ABOUT THE AUTHORS
(In order of first appearance)

KIRK T. McDONALD is a professor of physics at Princeton University, where his research centers on experimental elementary particle physics. Since particle accelerators are essentially boxes with antennas on their walls that radiate inwards, McDonald has long been fascinated with unusual aspects of electromagnetic waves.


Kirk McDonald

As an exotic example, he was the leader of a project that demonstrated how gamma rays could interact with a laser beam to produce antimatter. Many of his other articles on electromagnetism can be viewed at his website: http://puhep1.princeton.edu/~mcdonald/examples/

Gary Nixon, WA6HZT Gary Nixon's professional work in broadcasting began in 1970, and has included engineering, programming, and on-air work in California and Texas, program syndication in several states, and commercial radio production nationally. He holds an Associate of Science degree in Computer Science, and transitioned from broadcasting and broadcast engineering to the information system and computer programming industry several years ago. He holds an Extra Class Amateur Radio License, General Radiotelephone Operators License with Radar Endorsement, and a Second Class Radiotelegraph License wit Ship Radar Endorsement.

Claudio Re, I1RFQ is a graduate of Polytecnic of Turin in 1980 with specialization in "Telecommunications and Hyperfrequencies". He is an owner of *Sistel SRL* and *Sinfotel SRL*, two small telecommunications, companies in Italy. He is also a consultant and the Network Director of the World Family of *Radio Maria*, a Catholic Broadcasting Network that broadcasts now in 27 different countries of the globe. He has experimented with all kinds of equipment from 136 KHz to the optical frequencies (one-way communications at 22km) Claudio was born in 1956, built his first crystal set receiver at age 6 and at 16, obtained his license with the callsign 1IRFQ.

L. B. Cebik, W4RNL, has written extensively about antennas and antenna modeling (as well as other electronics subjects) in most of the U.S. ham journals, including *QST, CQ, Communications Quarterly, QEX, Ham Radio, 73, QRP Quarterly, Radio-Electronics, and QRPp*. Besides the continuing series of antenna modeling columns he does for ***antenneX***, he also writes a column for *10-10 News* (An-Ten-Ten-nas) and another for *Low Down* (Antennas From the Ground Up). A life member of *ARRL*, he serves as both Technical and Educational Advisor. Several years, LB joined the position as Technical Editor for ***antenneX***.

L. B. has published over a dozen books, with works on antennas for both the beginner and the advanced student. Among his books are a basic tutorial in the use of NEC antenna modeling software and compilations of his many shorter pieces. 13 of his books have been published by ***antenneX*** and listed in the BookShelf at our website.

He has been a ham since 1954 and is also a life member of *QCWA* and of *10-10 International*, for which he maintains an extensive web site. He also maintains a web site of his own (**http://www.cebik.com**) on which he has placed a large collection of entries from his notebooks. A teacher for over 30 years, he is retired and professor emeritus of philosophy at the *University of Tennessee*, Knoxville. ***a****ntenneX* is very fortunate, indeed, to have LB as a member of its writing team and Tech Editor.

Dan Handelsman, N2DT was first licensed as WA2BCG in 1957at age 13. He became interested in antennas at that time when he had to figure out a way to operate from the 6th floor of his apartment house. This resulted in a mobile whip being stuck out from a window without a counterpoise. At that point he became an "expert" in TVI. He was licensed as N2DT in 1977 and is a DX'er and contester. He is now playing with experimental antennas and low power.

Dan Handelsman - N2DT

Professionally, he is a Pediatric Endocrinologist and holds M.D. and J.D. degrees and is Clinical Professor of Pediatrics at the New York Medical College. As far as his antenna work he is an "amateur" in the truest sense of the word (Dan's words!).

Anselmo Stiffan, IZ3BGJ, ex HB9ICK graduated in Electrical Engineering in 1960, and worked for 3 years in the Olivetti research labs for the development of high-speed computer core memories. He spent 6 years at STMicroelectronics and 24 years in Motorola Semiconductors dealing successively with all kind of semiconductors from diodes to microprocessors and custom designs as International Product Marketing Manager.

Anselmo Stiffan, IZ3BGJ

He received his first radio license in 1962 as I1STA but, due to intense traveling across the world and family duties, was radio inactive for 30 years until he took an early retirement.

Getting back to the radio world with the call IZ3BGJ, Anselmo has dedicated his time to investigations into the antenna field, which was previously totally unknown to him.

The early retirement was also motivated by other great hobbies like trekking, climbing, and paragliding, all of which had been neglected during his long assignments in France, Switzerland, and USA. Anselmo is now back to his beloved Italy near his mountains and land of his ancestors.

Werner Hödlmayr, DL6NDJ


Werner Hödlmayr

Werner was born 1942 and started to build crystal radios and ship models at the age of ten. He obtained his Ham license, DL6NDJ which came quite late in life in 1980. He received a degree of electrical engineering in 1965, but never built power stations or large electric motors. Instead, Werner's attention was focused in a different direction, on the early developing field of Medical engineering and scientific instruments like spectrophotometers and gas chromatographs. This activity was to become his professional career specialty. Werner is an active member of the GARDS, an International antenna R&D group.

Other hobbies besides experimenting with antennas are, oil painting (3 years school of art), Lyrics, languages (speak five fluently) and building Stirling engine models. He has been retired since the year 2002 and pleased to be allowed to now apply all of his time to these wonderful things!

Jay Lemmons, N6YIP has an extensive technical, development, and manufacturing background covering almost forty years. His fields of activity include radar and air traffic control, high power antenna systems, audio routing products, bulk tape erasers, two-way radio systems and various digital products, including networking and computers. He has also designed, built, and maintained professional audio recording facilities, as well as serving as Chief Engineer of numerous AM and FM stations. His work has also spanned the telephony and wireless industry where he was responsible for millions of phone numbers, thousands of transmitters, dozens of paging switches and the staff maintaining them. Jay is currently Director of Systems Product Engineering for a national telecommunications firm, responsible for critical wireless message delivery and integration to medical and business facilities throughout the country.

Valentín Trainotti was born January 19, 1935 in Trento, Italy. He is an Electronic Engineer (National Technological University, Buenos Aires Argentina, 1963) and holds Post graduate courses on Antenna Measurements, Geometrical Theory of Diffractions and Radar Signature at: *California State University*, Northridge, CA (1981) and *Ohio State University*, Columbus OH (1985). Held technical positions of employment at *LR6 Mitre Broadcasting Station* from 1954 through 1963. CITEFA, Antenna & Propagation Division Chief Engineer since November 1963. He is a current member of the URSI (Scientific Radio Union) Commission B Argentina Representative and IEEE (Institute of Electrical and Electronic Engineers) as Senior Member and Eminent Latin America Engineer (1993)

Ben Smith, W4KSY has been a radio amateur for over sixty years and has worked in Electronics for sixty-five years. He has worked on everything from crystal sets to sophisticated airborne early warning radar systems and data communications systems. Has been a Field Engineer, Supervisor of several hundred Engineers and have marketed communications and radar equipment for a six billion dollar corporation (sold the first RCA contract to NASA). Ben has also been a consultant to the U. S. Navy for data communications. Ben says he is still learning every day about antennas!

RICHARD MORROW, K5CNF has an Associate Degree In Electronic Engineering, attended many classes and seminars conducted by Motorola, RCA, General Electric, Furuno. Has been a licensed radio amateur since September 1955 and holds an Advanced Class. Held license as a 2nd Class Commercial Radio Telephone operator w/ shipboard Radar endorsement since 1957, upgraded to 1st Class radiotelephone operator in 1960. Has been a broadcast engineer for AM, FM and TV. Was a electronics instructor for United Electronic Institute in Dallas, Texas, Over 100 published articles in 73 Amateur Radio, Radioscan, and of course, *antenneX* where he has been an associate since its creation in 1988.

Spent three years as a radio operator (1962-1965) in the US Army, assigned to Headquarters Company, 1st Battalion, 23rd Infantry, 2nd Inf. Div., Ft. Benning, Georgia. Worked in two-way radio industry as field technician for years. Previous jobs include Texas Instruments, Collins, Dresser Atlas, S.W. Bell Telephone, and several broadcast stations as chief engineer.

Has three patents issued on electronic devices and is an eternal experimenter. Built many transmitters, amplifiers, and numerous other ham devices as needed. Work DX when it shows up. Best DX, Pitcarin Island on 10 meters with the HTX-100 and a converted Cushcraft 1/2 wave CB vertical propped up against the garage. Other DX includes ZL on 75 meter SSB with 60 watts, Senegal on 75 meters SSB, 60 watts again, antenna was a dipole at 35 ft. Current activity is on 160 meters sometimes, 40 meters, two meters and 440 MHz. Favorite antennas are: Phased arrays, magnetic antennas, directional arrays, and anything that radiates well.

Current rigs are TS-430S, TS-700 multi-mode, Kenwood two FM meter rig, Icom 440 ht. Radio Shack HTX-100, Radio Shack 440 ht, 2 Atlas 210x, Johnson 275 watt Matchbox, Johnson Thunderbolt, several older SGC SSB marine rigs, three Heathkits.

Interests include; antennas, astronomy, music, both radio and optical, reading, photography, motorcycles, archeology, cars, Cosmology, Science in general, Nature, animals and aviation.

John S. (Jack) Belrose, PhD Cantab, VE2CV, now retired was previously a Senior Radioscientist, Radio Sciences Branch of the Communications Research Centre, located in Ottawa, Ontario, Canada. As you may remember, Jack has been one of the leading skeptics of the CFA technology. In fact, Jack was in attendance at an important CFA presentation and afterwards, took the co-inventors aside and told Dr. Kabbary and Mr. Hately that they would probably realize more radiation from the grounding wires, or from the feeder coax if the antenna was fed without a balun, than from the CFA by itself. Blunt and to the point!

Jack can certainly be considered an antenna "heavyweight" and weighs in an opinion on the EH in a Chapter based on his own article, "On the EH Antenna." As many know already, the promoters claim the EH is based on the CFA technology.

Any time I hear about a new concept, I always enjoy running it by Jack because he has a way of cutting right through any existing "smoke" and is not in the least bashful in expressing his evaluation. I say I "enjoy" his evaluations, because it makes for a very healthy balance. On the one side is the inventor who is bubbling over with excitement and perhaps too excited to see any flaws. On the other side is Jack who has seen a lifetime of antenna concepts and it's getting harder to find anything he hasn't already seen. Yes, I consider Jack's advice as a very valuable asset even though he may make "smoke rise from the inventor's collar." The inventors should be aware that not everyone would think their "baby" is as pretty as they do—so, it doesn't pay to be thin skinned when presenting the world with new concepts. The presenter should expect to be challenged about any "new" idea. If it works and it can be proved, then there is nothing to worry about. — *Editor*

Dave Cuthbert, WX7G

· **1979-1988 Hughes Aircraft ~** Designed a wide variety of test equipment for high-power microwave tubes including high voltage and RF designs.

· **1988-1995 Tektronix ~** Worked on microwave hybrids, PLL design, and in-house test equipment design for the 2784 Spectrum Analyzer. Sustaining engineering and switching power supply design for several oscilloscope lines. Designed a 0.025 lambda monopole for a commercial control device.

· **1995-1997 Advanced Energy ~** Sustaining engineering for multi-kilowatt plasma power supplies.

· **1997- present Micron Technology ~** A Micron Fellow since 2001, Analog and EMC engineering to support IC manufacturing.

· Five FCC licenses including a commercial radiotelegraph license.

· Certified NARTE (National Association of Radio and Telecom-munications Engineers) Electromagnetic Compatibility Engineer.

As part of my amateur radioactivities, I have built small antennas since 1972. Active member of the GARDS, an International Group of compact antenna researchers.

Scott Harwood, K4VWK, has been interested in radio since childhood. In the seventh grade he built a two-tube regenerative receiver using #30 tubes as a science project. He obtained his first amateur license in 1958 and has had the same call for over 40 years, and now is an Amateur Extra class.

After college and a tour in the USAF, Scott returned to Virginia, where he now resides. He has experimented with and developed antennas for the past 30 years. He and his wife, Susan, travel extensively, and his main area of interest has been small portable antennas for 160 and 80 meters. He has given talks at local radio clubs on antennas, and has written previously for CQ Magazine.