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MARCO's "AETHER" Pronounced "Ether"
Healthcare & Radio in One Medium
The Medical Amateur Radio Council

125th
Edition
2000-2020



A non-profit Corporation, founded in 1966, privately supported for the public good and dedicated to the advancement of Medicine through Amateur Radio.

Visit our [Public Facebook page—HealthCareHams](#)
Join Our [Private Facebook group—MarcoMedical](#)
Follow us on [Twitter—@HamsCare](#)
MARCO callsign [WB5D](#), see us on [QRZ](#)

Web Site—<http://www.marco-ltd.org>
Email—secretary@marco-ltd.org
Listserv—marco-ltd@googlegroups.com

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Membership Appreciation 20/20

We appreciate our MARCO members, a vibrant organization of amateur radio operators who work in, or have an interest in health related professions. How do our members serve amateur radio, MARCO, and how does MARCO serve you?

MARCO Membership

Amateur radio is morphing into a high-tech hobby, being attractive to prospective hams for varying interests that integrate with traditional aspects of being a ham focused on the art of radio, with a slant to the science and new technologies available to hams.

Much of our membership have been dedicated to MARCO for years. We welcome those new to our beloved organization and are cognizant of the spectrum of interest. You are the future of MARCO!

Time constraints often occur as life can get in the way of hobby. Many options for involvement are available to our members, a self-selection modality to participate.

In this edition of the *Aether* we explore the many options our members have for engagement with MARCO and supply the resources for you to choose to consider. MARCO serves you!

Look for MARCO in the November 2020 edition of *QST* Article—*Mini DXpeditions on a Cruise with MARCO*

Forensic Pathology

Many of our members have incorporated Medical Forensics into their career path, whether it be medical, dental, or neuropsychology, and more. Being a Medical Examiner or Medical-Legal witnesses has often been the result of their expertise. In this issue of the *Aether* we introduce you to this discipline and to some of our members who have been engaged in this professional endeavor.

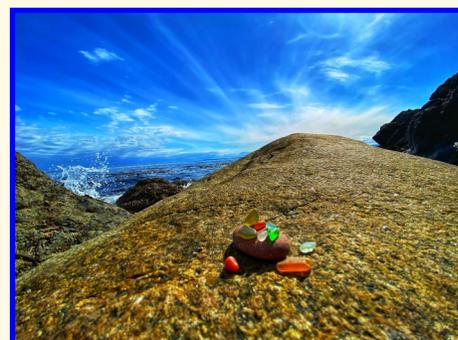
MARCO member Thomas Resk, M.D., Reno, NV—KJ7TKR
Retired Medical Examiner Butte County, CA

As a forensic pathologist with over 40 years of experience, I have found the field of forensic science to be challenging due to the diversity of forensic disciplines, intellectually stimulating and professionally satisfying.

While a forensic pathologist can often play many roles in their career, the principal role is that of serving as "physician to the dead." In this capacity, a forensic pathologist is tasked with independently determining the Cause of Death based on their medical education, training and experience.

Performing autopsy examination of a dead body is often a necessary part of establishing Cause of Death along with thorough death investigation including medical record review when available.

Continued on page two



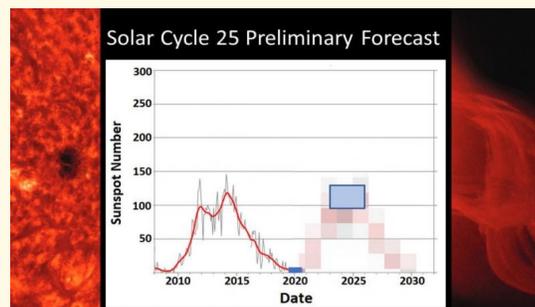
Our seasoned MARCO members offer much in wisdom, well rounded like sea glass after years of experience. Younger members are brilliant, rays of sunshine, bringing new ideas and the dawn of new days in amateur radio. Thank you to all that make MARCO a special home for professional camaraderie through our beloved hobby.

This photo was taken on one of the islands in the Salish Sea, WA by our new call district 7 director, Dr. William House, WA7WFH. [Click to view additional photos](#). Read more about Will and other new MARCO board members on page 6.

Can the Life Cycle and Solar Cycle be in Sync?

Hams often have challenges getting these two areas in sync, with the life cycle often taking priority. Family, career, antenna restrictions, and many more reasons often place personal ham radio activity into hibernation. Perhaps Solar Cycle 25 will be an opportunity for you as the sun awakes. MARCO is omnipresent to keep you connected with amateur radio in a time considerate manner, tying your hobby to your professional and/or personal interests. Keeping you informed and engaged is our priority!

From [NOAA's Space Weather Prediction Center](#)



WRITE TO US!

We welcome your comments.

Email to

aether@marco-ltd.org

Letters and articles may be edited for brevity & clarity.

Unedited member article submissions made available through links, and linked online material are not the opinions of MARCO. Graphics selected are the choice of the editor and not of MARCO-ltd.

MARCO NET SCHEDULE

DAY	TIME	FREQ.	NET CONTROLS
Any Day	On the Hour	14.342	Hailing Frequency
Sunday	10:30 a.m. Eastern	14.140	CW Net, Chip, N5RTF
Sunday	11 a.m. Eastern	14.342	Warren, KD4GUA
Wednesday *	8:30 p.m. Eastern	7.222	Harry WB9EDP

MARCO'S CW NET IS NOW CALLED THE "Bob Morgan Memorial Net"
Sundays, 14:30 UTC, 14.140 MHz

Page 2

MARCO Grand Rounds is held Sunday at 11 a.m. Eastern Time; 10 a.m. Central; 9 a.m. Mountain, and 8 a.m. Pacific Coast time on 14.342. You qualify for one hour Category II CME credit with your check-in. * The Wednesday net is a member led discussion net held during the COVID-19 crisis. *

Forensic Pathology continued from page one—Dr. Thomas Resk, MD

The forensic pathologist is an integral member of an assemblage of other forensic experts in varied disciplines to determine the Cause of Death, the Manner of Death, the identity of the decedent, the date and time of death and the circumstances of death.

All of the forensic science disciplines apply their specific scientific knowledge to serve both the decedent's family as well as address legal issues. The forensic expert often testifies in court to the facts of any particular case. A forensic expert witness can be anyone with particular knowledge deemed by the court as being an expert in that field. The quintessential example of a forensic expert witness is, without a doubt, Mona Lisa Vito (Marisa Tomei) testifying as an automotive witness for the Defense in the 1992 film, "My Cousin Vinny," a segment which is not to be missed.

Forensics—Professional Organizations of Interest

- National Association of Medical Examiners - [thename.org](#)
- American Academy of Forensic Sciences - [aafs.org](#)
- American Board of Medicolegal Death Investigators - [abmdi.org](#)
- American Board of Forensic Toxicology - [abft.org/](#)
- Society of Forensic Toxicologists - [soft-tox.org/](#)
- American Society of Forensic Odontology - [asfo.org/](#)

[Abstracts on Forensics from the NIH, National Library of Medicine](#)



[Additional Online References \(public domain\) for inquisitive minds...](#)

[What is a Medical Examiner?](#)

[The History of the National Association of Medical Examiners](#)

[What is Forensic Anthropology?](#)

[Recent Advances in Forensic Anthropology](#)

[The History of Forensic Anthropology](#)

[Forensic Entomology: The Use of Insects in Death Investigations](#)

[Forensic Botany for Locating Human Remains](#)

[What is Forensic Odontology?](#)



ValuJet Disaster—Dental Forensics in Action

MARCO member Larry Grayhills, M.S., D.M.D.—K1UAT

Retired Associate Medical Examiner Palm Beach County, FL

[For a full unedited version of this article click here](#)

[For Dr. Grayhill's biography click here](#)



As the Assoc. Medical Examiner, Forensic Odontologist, for Palm Beach County, FL, I was asked to present a disaster scenario program on May 10th, 1996 for the Miami Dade County Disaster Team. The scenario of the simulation was set in a Washington, DC suburb, the site of a passenger airliner crash. Approximately 120 "souls" were aboard a commercial airliner that crashed into a city park and surrounding buildings. Few intact bodies were recovered at the scene, but thousands of pieces of fragmented, postmortem human remains were. Visual identification of the deceased was impossible thus of particular interest was the dental evidence recovered at the scene.

Dentists on the simulation's postmortem team cataloged the recovered teeth. The Ante- and postmortem findings were then entered into the Army's CAPMI (Computer Assisted Post Mortem Identification) program, facilitating a rapid comparison that would have been impossible otherwise. After a successful exercise we departed not knowing how timely and parallel our endeavors had been as preparation for a real disaster...

On May 11th, the day after our drill, while driving home from this simulation exercise, I received a phone call from the director of the Miami Disaster Team. He informed me, "We need you back...we have a jetliner down in the Everglades." TV was showing aerial footage of a swampy scene off the Sawgrass Expressway in Dade County where ValuJet Flight 592 augged into the shallow swamp of the Everglades. The fuselage of the aircraft underwent extensive fragmentation as did the bodies of 110 passengers.

I had not yet returned the vital computers rented for the mock-disaster, with the ID program still loaded, and headed back to the Office of the Dade County Medical Examiner where the ID team set up their HQ, sharing a room with volunteer funeral directors. Our antemortem team began contacting the 110 families (passengers and crew) in order to ascertain the name of the last known dentist.

Hundreds of antemortem records started arriving, were cataloged by the team, and entered into the CAPMI data base. Meanwhile, recovery teams in full hip gaiters slogged through the murky, alligator infested swamp in an arm-to-arm search, recovering body parts in hand-held nets. They were assisted by local air-boat clubs who stood guard with loaded shotguns to fend off gators. The recovered body parts were transferred to the morgue for cataloging.

Dental data was analyzed by our postmortem team and entered into the CAPMI program for comparison with antemortem records. Of the 110 souls aboard ValuJet 592, only 12 were identified by dental records. Such a comparison of dental remains would not have been possible without the assistance of the computer program. The smallest bit of identified postmortem evidence placed in a casket was one tooth.

In our communities and study clubs we prepare for disasters. Whether they are terrorist attacks, airline disasters, condominium fires or hurricanes, it's not a matter of whether these events will happen, but when. In a disaster situation the main priority is to tend to the living. However, the postmortem identification of remains is essential to bring closure to grieving families, estate transfers and insurance claims. When this event occurred, the use of DNA technology for identification was expensive and lengthy. While much of that has changed, the use of dental data in the identification of unknown remains as characteristic as a fingerprint.

Neuropathology and Legal Consideration of Clinical Forensics with the Living

Robert L. Conder, Jr, Psy.D., FACPN, ABPP-CN & RP
Fellow, National Academy of Neuropsychology
Fellow, Sports Neuropsychology Society
President Elect, Medical Amateur Radio Council

Many think of Forensics in the post-mortem/CSI context, but there are ample examples of clinical forensic activities with living persons. Such as...

A. Criminal forensics—Capital Murder cases. There are multiple issues here in which the trier of fact (judge and jury) finds a neuropsychologist an asset. In capital murder cases, I am involved with competency issues such as: competency to waive Miranda; competency to stand trial; and status at offense (what was he “thinking” when he pulled the trigger?). The latter is many times useful during the Sentencing phase when the death penalty is being debated by the jury. I’ve also evaluated defendants on Death Row in Virginia and North Carolina prior to execution. Sometimes, we look at gunshot pattern data to attempt to ascertain mental status at offense.

B. Civil issues

1. Establishment of “damages” in brain injury cases involved in motor vehicle crashes, assault, workers compensation. While I am not involved in the liability, neuropsychologists are many times involved in damages evaluation with brain injury. This also includes evaluation of malingering. Rather than assessing malingering which involves assessment of a litigants’ mental intention, which is impossible to ascertain, we have special quantitative measures that assess whether a good faith effort during the assessment was given.

2. Testamentary Capacity—Given that our population is aging and many aging people have significant assets, their mental state at the time of making a will or estate can be in question, especially if the beneficiary is unhappy with their inheritance. Sometimes this is a post hoc analysis if the testator is deceased. Other times, we evaluate the testator in the office with specific technical instruments to ascertain their ability to make reasoned decisions about the disposition of their assets. A secondary but important issue is Undue Influence—This also is becoming more common in understanding testamentary capacity and decision making for wills & estates. Undue influence essentially means that someone is influencing the testator to make a decision they would not make on their own, independently. This does not necessarily have to be negative in the sense of threat or coercion, but can be a positive relationship such as someone being overly positive. The only glitzy part here is that sometimes sexual favors are involved. That’s the stuff you hear about on TV but usually is not the case.

In summary, these are forensic issues with living persons in which neuropsychologists are involved on a professional basis. Please note a



neuropsychologist is a very different subspecialty than a traditional clinical psychologist, as we focus on brain behavior relationships, neuroscience and examining the information processing and decision making abilities of the human brain. It’s like the difference between an internist and a neurologist. ([click for article and video](#))

Considerations for Becoming an Expert Witness

Malin Dollinger, M.D.—KO6MD—Rancho Palos Verdes, CA

A derivative ancillary occupation, that I spent 25 years on, was being a medical expert (cancer) witness. It began by accident, when I was deposed as a treating doctor (a “percipient” witness) to give the court information about my patient’s asbestos-caused cancer.

A deposition is a legal process under oath wherein the opposing attorney asks you a series of questions to obtain sworn testimony that can be used at trial, or more commonly to promote settlement. The deposing attorney liked the way I testified, and asked me if I would like to be an expert witness on all their asbestos cases. Why not! So over 25 years I assisted in about 300 asbestos-related cancer cases, all on behalf of the plaintiff (the party that was allegedly harmed and filed the lawsuit).

Continued in next column

Expert Witness continued—Dollinger

This is an example of a “toxic tort” legal case, wherein some exposure, chemical or radiation in the case of cancers, is alleged to be responsible. I did about 30 other toxic tort cases, related to chemicals or radiation causing various kinds of cancer.

To function as an expert witness, you need to “literally” be an expert. That means in your particular field of expertise, you must be practicing in that field, have written articles in your field, have certifications and memberships in the relevant professional societies, have an academic appointment, and have the requisite legal and practical knowledge to “know the ropes” as an expert witness.

I attended three separate expert witness schools, given by law firms and experienced expert witnesses. The basic legal principles are identical, no matter the field, and I have 20 different books on being an expert witness. You rapidly gain practical knowledge after your first several cases.

I am in practice as a medical oncologist, trained at Yale and Memorial Sloan-Kettering, am a Clinical Professor of Medicine at USC, wrote 120 medical articles and a cancer book for the public, with 16 different editions around the world, which sold over a quarter million copies (not counting the Chinese edition). I am certified by seven different medical boards. Thus, I discovered I was in great demand by attorneys.



For a view of more material including case descriptions, [see Malin’s unedited complete article by clicking here.](#)

Digital VHF/UHF Ham Radio Communication

A Net Opportunity for MARCO?

MARCO member Hilton Libanori M.D., Ph.D., PY2BBQ reports “*there is a weekly round in DMR (TG 724942), D-Star (XRF 724 D) and C4FM (YSF BRAZIL 724), on the air every Tuesday 9:00 PM Brazilian time (Wednesday 0:00 Z). Many technical subjects are discussed during the round that takes more than an hour and have the participation of more than 100 hams from Brazil and abroad, in Portuguese*”. Read his and N5GG’s unedited article about digital modes [by clicking here.](#)

AA4FL’s outlook - Our HF nets are cherished and a core activity of MARCO. We had a trial of an additional net for using interfacing of traditional FM VHF/UHF ham radio equipment with a smartphone/tablet option using Echolink. MARCO Member [John Creel, WB3GXW](#), has made his Echolink conference server *WASH_DC* (node 6154) available to MARCO. This offer is still available if we chose to permanently implement a net.

World-wide connections of offering ham radio based digital voice modes (DV encodes speech into a data stream before transmitting) networked through local repeaters is ham radio enhanced by the internet. This afford possibilities for potential additional MARCO nets for our members anywhere in the world simultaneously without the impact of HF propagation.

One of the features/capabilities of all of the digital voice modes (C4FM/Fusion, D-Star, DMR) is the possibility of internet linking to expand communication range beyond normal local repeaters.

Pros and Cons - Equipment Investment. Learning curve. The availability of repeaters using each protocol being active at the QTH where you normally operate. User groups that you are interested in may use one mode and not another. Hotspots, equipment that serves as a gateway for your digital signal through your router when there are no local repeaters available, but, these are more costs in equipment and learning complexities due to many proprietary modes. Which would MARCO as a group select?

MEMBER DISCUSSION: [Please write to be added to a distribution group to for discussing MARCO having additional nets using digital radio technology—\[nets@marco-ltd.org\]\(mailto:nets@marco-ltd.org\)](#)

Online Reference Material: Voice over Internet Protocol (VOIP) [What is it?](#) [Did a ham facilitate it use?](#) [VOIP FCC Implications?](#) [What is Echolink?](#) [What is DMR or Digital Mobile Radio?](#) [What is D-Star?](#) [What is System Fusion CF4M?](#) [What is P25?](#)



Our last hypertext issue of the *Aether* was [June's 2020 edition](#). [Click here](#) to read the COVID discussion we were having at the time about COVID-19. Fast-forward four months and we know more about the disease and treating it, but likely still know less than we think we know. With vaccines and therapeutics being developed and awaiting approval the situation is dynamic. MARCO keeps the dialogue about the subject on-going through our nets and google group. We looking forward to your participation...

COVID-19 from an International Perspective

Coronavirus in Brazil—as of September 15, 2020

MARCO member Dr. Hilton Libanori M.D. Ph.D., PY2BBQ

For the full unedited article [click here](#)

For Dr. Libanori's Biographical info [click here](#)

Brazilian territory is larger than the contiguous USA territory, corresponding to half of the South American total area and population, (210 million). The economy has the 8th Gross Domestic Product in the world, mostly based on agrobusiness, but also mining and high-tech industry.

Brazil is divided in 27 States and most of its population live in cities (84.72%). Our health system is hybrid, coexisting the public and private systems. The public system SUS (Health System) is present in the whole Country and is having an especially important role in this COVID-19 crisis.

The first known COVID-19 cases occurred early March with cases diagnosed specially in Sao Paulo, Rio de Janeiro, North East States like Pernambuco and Ceara and in the Amazon. In some regions there was a fast growth of new cases and a great difficulty in containing the spread of the disease. In the Amazon, cities are extremely distant from each other and many times the only way of transportation is by boat through the rivers. Distance there is frequently measured by days of journey. Hospitals with intensive care units are concentrated in the big cities like Manaus and Belem. Unfortunately, the appropriate medical care was not available for many people. The result was a fast-rising curve and many deaths in the whole Amazon area. In the Amazonas State the mortality reached 94.1 deaths per 100,000 inhabitants.

Other parts of Brazil dealt much better with the epidemics. The Sao Paulo State, the richest and most populous of the Country, have quickly declared quarantine, created thousands of new intensive care beds in the existing hospitals, and built several temporary hospitals. The mortality rate in Sao Paulo is 71.1 deaths per 100,000 inhabitants. With Brazil being a large and populous Country, each region had its own dynamics that are still in flux. What we have learned was the importance of a universalized health system for providing medical care for the entire population. [See more in the unedited article by clicking here.](#)

[World Health Organization \(WHO\)](#)
[COVID-19 World Dashboard](#)

Status of Covid-19 in Japan (Sept. 22, 2020)

[Click here](#) for an article as written by MARCO member Etsuo Takada, M.D., Ph.D., SJSUM, JA0BXP

Factors to consider in Japan's rate of Infection?
Open the article and view the links to references.

New Member Profiles

Insight into MARCO's Future...

Dustin Zack—W1ZAC, Dustin began working as an EMT in his hometown of Greenwich, CT after graduating high school in 2008, and continued to work there throughout nursing school. His parents were police officers and several other family members were firefighters in the same town. He would listen to them on a handheld scanner which is how he initially became interested in radio. Scanning various bands one day he came across a few QSOs in progress on the 70 cm amateur band and discovered amateur radio.

For more on how [Dustin syncs his life cycle with the solar cycle see his QRZ page](#)

Like most new graduates in nursing, he began my first job as a RN in 2014 on a general medical/surgical hospital floor. He learned a lot from that experience but wanted to work in emergency medicine. Transferring to the ER Dpt. as soon as he was eligible, he quickly found that previous experience in EMS proved to be very helpful in establishing a solid foundation upon which he could apply his advanced nursing skills in this area within this very challenging environment. Effectively caring for multiple patients of varied demographics with a very broad range of acute medical illness and traumatic injuries was an equally challenging exercise in critical thinking, prioritization, and time management.

Always being fascinated by cardiology Dustin moved into a position in at a hospital in that field in 2019, currently caring for patients before and after undergoing various cardiac procedures, including cardiac catheterization, RF ablation/cryoablation, ICD/pacemaker implantation, cardioversion, etc. He still maintains his emergency nursing board certification and continues work as an EMT to remain current in the specialty.

During the COVID-19 pandemic, the majority of our staff were reassigned to our drive-thru COVID testing tent in the parking lot across the street and our unit was repurposed as an overflow unit for COVID-negative medical/surgical patients requiring admission for unrelated problems. Thankfully, our hospital returned to relatively normal operation within a few weeks, and we are probably busier now that we ever were before!

Chad Wagoner—KE0RUZ, Chad has been a Family Physician in Southwest Missouri since 2006 after completing his commitment to the USAF. In addition to his clinic, he is also the medical director of a local nursing home and works in the informatics department as a Physician Builder for his health system's EMR. His wife is a high school math teacher. They have two children, Connor who is starting Junior High and Eryn, KE0WEY, a Freshman attending Missouri Southern State University Univ.

Chad is relatively new to amateur radio although he was first introduced to the hobby by an uncle as a teenager. He decided to get his ticket to expand his capability to aid in disasters. In 2011, local hams were instrumental in assisting with the Joplin tornado. Being a physician and a radio operator helps to further expand what he can offer should disaster strike.

His main radio interest is HF SSB, but given the band conditions, he also works FT8. Chad enjoys contacting special event stations and will occasionally try his hand at a contest or two. Plans are to try to learn CW as a way to expand his horizons He also enjoys working the ISS SSTV events with his kids. Aside from radio he is also a Freemason, active in both the Scottish Rite and York Rite, and an amateur astronomer / astrophotographer.

Visit [Chad's QRZ page](#)

MARCO Serves You!

Special COVID-19 Information Net

COVID-19 INFORMATION NET

Led by MARCO Members

7.222 MHz
0300 UTC
Thursdays



Live stream audio and archives

A medical information net on COVID-19—following NIMS protocols—will be held at 0030 UTC Thursdays on 7.222 MHz, hosted by Biomedical Physicist and Infectious Disease Specialist, Professor Harry J. Przekop (WB9EDP), assisted by Dr. Jerry Ziperstein (N4TSC).

This special net has a worldwide listenership and will be live-streamed at www.MARCOAudio.net and archived on the website for anytime access. You do not have to be a medical professional to participate.

Weekly Net Category II CME—on the HF Bands

Medical Topic Discussions of Interest to all

Our Radio-Internet Coordinator Chip Keister, M.D., N5RTF, New Orleans, LA... [livestreams our net online](#). Check into our nets and earn CME. For times when propagation is poor when you would benefit from audio from another receiver, if you are away from your radio, in a skip zone, or unplugged due to thunderstorms, join the MARCO CW net and Grand Rounds by live [internet streaming audio](#). These are recorded to [listen in later to the online archive](#).

To Listen:

1. Use a browser to go to the following web page which has a player app and **links to the audio stream and archive:** www.marcoaudio.net.
2. The second way is to manually enter <http://marcoaudio.ddns.net:8011/stream> into a standard music player on computer, phone, or portable device **while the net is in progress**.

Feel free to share these links with anyone, MARCO member or not. No login or password is required. There is room for 100 listeners at a time. Comments are appreciated.

Chip N5RTF

Weekly MARCO Medical Grand Rounds Net

The Medical Amateur Radio Council Organization (MARCO) conducts weekly Grand Rounds on Sundays at 1500 UTC (summer months) and 1600 UTC (winter months) on 14.342 MHz. Physicians from many specialties, including naval flight surgeons, biomedical physicists, infectious disease specialists, trauma surgeons, dentists, and many others discuss informative, and timely medical topics. The Net has worldwide listenership and contributes to dissemination of medical and public health awareness. MARCO live streams the Grand Rounds net audio on their website at www.MARCOAudio.net.

MARCO Grand Rounds Net

Led by MARCO Members

14.342 MHz
1500 UTC
Sundays

Live stream audio and archives

Founded in 1966, MARCO's mission is to promote goodwill and fellowship among amateur radio operators who are professionals in the healing arts or who have an interest in medicine, dentistry, and allied fields. MARCO is open to all licensed amateur radio operators who are healthcare professionals or affiliated with the medical industry. MARCO participants may receive one hour of Category 2 CME credit per Grand Round presentation.

On-air network operation is an integral part of MARCO activities and is conducted for the purpose of discussing and exchanging medical and technical information and, whenever possible, to be a public service by passing emergency and priority traffic. All General class or higher (and their international equivalents) licensed amateurs are welcome to check in.

Fight against COVID-19: An Indian Scenario

MARCO member Capt. Sirsendu Ghosh (VU3WTJ), B.D.S., PGDAST (Statistics), Dental Officer, Command Military Dental Centre (CC) [click for his CV](#), <https://www.vu3wtj.com/>

For the full unedited article [click here](#)

The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. India currently has the largest number of confirmed cases in Asia, and has the second highest number of confirmed cases in the world after the United States, with the number of total confirmed cases breaching the 100,000 mark on 19 May and 1,000,000 confirmed cases on 17 July 2020. On 29 August 2020, India recorded the global highest single-day spike in COVID-19 cases with 78,761 cases, surpassing the previous record of 77,368 cases recorded in the US on 17 July 2020. India currently holds the single day record for largest increase in cases, set on September 17th, with an additional 97,894.

The [full unedited article](#) contains information and research about treatment in India including:

- Genome sequencing of COVID-19
- Development of anti-COVID-19 drugs
- Development of anti-COVID-19 vaccines
- Production of PPE

[WHO COVID-19 stats for India](#)

[Economic Times India COVID info](#)

How does Sirsendu sync his life cycle with the solar cycle?
See his [QRZ page](#)

MARCO Serves Amateur Radio!

ARRL Foundation MARCO Scholarship

The ARRL Foundation Officers and Board have announced the 2020 recipient of the MARCO Scholarship in the amount of \$500.00. Lydia Anderson, KE8HPZ of Morrow, OH was selected from an outstanding group of applicants. MARCO also offers a scholarship through FAR, the Foundation for Amateur Radio.



Lydia is a Junior at the University of Notre Dame, studying pre-med and Arabic—a major which in her words, “allows me to prepare for a future in medicine while also learning a new and beautiful form of communication (much like ham radio)”. She is involved in the school's first aid organization providing care to the community during large campus events and football games. The ARRL announcement can be viewed [here](#). Congratulations Lydia!

Lydia reported on September 15th that COVID-19 “has definitely made this semester unique to say the least. Social distancing regulations frame campus life; everyone on university grounds is required to wear masks at all times other than while eating and drinking, many facilities are closed or have limited capacity, and courses fluctuate between holding in-person and online classes. I think flexibility is key for everyone in our Notre Dame family right now. As a whole, we are grateful to be able to be on campus and are hopeful that we will be able to finish the semester safely!”

Profiles in MARCO—our two newest Call District Directors bring new ideas to the Board of Directors

William House, M.D.—WA7WTH—Friday Harbor, WA

MARCO Regional Director for Call District 7

William was born in Louisiana and spent nearly two decades in the software engineering field in Boulder, Colorado. He came to medicine as a second career, but with a lifelong passion for service. Higher education was the University of Colorado at Boulder for undergrad degrees in Psychology and Neuroscience before attending the [Tulane University School of Medicine](#) earning an M.D. and Master's in Pharmacology. Dr. House finished a family medicine residency in New York, primarily in the Hudson Valley at a rural health training site with the Institute for Family Health.

The House family currently resides in Friday Harbor, Washington on San Juan Island where he owns and runs [Eventide Health](#). Eventide is a private practice serving the tiny villages of Friday Harbor and Roche Harbor, and neighboring islands in the Salish Sea. We have a pediatrician, two PAs and about a dozen other staff. My emphasis is on chronic disease reversal delivering healthcare through a unique educational setting. I think the missing component in modern healthcare is not educating patients with regard to their health issues. I spend a great amount of effort and time trying to reverse this trend. Doctor comes from the Latin *docere* which as you know means "to teach." If we are not teaching our patients we're missing huge and valuable opportunity that leads to shockingly better outcomes.

This vibrant 49 year old is married to his high school sweetheart and celebrated 29 years of marriage this year. Wife Sherrie is a high school math teacher. They have two daughters - Jackie (19) and Savannah (11). We all enjoy our time with quiet island life boating, hiking, eating as much seafood as possible, sea glass hunting, birding and whale spotting. We've lived in New Orleans, Boulder, Camden (Maine), Hudson Valley and have now settled permanently in Friday Harbor within the Pacific Northwest, our favorite place on the planet.

Amateur radio is a family endeavor. William came to the HAM community via my father-in-law ([Jim Ragsdale - W5LA](#)) who has been a serious hobbyist for many decades. Jim convinced my wife Sherrie (WA7SDH) to get her general HAM license in 1998. Subsequently, my oldest daughter Jackie (WA7JGH) got her tech license in 2017. Finally, submitting to SFHPPS (Severe Family HAM Peer Pressure Syndrome) I got my tech license in 2019. Living on a mountainous island with National Parks makes for easy Islands on the Air, Mountains on the Air and Parks on the Air (even simultaneously). The House family has always been adventurous and we see HAM as another avenue to that and love the ability to connect.

One of my ways to decompress from medical practice is spending time around the islands with my iPhone 11 Pro Max in hand for a camera. Please [click to enjoy](#) a few of my captures from around the Salish Sea.



"Carl" Carlyle Rowland, R.N.—N0ARN—Pueblo West, CO

MARCO Regional Director for Call District 0

Carl is a regular on *The Grand Rounds on the Air* weekly net. With a fairly central US location he often relays messages to Warren.

Long before becoming a Registered Nurse Carl became an amateur in 1965 as an incentive in higher education. While studying engineering there was an opportunity too good to pass up as the instructor offered an "A" in the class if you got your amateur license. While engineering was not the career he chose to pursue he obtained a hobby for life.

Carl was well seasoned and prepared for nursing, having life experience that included years in business, time in a banking, owning a construction company, and a successful real estate business. He went back to school and became a Registered Nurse after a major trauma in life, losing his first wife to Leukemia in 1984.

Two years later Carl married his current wife Nancy, N0RNA. She is a Registered nurse so they are a good team. During the last ten years of their careers they were traveling nurses, spending most of their time in the southwest, Texas, New Mexico, Arizona, California. They did spend a couple years in Hawaii and had one stint in Raleigh NC. It was a wonderful career he wishes he would have had done so earlier.

Catch Carl before the net on Sundays and say hello. For Nancy you will need to wait for their adventures in the high country where amateur radio comes in handy. When cell service is not possible Amateur frequencies are amazing!

MARCO Director at large profile

Dr. Jerry Ziperstein, N4TSC

Jerry has been a MARCO Director at Large since 2019. He also serves MARCO and amateur radio assisting Past-President, Harry J. Przekop, WB9EDP, with running the Wednesday night 40m COVID-19 informational net. Listeners from the ham radio and shortwave listening communities have expressed appreciation for their contributions toward this venue of public health awareness.

Jerry got his novice license in my teens and his private pilot's license in his early 20's. He currently resides in Boca Raton, FL

- 1963 BA major, biology, Adelphi College, NY
- 1964 MS Radiation Health Physics—U. of Miami, FL
- 1973 MD U. de Montpellier, France
- Followed by externship and Internship in medicine at Long Island College Hospital, Brooklyn, NY
- Then followed by residencies in Orthopedics and Ophthalmology
- A surgical fellowship at U. of Witwatersrand, Johannesburg, South Africa
- And full time practice as an Eye Surgeon in South Florida



GREETINGS FROM YOUR PRESIDENT

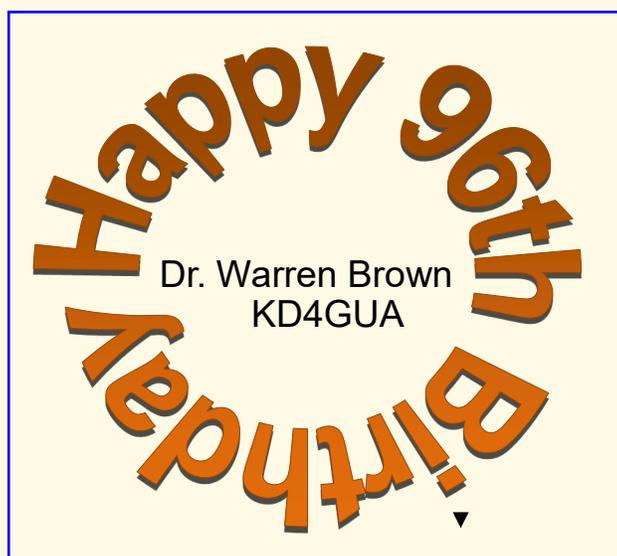
October 2020

As I write this, we in the northeastern United States are experiencing late summer weather—warm days, cool nights and plenty of thunderstorms. By the publication date of the October *Aether*, we should be looking at a blaze of fall colors. It is time to make those station improvements before the winter season—I hope that by the time you read this there will be a new antenna at KM2L. If any of you are making station improvements, please share the news.

MARCO's Board met via Zoom in August. We had over twenty participants, including members in Brazil, India and Japan. The main event was the review and approval of our updated bylaws. With one additional tweak to come at our next meeting in January, we are reorganized, better-structured and more efficient. Heartfelt thanks to all who participated in this effort!

MARCO mania is growing! We have several new and enthusiastic members. Also, Jay AA4FL, Bob K4RLC, Alanna K4AAC, David KN2M and Diane N2HIW are hard at work planning an ambitious Caribbean DXpedition for the spring of 2022. There will be sun, surf, seafood and radio. Looks great! Further, space scientists report that we have passed through the solar minimum and cycle 25 sunspots should start to appear with regularity. So, even the sun is on the upswing. Now, if we can only kick that pesky coronavirus to the curb...

73, *Bruce*, KM2L



MARCO OFFICERS, 2020-2021

Mailing addresses for the are on QRZ.com.
E-mail is preferred, phone contact info is provided for the President and Secretary only.

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KM2L@arrl.net

P: 716.713.5597

President-Elect: Bob Conder, Psy.D., K4RLC

Bconder@yahoo.com

Secretary: Jay Garlitz, D.M.D., AA4FL

jay_aa4fl@gmail.com

C: 352.246.6003

Treasurer: Charles Lind, M.D., N8CL

charles.lind@gmail.com

Web Master: Dave Lieberman, KT8E

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n5rtf@tkeister.net

MediShare Director: Arnold Kalan, M.D., WB6OJB

[wb6ojb@yahoo.com](mailto:w6ojb@yahoo.com)

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Arnold Kalan, M.D., WB6OJB, [wb6ojb@yahoo.com](mailto:w6ojb@yahoo.com)

Chip Keister, M.D., N5RTF, n5rtf@tkeister.net

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Jerry Ziperstein, M.D., N4TSC, n4tsc@arrl.net

We have been honored with a three page spread in November's issue of *QST* (pages 57-59), and the cover's photo. The article covers one of our two 2019 member DXpedition trips, our annual MARCO business meeting in Tampa Florida followed by an eight day Western Caribbean cruise. For more trip photos for the article featured in *QST* [click here](#). Also view the QRZ pages for V31D, HQ9D and ZF2D. [To join or renew your membership in the ARRL click here](#)

The second 2019 trip was in October to St. Lucia, for a vacation style operation in tandem with a weekend J68MD CQWW SSB entry that resulted in our coming in 2nd in North America and 7th place in the world for our entry category. Operators were Dave J68MD (KN2M), Diane N2HIW, Bruce KM2L, Bob K4RLC, and Jay AA4FL. We stayed at the J68HZ's Villa Grand Piton and balanced radio time with our spouses for vacation time exploring this beautiful island.



To be added to a discussion list regarding this DXpedition contact us—DXcation@marco-ltd.org



Another vacation style DxCation trip designed for members, spouses, family and friends of MARCO is being planned for May-June 2022. Details follow below and on DxCation.com.

We are in the preliminary stages of planning. One flight to Dutch Sint Maarten coupled with a drive to the French Saint Martin side of the island and ferry rides to Anguilla and St. Bartholomew makes for a very attractive trip. Participate in the trip segments that interest you, three different opportunities for you to participate.

- May 24-31, 2022 Dutch and French St. Martin, including an entry in the CQ WPX CW contest
- May 31-June 6, 2022 St. Bartholomew
- June 6-13, 2022 Anguilla, includes an entry in the ARRL VHF contest focusing on 6m

The group will keep you posted as plans progress. if this sounds like a trip you would want to participate in! Visit DxCation.com for the latest info.



MediShare International News Arnold Kalan, WB6OJB, Director

Take this opportunity to send a donation in recognition of a member's exemplary service to MARCO or in memory of a member's loss, and assist MARCO's way of helping the less fortunate worldwide. In August-September 2020 we received donations to Project MediShare from Arnold WB6OJB / Joan Kalan and Jay AA4FL / Randi Garlitz, in honor of Warren Brown KD4GUA's 96th birthday, and one to MARCO from Bob K4RLC / Alanna K4AAC Conder.



For more details about MARCO's Project MediShare and the types of projects it [supports click here](#).



To Paul Lukas, N6DMV, for making a \$1,000 donation to Project MediShare this September. We appreciate his very generous donation!

Donations from members and friends help us to fulfill our mission. Let us know if you would like to be involved with supporting and fostering our work by joining our committee.

MediShare@marco-ltd.org



<https://marco-ltd.org/category/medishare/>

MARCO is a 501 (3)(c) organization and Medishare International is a project of MARCO. [Click here to donate online](#) made mail checks out to MARCO and place in memo portion the purpose of the donation. Send your donation to MARCO c/o Secretary Jay Garlitz, 6308 Kings Gate Circle, Delray Beach, FL 33484

Adventures in being a DXpedition Team Physician

MARCO Member Arnold Shatz, MD, FACS—N6HC

It is my pleasure to offer you some insight into being a DXpedition doctor. I have had the honor and privilege to serve my fellow DXpeditioners in this capacity so that their safety and wellbeing has been assured. I have been on 14 major DXpeditions around the world over the past 15 years:

[K7C-Kure atoll \(2005\)](#)

[3B7C- St. Brandon Island \(2007\)](#)

[TX5C- Clipperton Island \(2008\)—Video Part Two](#)

[K4M-Midway Island \(2009\)](#)

[T31A- Kanton atoll, Central Kiribati \(2011\)](#)

[T32C- Christmas Island, Eastern Kiribati \(2011\)](#)

[NH8S-Swains Island \(2012\)](#)

[T33A-Banaba \(2013\) *see editor's note below](#)

[FT5ZM-Amsterdam Island \(2014\)](#)

[TX3X-Chesterfield Island \(2015\)](#)

[the ill-fated 3Y0Z-Bouvet Island \(2018\)](#)

[KH1/KH7Z- Baker Island \(2018\)](#)

[VP6D-Ducie Island \(2018\)](#)

[VP6R-Pitcairn Island \(2019\)](#)

The teams have been comprised of 12 to 20 members with ages ranging from the late 30s to over 80 years of age. The average age of a DXpeditioner in my experience has been around 65.

The operator rosters have included people from every continent of the world (excluding Antarctica). All members were required to fill out a vetting form with their medical history, current medications, allergies (drug and food), prior surgeries and demographic information. Medical issues admitted to ran the gamut from none to the mundane (hypertension, NIDDM, elevated cholesterol, obesity, etc. to the serious including cancer).



I emphasized the fact that all their medical information was confidential. They were required to purchase evacuation insurance and asked to purchase medical insurance to cover the trip dates. On rare occasion, I recommended that an individual withdraw from the team due to their medical status... [For the full article click here](#)

* Editor's Note—I had the excellent experience of being invited on a DXpedition (T33A) by Arnie through MARCO, in part to be a radio team member, but also to provide dental surgery for the locals while there. The photo above was taken at the island we staged from, Tarawa (T30), at Tungaru Central Hospital. I have seen firsthand how these valuable MARCO members not only protect the health and welfare of the team members, but also be an active part of the team of radio operators. Hope this creates an interest for you in becoming a DXpedition doc and/or a team member, it's a life changing experience—Jay AA4FL

[Video of T33A Banaba Island Primary School Outreach 2013](#)

[Video of T33A Dental Surgery Outreach 2013](#)

[Video of 2013 T33A Dxpediton--Banaba, Republic of Kiribati](#)

Editor's Note—One of the most fascinating videos about why hams enjoy working DX (stations around the world) and going on DXpeditions to put remote locations on the air for other hams to speak to is by a physician, Dr. Ralph Fedor, MD - KOIR. The video is publicly available for viewing on YouTube -

[DXing and DXpeditions](#)

For a profile of Dr. Fedor [click here](#)

Join and support **The International DX Association, Inc.**, a non-profit organization for the enhancement of amateur radio, worldwide peace, and friendship. www.indexa.org

Both Dr. Fedor and Dr. McGirr have the honor of being inductees of the [CQ Magazine's DX Hall of Fame!](#)

MARCO Member Michael McGirr, M.D.—K9AJ

Mike enjoys traveling and being the DX chased by participating in major DXpeditions but also in individual and small group trips! He also relishes activating IOTA's, (Islands on the Air), and contesting.

Mike was a team MD as a member of

[1988 K9AJ/KH5 Kingman Reef](#)

[1993 AH1A Howland Island](#)

[1997 VK0R Heard Island](#)

[2002 VP6DI Ducie Island](#)

[2007 BS7H Scarborough Reef](#)

[2009 PW6C PY IOTA \(SA-062\) operation](#)

[2010 T32C/MI/SI/VI first time IOTA activations](#)

[2016 VP8STV/SGI South Sandwich and South Georgia](#)

Other activations: (IOTA): J3J (NA-147), H79W/YN4 (NA-228), K6VVA/6 (NA-178), CE8A (SA-094), VP6AJ (OC-056), V63J (OC-012, 132, 180, 277), K9AJ/VY0 (NA-007, 156, 175, 185, 195, 225, 227, 229), K7Y Khantaak Island in KL7 (new IOTA NA-250 in 2019)



Mike (K9AJ) and wife Susan (K9XYL) also joined MARCO for the 2019 cruise mini-DXpeditions that featured in the November 2019 issue of QST. Photos below are from MARCO's ZF2D operation Mike on 20m CW, Susan on SSB.



MARCO Members Serving Amateur Radio

Making Important Contributions

Click on the Hypertext and images to learn more about the exciting ways MARCO members are making contributions to Ham Radio and Society

R. Scott Wright, M.D.—K0MD

Medical Researcher and Radio Contester

Professor of Medicine, Mayo Clinic, Rochester, MN
Cardiovascular Medicine

[Medical Biography](#)
[Medical Publications](#)
[COVID-19 research/trials](#)

Amateur Radio

- [ARRL Contest Advisory Committee](#) - Dakota Division
- [K0MD QRZ Page detail](#)
- Editor of the [National Contest Journal](#) (2018-20)
- Contest entries from China, Chile, Uruguay, Turks and Caicos

Ham Radio Media Appearances



[COVID-19 Discussion HamNation Episode #448 - April 8, 2020](#)



COVID-19: The Doctors
Are In The House! - Ham
Nation 451

Ham Nation
YouTube - Apr 30, 2020

[COVID-19: The Doctors are in the House! - April 30, 2020](#)

Our last MARCO BOD Meeting was held at 1500 UTC Saturday August 15, 2020 via Zoom. The **minutes for the meeting are members only content**. The password will be available on our google group listserv. If you are not registered, email secretary@marco-ltd.org to be added

Content can be viewed by [clicking here...](#)

Richard Allnutt, M.D.—WS8G



[Chairman of HamVention 2021](#)

[Assistant General Chairman HamVention 2019-20](#)

[Rick's QRZ page](#)

How many MARCO member knew [HamVention](#) is led by an MD? The management skills needed in medicine and developed as a flight Surgeon in the USAF are invaluable in planning and implementing a large and complicated meeting and Rick is up to the challenge. This is a family effort with wife [Diane, NS8Z](#), serving as an integral committee chair.

[HamVention](#) is the preeminent Ham radio meeting in the USA. If you have not been to this mecca of amateur radio join us on a pilgrimage in May of 2021. Of course, in the age of COVID-19 plans might change, keep posted.

The meeting location is Xenia OH right near Dayton, and it's many sights for the family to visit. Allow extra time and don't miss visiting the [National Museum of the US Air Force](#) located at Wright Patterson Air Force Base, The [Wright Brothers National Museum](#), and [Carillon Historical Park](#).

Join MARCO at HamVention 2021. We have reserved a block of rooms for starting on May 20 with a May 23 departure. The highlight of the visit will be HamVention itself and the many social activities we have planned. We will have a business meeting at the hotel Friday morning, evening dinners and a banquet Saturday night,

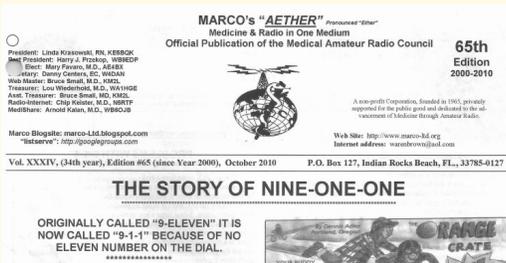


For reservations contact the Wingate by Wyndham, phone 937-912-9350. Their address is 3055 Presidential Dr., Fairborn, OH 45324 MARCO Block rate is \$129 per night.

MEMORIES OF YEARS AGO IN MARCO

Our History Book

Ten years ago in MARCO—October 2010



- The lead article recounted the interesting history of the nationwide emergency calling number (9-1-1). Warren also included a short piece explaining the differences between delirium and dementia, and a column discussing MRSA, a clinical problem then as now. Another article described E-cigarettes, a newly-introduced product intended to assist smokers in quitting.
- MARCO President Linda Krasowski KE5BQK told us of her recent trip to Washington, DC to attend the American Guild of Organists convention, and to conduct some sightseeing. She was thrilled to visit our nation's capital for the first time.
- Numerous short items discussed RF exposure, the definition of "habeas corpus," the number of medical schools in the United States and health-care rationing.
- Another fascinating installment of Warren's long-running series describing the career of ham radio operator and German spy Erich Gimpel appeared in this issue.

Twenty Five years ago in MARCO—October 1995



- This issue reported the death of MARCO founding member Dick Shoupe, W8QP. Dr. Shoupe, of Findlay, Ohio, suffered a heart attack. Sister Ethelbert WB8GWE, another long-time member and active net participant during the 1970's also passed away.
- MARCO provided an on-air medical resource team for the expedition to Easter Island and Salas y Gomez, led by Bob Schneider KK6EK of Peter I and Heard Island fame Bob "Smitty".
- Smithwick, then-W6JZU, maintained frequent contact with the remote scientific and amateur radio team, while other Warren KD4GUA served as support team Medical Coordinator.
- Several MARCO members made their expertise available to the team.
- Newsletter Editor Ed Briner, WA3TVG attempted to generate enthusiasm for a West Coast 75 meter MARCO net.
- In 1995 MARCO conducted a full schedule of nets, meeting on 75 meters on Monday, Wednesday and Friday evenings, on 40m on Tuesday and Friday evenings, conducting Grand Rounds on Sunday morning and holding a DX net on Sunday afternoons.

The Secretary's Keyboard Korner

secretary@marco-ltd.org



This issue of the *Aether* is being released electronically. It is paramount that members have their email address on file for when the *Aether* is presented in electronic format, by link in an email. **It is equally important for you to be on our listserve/google group so you may receive information such as passwords for Member only content, such as BOD minutes as noted on page 10.**

- ⇒ The next edition of *the Aether* in Dec, 2020 will be in print and produced by long-term editor Warren Brown. My next online edition will be in February 2021.
- ⇒ **Online editions of the *Aether* can be printed by the reader for use at home but all the linked information available through clicks within the online document would not be available.**
- ⇒ To provide feedback on this issue of the *Aether* contact us at aether@marco-ltd.org
- ⇒ Our next Zoom BOD meeting will be held in January 2021 on a date to be determined.
- ⇒ In the [June 2020 Aether](#) I wrote an article about working FT8 on 6m. My Sporadic E provided excitement peaked this summer as I logged 5 Japanese stations on this band with 100w, as well as contacts with Crimea, Greenland, and many more. You may want to revisit that article on page 10 of the June's edition to see how the digital modes can offer you ways to work DX on 6 through 160m with modest radios in the antenna challenged communities that we live during times when the life cycle is not in sync with the solar cycle.
- ⇒ Read about our MARCO HamVention 2021 meeting on page 10
- ⇒ We will have a presence at [HamCation](#) Feb. 12-14, 2021. The [ARRL 2021 National Convention](#) will be held at HamCation.

MARCO Member Communication

There are many ways that MARCO's BOD and members keep in touch and stay informed:

- Our on-the-air nets as listed within this edition of the *Aether*.
- Through printed and electronic versions of the *Aether* Newsletter
- Radio QSO's
- Our Google Group Listserv
- Through emails
- [Mailchimp](#) email campaigns
- Contact addresses@marco-ltd.org as seen within this edition
- Zoom sessions of the board of directors that are open to members
- Annual live business Meetings with social events'
- Hamfest presence
- Committee projects

Do not miss out - make sure to contact the secretary with changes of mailing and email address. To join our google group or update addresses send an email to secretary@marco-ltd.org

MARCO Membership News
August—September 2020

New Members

K0MD—Scott Wright, Rochester, MN
 K4AAC—Alanna Conder, Raleigh, NC
 AA2VG—Peter Delucca, Huntington, NY
 WW6AA—Merrill Knopf, Long Beach, CA
 KJ7TKR—Tom Resk, Reno, NV
 KE0RUZ—Chad Wagener, Carthage, MO
 KE8HPZ—Lydia Anderson, Notre Dame, IN
 W1ZAC—Dustin Zack, Fairfield, CT
 W5AGX—Samuel Stratton, Atascadero, CA
 K2CBI—Michael Weissman, Mt. Kisco, NY
 WB3GXW—John Creel, Silver Spring, MD

**SEND A HAM FRIEND A
 MEMBERSHIP IN MARCO, \$15,
 ONE WHO IS INTERESTED IN BOTH MEDICINE & RADIO.**

Renewals

WS8G—Richard Allnutt, Beaver Creek, OH

Silent Keys

W0RPH—Thomas E. Brewer, Pueblo, CO

MEDICAL AMATEUR RADIO COUNCIL, LTD.
[New Membership Application & Renewals](#)

Join online at
<https://marco-ltd.org/join-marco-amateur-radio/>

or by mail form

REGULAR MEMBERSHIP \$25: A licensed professional in the health care field who holds an amateur radio license. A DX Membership is \$25 in U.S. currency.

ASSOCIATE MEMBERSHIP \$15: Anyone licensed or unlicensed who is interested in medicine and radio.

10 year Regular membership fee \$200 (a saving of \$50).

Name: _____

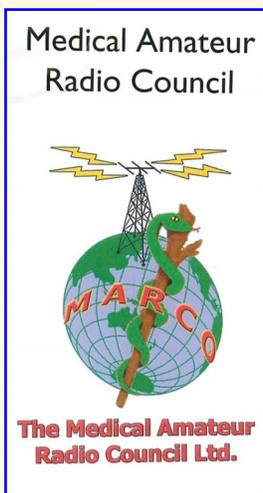
Address: _____

Call Sign: _____ Type License: _____

Phone: _____ email: _____

Birthday _____ (Year optional.) Member ARRL: Y / N

**Applications for membership should be sent to
 Secretary Jay Garlitz
 6308 Kings Gate Circle
 Delray Beach, FL 33484, USA**



125th edition
 (2000-2020)
 October 2020



If you are interested in contesting and would like to join other MARCO members in a multiple operator entry let us know - email us at contesting@marco-ltd.org. A group is forming to activate WB5D in contests at varying locations stateside post pandemic.