Gordon Engineering Leadership Award.

Ms. Harris lives with her husband and business partner, renowned wireless pioneer Marty Cooper, in Del Mar, California.

EXCELLENCE IN SALES AND MARKETING AWARD – NEW IN 2022

Patti Ryg — In recognition of an individual who exhibits the “Esprit de Corps” of sales, marketing and promoting in the Wireless Industry.



Patti Ryg is a national dealer manager for Diga-Talk Plus, a nationwide provider of push-to-talk (PTT) over cellular (PoC) service. Her 38-year career has included sales positions at Primus, Hutton, and Tait Communications. RCA’s Excellence in Sales and Marketing Award recognizes

Ms. Ryg’s leadership and excellence in sales, marketing, and promotion in the Wireless Industry.

Ms. Ryg has had an outstanding career in sales, marketing, and strategic planning and in supporting two-way radio dealers and women in wireless since 1974. She began her career working part-time for a land mobile radio dealer in Joliet, Illinois when she was in high school and college. In 1983, she joined Communications Associates (CA), one of

the pioneering wholesale distributors of cellular and radio communications equipment, as an inside salesperson and later moved to field sales, covering land mobile radio dealers and self-maintained end users of radio systems in the Midwest. She was instrumental in expanding distribution’s value to the sales channel on a national level.

When CA was acquired by Hutton Communications, Ms. Ryg remained with Hutton; and also spent a year with Tait Communications in dealer sales. Patti has enjoyed helping manufacturers market and sell their products through distribution and helping her radio dealer customers become more successful. She has also encouraged other women to work in the wireless communications industry.

She next joined Primus Electronics in 2014 as the senior account manager with responsibility for dealer sales. In 2019, Patti became national dealer manager for Diga-Talk Plus, a nationwide supplier of push-to-talk over cellular service.

Ms. Ryg is involved with the Women of Wireless Communications and was named as an RCA Fellow in 2018.

2022 HONORS & AWARDS

RCA SPECIAL RECOGNITION AWARD

Don Root, K6CDO — For dedicated service to the Radio Club of America.



Don Root, K6CDO, is a Fellow and Director of the Radio Club of America, and he is currently employed as a full time Program Manager at the Association of Public-Safety Communications Officials (APCO). He is a Life Member of APCO and received the NPSTC DeMello

Award in 2009. The RCA Special Recognition Award recognizes Mr. Root's service to RCA in the Membership Committee, the Member Services Senior and Retired Committee, and his work on the RCA website.

Mr. Root has 47+ years in Emergency Management and Public Safety wireless communications. Experienced in Disaster and planned incident response and support, including expedient field communications network design and installation; communications and warning system planning at the Federal, State and Local levels; State-level Interoperability coordination; Regional Frequency Coordination and management; large-scale radio network upgrade management with minimal operational impact; Multi-agency collaboration for national level public safety communications policy development; led the effort to develop and maintain ANSI Standards for Public Safety Common Channel Naming. He also has nearly 4 years of experience in Aviation Electronic Systems and Flight Test Instrumentation.



BARRY GOLDWATER AMATEUR RADIO AWARD

Edward M. Gable, K2MP — In recognition of unique contributions to the field of amateur radio.



Edward Gable, K2MP, was first licensed in 1957, as WN2MPM, operating CW on his first home brew single tube, 6L6 transmitter. Mr. Gable spent most of his career with Harris Corporation, in Rochester, New York. He spent 32 years working on HF high powered transmitters,

receivers, antenna couplers, and during the NASA Apollo program days, on their Unified S-Band Communications System.

While in the U.S. Army, stationed in Northern Italy, Mr. Gable signed I1DFD and obtained a W2MPM/M1 license to operate in the nearby Republic of San Marino. In 1977, he selected the callsign K2MP from a list of calls available within the FCC for Extra Class operators, and he has used that call sign for the latter part of his 66-year ham career. Mr. Gable has worked with many ham radio organizations, accepting many leadership roles with a special interest in training, lecturing, and writing. As Director of Licensing Classes for the Rochester Amateur Radio Association, he annually taught two classes of some fifty students per class, and personally brought over 1,000 newly licensed hams into our service.

Mr. Gable's CW DXing is a favorite activity, and he has worked all ARRL Entities and 9BDXCC. He needs just

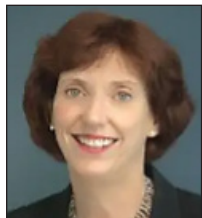
one valid QSL card (Crozet) to achieve Top of the ARRL DXCC Honor Roll status. He has earned the ARRL Satellite Achievement Award, the Mode J Club Satellite Award, The ARRL 600 Club Award, VUCC, WAZ, WAS and has held positions as ARRL Assistant Director Atlantic Division. He is a member of the A1 Operator Club, FISTS, the Amateur Radio Lighthouse Society, and for many Years was Assistant Radio Officer for Monroe County (NY) RACES. He is a Charter Life Member of the ARRL. Mr. Gable also supported the Army MARS program as AAR2FH and won the New York State Army MARS Accommodation Award for his work during Operation Desert Storm.

Mr. Gable is the only Radio Amateur to have been selected twice as the Atlantic Division Radio Amateur of the Year for years 1981 and 1999. At age 55, Mr. Gable retired from industry to focus on the history of technology. He became a Curator with the Antique Wireless Association Museum and led its curatorial activities for the next twenty years. As Curator Emeritus, he coordinated the AWA's 100th Year On-Air celebration of the 1921 Transatlantic Tests. He continues to be involved with an AWA initiative involving STEM classes, and he will be involved with the installation of a new AWA Ham Shack addition to the AWA Museum building. Mr. Gable received the AWA's Houck Award for Historical Preservation, J.P. Taylor Award for the Preservation of Television History, and became a Fellow in both the Radio Club of America and the Antique Wireless Association.

2022 HONORS & AWARDS

RCA SPECIAL SERVICES AWARD

Ellen O'Hara — In recognition of RCA members who have performed significant work to advance the goals and objectives of the Radio Club of America.



Ellen O'Hara has spent most of her career in the wireless telecommunications industry. She retired in April 2021 from her positions serving on the boards of Zetron, Inc and EFJohnson Technologies, Inc. In addition to her board positions, Ellen concurrently served as Senior Strategy

Advisor to JVCKENWOOD and as Chair of the Industry Council for Emergency Response Technologies (iCERT) from 2016-2021. From 2009 through March 2016, Ellen was the President and CEO of Zetron, headquartered in Redmond, Washington.

Prior to Zetron, Ms. O'Hara served as president and chief operating officer for EF Johnson in Irving, Texas (2005-2008) and held executive management positions at Motorola Solutions (1992-2005) and product management

positions at GE's Mobile Communications Division (1980-1992). Ms. O'Hara began her career in administrative and organization development roles at the Massachusetts Institute of Technology (1973-1980).

In addition to her role as Chair of iCERT, Ellen was JVCKENWOOD's management representative to the Public Safety Technology Alliance. Past industry board activities include the Washington Technology Industry Association, the International Technology Association, the FCC Coordinating Committee and the American SMR Network Association. In 2021, Ellen was awarded the Vivian Carr Award by the Radio Club of America for her contributions as a woman in the wireless industry. She has also served on the board of a charity for affordable housing in the Seattle area and on the vestry of her church.

Ms. O'Hara holds an MBA with high distinction (Baker Scholar) from the Harvard Graduate School of Business and a BA in European history with distinction from Mount Holyoke College in South Hadley, Massachusetts. During her college career, she also attended the University of East Anglia in Norwich, England for one year. She is married and has twin sons.

RCA PRESIDENT'S AWARD

Paul Scutieri — For service and dedication to the Radio Club of America.



Paul Scutieri is a public safety communications professional with more than 25 years of experience providing public safety solutions at the federal, state, and local government levels. This award recognizes Mr. Scutieri's leadership in bringing the RCA Mentor/Mentee Program to fruition, and for his

prior work on the RCA Banquet Committee.

Mr. Scutieri started in radio during high school where, as a freshman, he founded and aired the school's first radio station, WFDR. He has since built and managed several successful public sector and public safety technology sales teams.

Mr. Scutieri is currently the southern region sales manager at MCM Technology (Mcmtech), an industry leading public safety, asset management software solutions provider. He was previously the Public Safety Sales Director for Black & Veatch Telecommunications Division/Connected

Communities Business line. He was formerly regional sales manager for M/A-COM/Tyco (Harris Corporation) during the New York State 800 MHz digital Wireless Network implementation. Prior to that, he worked for 10 years in the New York State Assembly, moving through various positions from Program Counsel Staff, Central Staff and House Operations while working on numerous legislative issues.

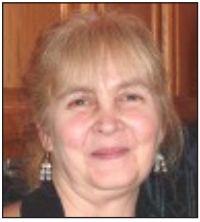
He is a long-standing member of APCO, serving on many committees such as the Emerging Technologies Committee and the Awards Committee. He served as Session Proctor for APCO for the past six years, ensuring their testing processes were secure. He is also an IACP (Police Chiefs) member and a North Carolina APCP/NENA member. He volunteers at a nursing home and mentors University of Westminster undergraduates/graduate degree students. He is also a member of the Albany/Tula Alliance Sister City exchange program between the U.S. and Russia.

Mr. Scutieri has a BS degree from the State University of New York at Brockport and has completed coursework at the State University of New York at Albany in their MBA program.

2022 HONORS & AWARDS

THE RALPH BATCHER MEMORIAL AWARD

Jim and Felicia Kruezer — For significant work in preserving the history of radio and electronic communications.



Jim and Felicia Kruezer have worked together for decades to preserve and educate in the areas of telegraphy, wireless, radio and other electric and electronic communications.



Beginning at the age of 14, in 1967, Mr. Kruezer attended a BOCES school and obtained training in Technical Electronics. He began seriously collecting radios and related historical documents after joining forces with Ms. Kruezer in 1973. Two years later, they learned about the Antique Wireless Association (AWA) and became members. That same year, they also helped establish a club in the

Niagara area, becoming charter members of the Niagara Frontier Wireless Association. Jim and Felicia became Amateur Radio Operators in 1978 (N2GHD and KA2GXL).

At the local August 1979 meeting of NFWA, Ms. Kruezer presented on Edwin H. Armstrong and his legendary achievements. Armstrong's long-time collaborator, Harry Houck, was an unexpected attendee! He graciously accepted an invitation to visit their home and radio collection, and they have treasured those memories to this day.

In 1985, the two established New Wireless Pioneers, a rare book dealership specializing in technology and communications history. They co-authored 28 catalogs from 1986-2002. In 1986-1987, they acquired a significant number of wireless and electrical books and trade catalogues from the Franklin Institute, adding the wireless related items to their collection and eventually selling the remaining items to the Smithsonian Institution. In 1988, they purchased the Harlowe Hardinge collection. The collection details a Radio Club of America charter member's experiences in France during World War I. Hardinge established the school for training Allied wireless operators, meeting at times with his fellow RCA members, Armstrong and Houck during the war.

In 1991, Mr. Kruezer was approached by the Canadian Marconi Company to appraise their collection for the National Museum of Science and Technology in Ottawa, Canada. The pair also joined the RCA as members that year. They co-authored an article for the May 1992 Stokes Memorial edition of the *Proceedings of the Radio Club of America* detailing their 1990 purchase of the library of W.E.D. Stokes, one of RCA's founders. The purchase rekindled their interest in RCA's history, and they began to search for other items to complement their library and research capabilities. In 1995, they co-authored an extensive article for the *AWA Review* to share and document their extensive Marconi radio collection and early wireless archive.

In 1996, the Kruezers created a replica of the Titanic Marconi Wireless Room for the Mariners Museum in Newport News, Virginia. This led to the creation in 2006 of a similar and more extensive display for the Titanic Museum in Branson, Missouri, which remained on continuous exhibit until 2018.

They have been extensively involved at the AWA in its museum and library operations, and they have received the 1999 AWA Houck Award for Preservation of Marconi Radio Artifacts. This year, they have been nominated to receive the AWA Houck Award for Documentation. Ms. Kruezer served as AWA Secretary from 2008-2009 and has been an AWA Board member from 2007 to the present. Mr. Kruezer has been the AWA Librarian since 2007 and a Board member from 2009 to the present. Both have been AWA Assistant Museum Curators since 2009. Mr. Kruezer received the AWA Curator Award in 2011 and was named an RCA Fellow in 2016.

The two continue to develop and enhance AWA's museum displays and assist in adding more artifacts, including retrieval, cataloguing, and preservation of RCA's historic archives from June Poppele in 2017. Together, they have created an RCA historical display at the AWA museum, and they will continue to work to preserve and share the incredible history of RCA, the world's oldest wireless society.



Congratulations to 2022 RCA Award Winners!

2022 HONORS & AWARDS

RCA SPECIAL RECOGNITION AWARD

Evan P. Rolek — For dedicated service to the Radio Club of America.



Mr. Rolek, K9SQG, is a long-time Amateur Radio operator and member of the American Radio Relay League. This award is presented to an individual who has worked tirelessly to support the Radio Club of America. For decades, Mr. Rolek has supported the RCA Youth Activities Program. His support provides

resources for the various Youth Activity programs, and consequently to the future of wireless – our young people.

Mr. Rolek is a Human Factors Engineer at InfoSciTex in Dayton, Ohio. He designs and evaluates user interfaces and system effectiveness for military weapon systems, commercial systems, and software applications. He uses operator-in-the-loop real-time simulations and field test

data for developing human operator models. He assesses human operator effectiveness from operational, training, and field exercise contexts. He develops experimental designs, effectiveness and workload metrics, and test plans for laboratory and operational tests.

Mr. Rolek published previously in the *Proceedings of the IEEE*, *Human Factors*, *Proceedings of the Human Factors and Ergonomics Society*, and the *U.S. Naval War College Review* regarding a range of topics in experimental design, cockpit technology (IMPACT) for air-to-ground fighter integration, control-display, SAM system performance, CRT performance, Soviet radio electronic combat, and other topics. He co-authored several studies for the Flight Dynamics Directorate of Wright Laboratory of the U.S. Air Force at Wright Patterson AFB in conjunction with Veda, Inc., Armstrong Aerospace Medical Research Laboratory, and Systems Research Laboratories, Inc.

RCA EMERGING PROFESSIONAL AWARD

Divyam Mishra — For service and dedication to the Radio Club of America.



Divyam Mishra was drawn into electronics and technology from a young age ever since he became involved with his local amateur radio club. He was given opportunities from a young age to present at the Radio Club of America's Dayton Hamvention Youth Forum in 2014 and at the RCA Tech Symposium in 2015.

He received RCA's Young Achiever of the Year Award in 2014. With a background in Artificial intelligence (AI), hardware and software technologies, and signal processing,

he believes in fusing together the latest technologies to solve complex problems.

Mr. Mishra has a proven track record and participated in research at premier institutes, including Georgia Tech Research Institute (GTRI), NASA Jet Propulsion Lab (JPL), and Qualcomm AI. Those activities made him eager to apply his experience and knowledge in different domains.

Mr. Mishra graduated with a Bachelor of Science in Electrical and Computer Engineering and a minor in Computer Science from Georgia Tech in spring of 2021. He is currently an Artificial Intelligence engineer in the machine learning group for neural network hardware acceleration at Qualcomm.

COLLEGIATE ACHIEVEMENT AWARD

Audrey McElroy — For professional accomplishments and continuing involvement with Radio Club of America.



Audrey McElroy is a first-year Computer Engineering student at the Georgia Institute of Technology. She is also involved in amateur radio. She earned her Extra Class callsign, KM4BUN, when she was 15. She has combined her STEM Biotech, Physics, and advanced Calculus knowledge with Amateur Radio

to develop many experiments; such as decoding the ISS SSTV transmission using her own automated satellite ground tracking station as well as developing high altitude balloon experiments that have reached the edge of space, and

one that orbited the globe 4.5 times, all while maintaining periodic telemetry. She is in demand as an SME on High Altitude balloons by numerous organizations. At the request of the Southeastern VHF Society, she published a white paper detailing her experimentation with buoyancy and high-altitude balloons that transmit telemetry via WSPR and APRS utilizing the HF bands. Audrey is the first recipient of the RCA Young Achievers scholarship and has had the opportunity to present her experimentation at several conferences such as the American Institute of Aeronautics and Aerospace (aiaa.org/) as well as several Amateur Radio virtual podcast events to a global audience. She has also received a scholarship from the Amateur Radio Relay League provided by Amateur Radio Digital Communications.

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CONGRATULATIONS

Patti Ryg

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2022 FELLOW CLASS



Lynn J. Bisha, W2BSN

Lynn Bisha's parents were both involved in Amateur Radio. He grew up with a station in the kitchen in West Carthage, New York. He was originally licensed in 1962 and earned Extra Class in 2003.

Lynn acquired his father's call sign, W2BSN, in September 2003 under the FCC vanity call program.

Mr. Bisha served in the U.S. Navy as an Aviation Electronics Technician (ATN) in an A-6A Intruder squadron (VA-35) from NAS Oceana VA. 1965 - 1969. He served two 7-month cruises in the Tonkin Gulf aboard the USS Enterprise and was honorably discharged in 1969. He spent the next 36 years in the IBM system 360/370 mainframe world as a field engineer at four different companies.

In 1981, Mr. Bisha donated several items to the Antique Wireless Association from his father's estate. AWA's founder, Bruce Kelley, knew Lynn's parents through Amateur Radio. Mr. Bisha eventually returned to ham radio as his children grew older, and he refurbished three separate operating stations from the 1950s, 1970s, and late 1980s.

In 2004, he toured the AWA museum and discovered that others also knew his parents. After retiring in 2005, Lynn began volunteering at AWA. One of his first assignments involved creating an early RCA receiver display, that coincidentally included his parent's donated RCA - RA and DA units. Mr. Bisha joined AWA's Board of Directors in 2009 and became the Assistant Curator the following year, eventually becoming Curator in 2017. His work includes cataloguing, restoration, exhibit preparation, docent tours, research, and other curatorial responsibilities. He has made significant contributions to AWA and to Amateur Radio.

Mr. Bisha is a member of: Antique Wireless Association (Life Member, Board of Directors), Rochester Amateur Radio Association (RARA), Rochester DX Association (Life Member, Board of Directors), Amateur Radio Relay League (ARRL), and the Radio Club of America. He has received the following Amateur Radio awards: WAS, WAZ, 7BDXCC, ARRL 2014 Centennial WAS with all endorsements, ARRL Centennial Challenge Top Level, Royal Order of the Wouff Hong, 239 DX entities confirmed.



Professor Jim Breakall, WA3FET

Professor Jim Breakall, WA3FET, received B.S. and M.S. degrees in Electrical Engineering from Penn State University and a Ph.D. in Electrical Engineering and Applied Physics from Case Western Reserve University,

Cleveland, Ohio. He has over 45 years of experience in numerical electromagnetics and antennas. He was a Project Engineer at the Lawrence Livermore National Laboratory (LLNL-Livermore, CA), and an Associate Professor at the Naval Postgraduate School (NPGS-Monterey, CA). He is currently a Full Professor of Electrical Engineering at Penn State.

Dr. Breakall began his career as a graduate student at the Arecibo Observatory in Puerto Rico, working on antenna analysis and radar probing of the ionosphere. At LLNL, he and his group worked on the development of the Numerical Electromagnetics Code (NEC), the first sophisticated antenna modeling program. Other significant projects that he has worked on were the designs of the HAARP facility in Alaska, both HF facilities at Arecibo, and the Kinstar low profile AM broadcast antenna. Dr. Breakall (electrical) and Tim Duffy (mechanical) designed the very popular Ham Radio Skyhawk Yagi antenna, and Dr. Breakall is the inventor of the Optimized Wideband Antenna (OWA).

Dr. Breakall is also a member of the IEEE Antennas and Propagation Society, IEEE Broadcast Technology Society, Eta Kappa Nu, International Union of Radio Science Commission B, IEEE Wave Propagation and Standards Committee. He has been an Associate Editor for the *Radio Science* journal and served as an Arecibo Observatory Users and Scientific Advising Committee Member. He has been a frequent speaker at the Dayton Hamvention Antenna Forum and has built two major contest superstations, K3CR and KC3R, near Penn State, and WP3R, on his farm in Puerto Rico near the big Arecibo dish.

He has graduated numerous graduate students and received many awards over the years. In 2017, Dr. Breakall was awarded the prestigious Sarnoff Citation from the Radio Club of America. He was elected as a Director to the RCA Board in 2018 and 2020 and served as the Co-Chairman of the 2020 and Chairman of the 2021 and 2022 RCA Technical Symposiums. He also serves on the RCA Scholarship Committee and Education Committee.



2022 FELLOW CLASS



Jason Kern

Jason Kern began his career in public safety in 1991 and is currently serving as the Executive Director of Southeast Emergency Communications (SEECOM) in Crystal Lake, Illinois.

During nearly three decades as a tenured public safety professional, he has extensive experience in Law Enforcement, Fire/EMS, Emergency Management, and most notably 9-1-1 Communications. His notable certifications include APCO CPE, APCO RPL, NENA ENP and COM-L.

Mr. Kern became an APCO member in 1997 and has been extremely active in both chapter and national activities. As a member of the Illinois Chapter, he held numerous board positions over a 13-year tenure including two terms as Chapter President and nearly six years on the Executive Council. He also spent time as the chair of the IL Emergency Medical Dispatch Committee, a member of the IL Historical Committee and currently sits as a long-term member of the Legislative Committee. Over the last several years, the Legislative Committee has been successful in obtaining two surcharge increases, a NG9-1-1 and consolidation cost recovery bill, and currently is working towards introducing training standards language. In 2011, Illinois APCO awarded him with the Chapter Senior and Chapter Life distinctions.

Mr. Kern has served in numerous capacities with APCO International, including a number of committees over the past 14 years, including Historical, Member & Chapter Services, Professional Development Events, Leadership Development, Finance & Budget, and Investment. He also served APCO from 2013 thru 2016 as a Group Leader and from 2016 to 2019 as a representative to the Board of Directors in the North Central Region. Mr. Kern was presented with Senior Membership in APCO in 2018. In 2019, he was elected as the 2nd Vice President for APCO International, and he continues to serve on the APCO Executive Committee, serving as the President of APCO International for the 2021-2022 term.

Southeast Emergency Communications is a regional consolidated Emergency Communications Center located approximately 50 miles northwest of Chicago in McHenry County. They provide police, fire and medical services to over a dozen agencies in the area covering more than 100 square miles with a residential population of nearly 215,000. SEECOM is a partner with NCMEC's Missing Kids and 9-1-1 Readiness Project, an IAED Medical ACE Center and a two-time recipient of APCO's Agency Training Program Certification (P33).

Mr. Kern is married to Miki-Kay and has a son Joseph. Away from the office Jason is an avid motorcycle rider, sports fan, and travels extensively with the family.



Neil Horden, Fellows Respondent

Neil Horden has over 40 years of experience in wireless communications, starting with his career as Chief Engineer for WMPH-FM and WXDR-FM in high school and college. He has been involved in many aspects of the wireless

industry, working across many technologies and markets from the deployment of traditional Land Mobile Radio (LMR) system to product management and technology strategy in the hand-held terminal and cellular market.

As Principal Consultant for Horden Technologies, Mr. Horden supports the Public Safety and wireless communications markets with technical and strategic assistance. In his previously position as Chief Consultant for a nationwide consulting firm, Mr. Horden has led efforts in the design and analysis of communications systems including: statewide, regional, and local networks for the public safety, education, healthcare, utility and transportation markets. Previous roles with Motorola include systems engineering, technical sales, product management, and marketing support for their Land Mobile Produces (LMPS), Integrated Digital (iDEN), Cellular, and Telematics groups.

He is a member of the Radio Club of America, National Emergency Number Association (NENA), Association of Public Safety Communication Officials (APCO) serving on their Commercial Advisory Council, Next Generation 9-1-1 Institute, and was previously the Program Manager of the Project 25 Technology Interest Group (PTIG). Additionally, he is a Member of the Editorial Advisory Board for *Mission Critical Communications Magazine*. He holds a Bachelor of Electrical Engineering from the University of Delaware, and an MBA from the University of California, and was previously an EMT and Cardiac Rescue Technician in the State of Delaware.



2022 FELLOW CLASS



Pete Varounis, NL7XM

Pete Varounis, NL7XM, has been a licensed Amateur over 40 years and is a Life Member of the Radio Club of America, American Radio Relay League, Antique Wireless Association, a Board Director of the Quarter Century

Wireless Association for ten years, and a member of the A1-Operators Club. He is the past Country Manager for the U.K. Six Metre Group, and he is a member of numerous other organizations in Amateur Radio.

Mr. Varounis became an Honorary Life Member of the Delaware-Lehigh Amateur Radio Club after his successful efforts recruiting and helping to reorganize the organization,

serving as Treasurer, Program Chair, Charitable Giving and Donations Officer, Newsletter Circulation Manager and Life Committee Chair.

Mr. Varounis is a retired law enforcement superior officer. He is a Champion Pistol Competitor, winning 18 Gold Medals in the New York State Police Olympics.

As a U.S. Amateur Callsign Historian, he was awarded the prestigious AWA Houck Award for Preservation and consulted for the TV comedy "Last Man Standing" by designing custom callsigns.

Mr. Varounis has assembled a vast, 113+ year-old library collection of rare Callbooks, stretching 26 linear feet that he makes available for research to independent historians, universities and organizations.



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The Radio Club of America is a volunteer organization and maintains its vital link to the industry and programs through the work of many individuals. We welcome the participation of all RCA members. Please review the committees shown below and decide where your talents and interests may help serve RCA's members. Please contact us to lend a hand.

We always have fun and engage in projects throughout the year. Whether you are interested in working with young people, promoting the latest technology, preserving wireless history, fundraising, event planning, or publications and web site content, there are ample opportunities for you to participate. Join us today!

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