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

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

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## Diagnosis: Past, Present and Future

As covered in recent editions of the *Aether*, [Medical](#) and [Dental](#) Technology are changing rapidly with advances in science. The impact on the art of diagnosis are evident to patients and to those of us still in clinical practice. In this edition we explore the change in focus, the reasons why, and potential future trends.

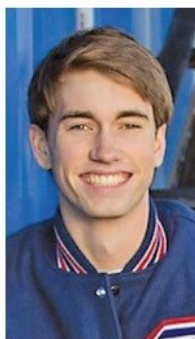
Our discussion in print is intended to be a dialogue. We encourage members to use our Google Group to foster an interactive perspective on the changes you are observing, aspects of diagnosis common in the past, those were foundational but seem to be but forgotten or under appreciated. Our google group is an effective venue for professional discussion, an area for members only exchange. The airwaves are in the public domain. Our "Grand Round on the Air" net takes place on 20m, is live streamed, and recorded for streaming on demand. The *Aether* is published online and older editions are being digitized. Peruse the secretary's column on page 11 for his view on our venues of communication and the potential to make our net archives and publications accessible to all amateurs as a public service.

Page 5 includes an article that was also covered in a recent *Grand Rounds on the Air* net, electrosurgery, its past, present use, and the potential use in the future. Articles such as these are a glimpse into our professional experiences and of interest to our members and the public. Please [submit articles](#) with content in the text of an email or with a MS word attachment about your experiences with materials and procedures from the past that are now a lost art or one supplanted by the technology of today, to [aether@marco-ltd.org](mailto:aether@marco-ltd.org)

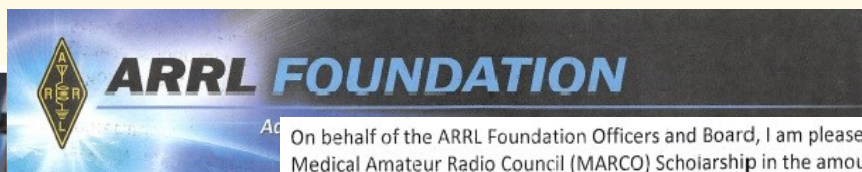
In the June 2023 edition of the *Aether* included an article on the Human Genome project. We continue the discussion on page 4 in our "Rambling Around with Warren Brown" column, with a look back to August 2013, when the *Aether* included an article written by a physician who was presented with direct-to-consumer genetic testing results and how genetic medicine was starting to impact the doctor-patient relationship during the annual/physical exam.

The annual/physical exam is discussed as being vital to maintaining health through establishing a dialogue with our patients about prevention and addressing subtle signs and symptoms through diagnosis at an early stage of disease. [Communication](#) and trust can be amplified through an interaction with the patient that exudes professionalism through [verbal skills and non-verbal strategies](#). Those under examination and very observant, you might want to consider this a de-facto job interview for remaining their provider. Your [interpersonal skills](#) and individual or group practice philosophy is on display. Is enough dedicated time allocated for the task at hand, one without interruption or multi-tasking? Read our article on pages 2 and 3 for more discussion on the annual/physical exam.

### Present



Ian L. Parker,  
KG5LST



On behalf of the ARRL Foundation Officers and Board, I am pleased to announce the 2023 recipient of Medical Amateur Radio Council (MARCO) Scholarship in the amount of \$1000.

Ian Parker, KG5LST, of Oklahoma City, Oklahoma has been selected for The Medical Amateur Radio Council (MARCO) Scholarship from an outstanding group of applicants. Scholarship recipients were recently notified of their awards, and we have already had many replies conveying their excitement and appreciation.

June 1, 2023

Medical Amateur Radio Council

### Future

Scholarships through the ARRL Foundation would not be available without the support of thoughtful and generous sponsors such as you. Thank you for making The Medical Amateur Radio Council (MARCO) Scholarship possible, and for aiding a student Amateur Radio operator in his/her pursuit of their higher education. I am confident that these young people will be successful in their future careers, and in representing Amateur Radio as well.

## The Past, Present and Future of the Annual/Physical Exam— A Bob Currier Grand Rounds on the Air topic

The topic for The *Grand Rounds on the Air* net on July 16 2023 was on the annual/physical exam, as presented by Jay AA4FL, Warren, KD4GUA, and Harry WB9EDP. Click to listen the a [recorded audio stream](#) of the net (20m propagation was poor that day). This article expands upon that on-the-air discussion.

Follow the links below for additional exploration on this subject to learn. The choices of links used are by the editor, not MARCO. Note that YouTube links may contain advertising in advance of the intended resource material and that is their policy, not our choice. When present you may click through the ads after a short preview. This article is not for training purposes but is the basis for further group discussion, asking as many questions as it answers...

**Past:** [The Origins of the History and Physical Examination](#) are well documented in the literature. [There are ten individuals described in the prior link](#) who are responsible for the development of modern physical diagnosis: Hippocrates, Vesalius, Morgagni, Sydenham, Auenbrugger, Corvisart, Laennec, Louis, Mueller, and Osler. This article also describes Seven crucial developments over the past 3,000 years that have shaped physical diagnosis as we know it today.

A [complete history and physical exam](#) in a traditional format (recent past) as implemented by a Univ. of Virginia faculty member can be viewed here as one example.

### Present:

[Areas addressed](#) may differ in focus with the nature and purpose of the exam, a new patient examination, an annual exam, or one addressing a chief complaint. Topics include taking a medical history; physical examination; mental soundness; determination of [tests and labs needed](#); and reaching diagnoses when [addressing an illness, sign, or symptoms](#).

Factors affecting accuracy that emanates from communication shortfalls can diminish an medical interview and limit the effectiveness of obtaining a complete clinical picture. This can be inhibited by one, or both, the provider and patient. Is there enough office time scheduled, time where multitasking is not present and the focus is on the patient? Does the exam elicit truthful responses from a patient who fully understands the questions asked? Does the recording of the data while in the room assist or inhibit the process when a tablet or computer is in use and templates are being populated by answers? Can the patient fully and accurately express their concerns and history of, and present symptoms? Are there other factors such as emotional issues and distress? [Is the medical interview an "art" or a "science"?](#) It certainly is a clinical skill based upon establishing a rapport with the patient that enables two way communication. See the [June 2021 edition of the Aether](#) for more information on verbal and non-verbal communication.

View the physical exam from the [perspective from a 1st year medical student](#) as they prepare for an [Objective Structured Clinical Examination \(OSCE\)](#). The [OSCE](#) was developed in 1975 by Ronald Harden, Professor of Medical Education (Emeritus) at the University of Dundee. It was first outlined by Professor Harden in a journal article in The British Medical Journal (BMJ), [Assessment of clinical competence using objective structured examination](#). It is now a universally-accepted standard exam in higher education assessment.

What past included items have you found omitted from your examinations as a provider or as a patient? Do you rely less on a direct testicular exam and more on patient self-exam more than in the past? To diagnose and screen for prostate issues such as early signs of [prostate cancer](#) do you as a provider, or as a patient, rely more today on PSA blood tests and/or do you still provide or receive a [digital rectal exam \(DRE\)](#). Are standard exam components from years past being replaced with [high costs tests, and are they overused?](#)

Physicians and dentists have practice modalities and business models that may differ from years past. Are there factors that may have an effect of clinical implementation where time may not be allowed for the in-depth examinations of the past? How does corporate owned offices compare based on their business models? [Does a high level of student debt when present affect time allocation for examination?](#) If a practitioner works in a corporate office that limits what they consider to be appropriate for examination or in regard to any other doctor-patient manners [can those doctors afford to quit and change jobs?](#) [Does clinical ethics play a role?](#) Does the [average dental graduate debt](#) exceed the levels of medical graduates and [how does that impact their career and clinical choices?](#)



[Click for Grand Rounds Webstream](#)

continued on page 3

Please use our google group to continue the dialogue on these subjects. Feel free to submit follow-up articles and responses for future publication in the *Aether* to [aether@marco-ltd.org](mailto:aether@marco-ltd.org).

## The Past, Present and Future of the Annual/Physical Exam—continued from page 2

### Future:

Medical examinations in the future are likely to be updated with increased application of genomic testing and data analysis aided by artificial intelligence.

[What about patient's applying AI at home for self-diagnosis?](#) Currently at home [internet symptoms checkers](#) are not very sophisticated or interactive. Chatbots, chat-based artificial intelligence supported tools that are (internet accessible by computer, tablet, or smart phone) in their infancy and rapidly being developed. They may be asked and respond to questions that are of a medical diagnostic nature. How fast will this technology advance and will it be effective? Will it provide answers that delay appropriate medical care or result in directing patients to see their provider in a prompt manner? Jeff Pulver, [WA2BOT](#), a futurist, is well known for his success with voice-over-internet-protocol in its infancy ([Pulver FCC declaratory ruling 2004](#)). He has been writing about the [future of chatbots](#) since 2016. The prior linked article about Jeff from 2016 and current articles such as one from [March 2023 in the NY Times](#) reach the same conclusion for chatbots in business and are worth a read. Personally extrapolate what it might mean for medical diagnosis in the home environment.

### Dental Examinations:

[The type and purpose of examinations in dentistry](#) are reflected in the [Code on Dental Procedures and Nomenclature \(CDT\) coding system](#). New and annual patient exams can vary in coding or content depending on purpose, a exam for general dental purposes or one additionally focused on age related specialty needs such as [pediatric](#), [geriatric](#), [periodontal](#), [orthodontic](#), [endodontic](#), [oral cancer screening](#), etc.

Historic components of the exam in the 20th century were objective and subjective. The [evaluation of the dental patient](#) and the disorders examined vary by provider with legal requirements for such varying with [licensure](#) and regulation based on [state jurisdiction](#). [Dental imaging for most of the century](#) was two dimensional in nature (2D) and until the last decade [film based](#). ([Pauwels, Ruben. \(2020\). HISTORY OF DENTAL RADIOGRAPHY: EVOLUTION OF 2D AND 3D IMAGING MODALITIES](#)). 2D imaging is technique sensitive with film or digital sensor alignment being problematic due to [operator placement](#) and the presence of [varying oral structures](#) affecting placement, leading to subjective determinations within in objective examination. [Auscultation of the Temporomandibular Joint](#) was stethoscope based

Tools at a dentists disposal to apply at the time of dental exam have increased in time with new technologies becoming available such as [3D dental imaging](#), [oral cancer tissue screening](#), [advances in dental caries detection](#), [computer use in dentistry](#), [lasers and minimally invasive dentistry \(caries detection\)](#), [Ultrasound in Treating Temporomandibular Disorder](#), [Teledentistry](#), and [salivary diagnostics](#).

The future of dental examination and treatment will like medicine be aided by genomic testing and [AI technology](#). View this treatise on [artificial intelligence](#) for more detail.

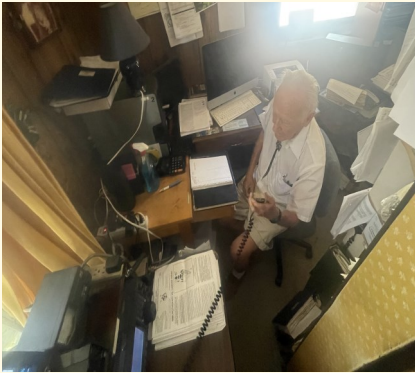
Use our google group to continue the discussion of what the future will bring in medical and dental diagnosis.

### ***Grand Rounds on the Air***, a case presentation program, [click to review](#)

David KN2M, our 2nd call district director, presented a case as the subject for the [Grand Rounds on the Air August 6, 2023](#). He received a referral for an unfortunate patient to his practice, one with tertiary syphilis affecting the eyes. This condition (ASPPC Acute Syphilitic Posterior Placoid Chorioretinitis) is quite uncommon and most retina specialists may only see this a handful of times, and some not at all, depending on their practice location and patient demographics. He presented the case, highlighted the ocular findings, discussed various aspects of the disease, then opened the net for questions.

Please consider volunteering to present a case of your own in this format, one that can be highlighted in the *Aether* through a link to a Web stream recording . Contact [aether@marco-ltd.org](mailto:aether@marco-ltd.org) with details of the case you would like to present. If you do not have HF capability or a quality signal to net control we will stay find a way to make the transmission and discussion occur in an effective way...

## Rambling Around with Warren Brown, KD4GUA



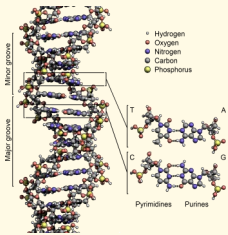
In 2013, we explored “A New Mission for Physicians, 21st Century Patients Will be Dealing with Direct-to-Consumer Labs Loaded with Genomic Reports—”What does this all Mean?”

What are your experiences with patients today in comparison to those in the 2013 article that follows? Is obtaining genomic information a part of your 2023 exam? Do you use patient obtained reports to aid in preventive medicine or in treatment?

The following is based on highlights from Abhishek Pandey’s article in JAMA, April 10, 2013, Vol. 309, No. 14, Page 1471, tense modified from the version in the [August 2013 Aether Edition](#).

During that era a patient came in the office with a \$200 read-out from his *direct-to-consumer* lab report from his saliva specimen. It presented him with his risks for various diseases and drug responses, along with a genetic based analysis of his likely ancestral origins and a few selected physical traits. **He took it to his doctor and the doctor didn’t know how to interpret it!**

By that time, thousands of people had gone online and accessed their genetic information. Some view this information recreationally, but to others, genetic profiles provide a new perspective on their health. The later group has high-lighted one of the first concerns for the patient-physician relationship in the post-Human Genome Project era, then a decade old. For future physicians, this highlights a new challenge for medical education.



According to his genetic profile, the patient had an above average risk of developing type 2 diabetes. He is also a carrier for Tay-Sachs disease, and he had particular variations in drug-metabolizing liver enzymes, among other findings. After receiving his report he embraced the information and started eating healthier foods and joined a running group. He went online to learn about Tay-Sachs and what his liver enzyme status meant for his alcohol and caffeine consumption. He also sent a copy of his report to his physician, whose knowledge and guidance, he felt would help him make better sense of the findings. But during his next visit, his physician brushed the report aside and went on with business as usual!

The doctor simply assumed the findings were in his medical history and because he hadn’t been prepared to interpret it. Teaching styles and curricula may vary from school to school, but in the present medical education , there is not much in genetic data or in genomic training. Patients sense this discomfort in their physicians.

Genetic testing isn’t the first patient-generated challenge physicians have faced. A growing interest in over-the-counter alternative medications, like St. John’s wort or ginkgo biloba, has recently tested the medical community’s ability to work with curious proactive patients. Many schools and residency programs acknowledge this new trend in health care and they have responded by adding lectures, training exercises and even certification programs to their curricula. Physicians today are much better prepared to (2) counsel this group than prior. Now we must tackle this new exotic field of human genetics.



**WHAT IS GENOMIC MEDICINE?** Everyone responds to stress and the environment differently, and they also respond to disease and to treatments differently. At the time, even though greater than 99% of a DNA sequence was considered identical from person to person, the last 1% helped to explain these differences. Different people may have small variations in specific genes and some people may have genes that others do not. These may increase susceptibility to a specific disease or provide protection from that illness. Scientists continue to discover new ways that subtle gene differences cause large differences in health. This understanding can lead to better ways to prevent, diagnose and treat many types of health conditions.

Genomic medicine describes these efforts. Although genomic medicine at that time was early in development, some areas where it has shown promise included:

**Risk assessment**—For instance, women with a BRCA gene mutation (variation) are at higher risk of developing breast cancer than those without the mutation.

**Early detection**—individuals with mutations in genes that increase risk of colon cancer benefit from earlier and more frequent screening for colon cancer.

**Diagnosis**—for some types of heart disease, detection of a gene mutation can lead to diagnosis and treatment that can prevent sudden cardiac death before any symptoms occur.

**Prognosis**—for many types of cancer, including some types of lung cancer and leukemia, presence or absence of specific mutations means a higher likelihood of survival.

**Tailored treatment**—It is now understood that some of the variability in how people respond to medications is explained by the way their bodies interact with the drugs. The field of pharmacogenomics seeks to understand these differences. For some medications, identifying individual gene differences can help customize both the selection of medications and choosing for the best response.

Contrast this article to the one on the human genome from the [June 2023 Edition of the Aether](#)

## Electrosurgery in Medicine and Dentistry—[Grand Rounds July 23, 2023](#)

**Past and Present:** For thousands of years human beings have used [heat in the form of cautery](#) to treat trauma and disease. By the late nineteenth century, as technology advanced, heat could be produced by electric current. In 1920 inventor [William T. Bovie](#), who is regarded as the father of electrosurgical devices but had a doctorate in plant physiology (reported to be a biophysicist), developed an innovative electrosurgical unit that Harvey Cushing, the founder of modern neurosurgery, introduced to clinical practice. The Bovie unit passes high frequency alternating current into the body allowing the current to cut or coagulate, bringing down the postoperative mortality rate. The electrosurgical units (ESU) developed by Bovie, were essentially a [spark-gap unit](#), which consisted of two small metal conducting pieces separated by an air gap. Some online material, not from ham sources, [erroneously states he is the creator of the spark-gap generator!](#) However, Bovie's device allowed Cushing to reexplore operations in patients with brain masses that had been declared inoperable.



While some claim Bovie had many personal medical issues and costs contributing to his need to sell his patent, it is also reported that he sold the patent of his discovery to a manufacturer for only one dollar. Thus the literature also reflects this was a selfless act, for the further betterment of mankind, without any personal financial gain. Variations of his device remain a fundamental tool in the practice of medical and dental surgery. Follow the links below for additional exploration on this subject to learn about the origins in medicine and current applications.



The dental [electrosurgery](#) unit pictured on the left operates at a frequency of 3.68 MHz with a power of 55w. Dental units operate at a frequency of 500 KHz to 27 MHz. Perhaps users should modulate the output and get a ham radio ticket so they can work and play at the same time! Units of a [monopolar](#)



[Click for Grand Rounds Program Audio Stream](#)

design use an active electrode presented as a tip on a handheld wand and require a [dispersive electrode](#) elsewhere on the patient's body that functions to defocus the RF current thereby preventing thermal injury to the underlying tissue. This approach has disadvantages such as patient with pacemakers being impacted by the current, the presence of flammable gases being ignited. To counter these issues [bipolar devices](#) were developed that focus the current at the tip for direct application of the heat with the current being directly returned it to the unit. Dentists have been, and continue to use electrosurgery as an adjunct to dental prosthetics. Tissue overgrowth in reaction to the presence of decayed hard tissues within the teeth can be a significant impediment to accurate registration of traditional impression taking for dental prosthetics (fixed bridgework and crowns), and for laser scans in digital dentistry (CAD-CAM or Computer-aided-design sometimes in dentistry coupled with Computer-aided-manufacturing). [Electrosurgery provides an option to quickly and effectively remove hyperplastic tissue](#) that contains a lot of vascularity and cauterize the area for impression taking. It can also be used as an adjunct for [cosmetic enhancement](#).



For medical care there are many applications for electrosurgery, the [basic principles can be explored in this link](#). More details about the use of this technology's application in medicine are available in the literature but not in the public domain. A [MARCO program on this subject](#) was presented, by MARCO member Harry Przekop WB9EDP during the July 23, 2023 *Grand Rounds on the Air*. Group discussion among participants is an added feature during the net.

Units used for medical treatment may need to consider access for treatment areas that are not in direct vision, even in the [Operating Room \(OR\)](#). While dermatologic treatment is direct vision, flexible endoscopy reflects this additional need. The [American Society for Gastrointestinal Endoscopy](#) offers an [overview of electrosurgery generators](#) details the technology and equipment needed. The image to the right offers function for with features to address these needs, with an [argon plasma coagulation](#) in addition.

In dermatology some of the most common uses are described in this [link](#). Electrosurgery is applicable as a routine and cost effective way to treat a variety of skin lesions, especially small superficial lesions (skin tags and small angiomas). The major modalities in electrosurgery are electrodesiccation, fulguration, electrocoagulation, and electrosection are [discussed in detail in this link](#) as they pertain to dermatology.

In neurosurgery there are numerous articles that appear in the literature that one can purchase and read for more detail, such as [Electrosurgery](#) that appeared in the *Journal of Neurosurgery*, and [Battling blood loss in neurosurgery: Harvey Cushing's embrace of electrosurgery](#).

**Future:** Many uses have been supplanted by laser based equipment. The use of electrosurgery continues to offer advantage of cost effective results and is likely to be a tool of relevance in the future.

Use [MARCO's Google Group](#) to continue group discussion on the subject. If you are not already on the list for using this feature make sure to sign-up or request that you be added by the secretary by contacting [secretary@marco-ltd.org](mailto:secretary@marco-ltd.org).

## MARCO Nets, 2023 updates

### Weekly MARCO Medical Grand Rounds on the Air HF Net

The Medical Amateur Radio Council (MARCO) conducts its weekly *Grand Rounds on the Air* net on 14.342 MHz. (1500 UTC summer, 1600 UTC winter). Health Care professionals check-in to the net and engage through moderated (net directed) roundtable discussions on topics of interest, and have occasional continuing medical education (CME cat 2) presentations. Those present include physicians and dentists from many specialties, pharmacists, nurses, researchers (PhDs), EMTs, and members who serve in other health related careers. **All members of the amateur community and public are welcome to listen and submit questions** to the discussion panel using the AIM messaging feature in the freely available netlogger program ([netlogger.org](http://netlogger.org)), aided by using the [livesteam of the net](#). This facilitates country and worldwide engagement of participants and listeners while negating the limitations of HF propagation.

#### MARCO Grand Rounds on the Air



14.342 MHZ  
Sunday  
16:00 UTC

Live audio stream and archives  
[WWW.MARCOAUDIO.NET](http://WWW.MARCOAUDIO.NET)

Founded in 1966, MARCO's mission is to promote goodwill and fellowship among amateur radio operators who are professionals in the healing arts or have an interest in medicine, dentistry, allied fields or in medical education and industry. On-the-air operation is an integral component of MARCO activities and is conducted for the purpose of discussion through exchanging medical and technical information of a non-commercial nature while conducting such dialogue as a public service of interest to the entire amateur radio community.

### Livestreams and Net Recordings

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](http://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

### MARCO International DV NET

The **MARCO International DV (Digital Voice) net** meets on Sundays at 1400UTC. It is the first of three Sunday morning nets and serves as the first place of roundtable discussion for the *Grand Rounds* topic of the day, while affording amateur radio operators without HF radio equipment, antennas, or those with technician licenses, and members in Asia (time of day), to participate while developing the topic for the HF net later in the day.

We have chosen to use the [QuadNet Array](#), an IRC or Internet Chat Facility that acts like a **universal translator between different digital modes** that allows hams who identify by callsign to connect with other users of digital radios world-wide through interconnected reflectors and talk-groups. See their website for more details, including how to connect, within the <https://www.openquad.net/> webpage.

This net applies the same format of, and augments MARCO's HF-based voice nets, providing a mechanism for members and guests worldwide to join discussions without the limitations of HF propagation, antennas, or equipment. Since operators can participate on radio while mobile through digital hotspots or repeaters, or at a fixed location by USB dongles on a computer, the net is a versatile opportunity for involvement for both newly and seasoned amateur radio operators.

Contact [Jay AA4FL](#) for additional details needed for implementing equipment needed for participating and protecting your neural connections, great involvement for your soul and health!

### MARCO CW NET

#### The Bob Morgan Memorial Net

Our CW net is held every Sunday one half hour before the *Grand Rounds on the Air* net, at 09:30 central time, currently 1530 UTC, on 14.140 MHz. Net control is Chip N5RTF. The net is named after the late MARCO member Dr. Bob Morgan, VE3OQM.

At times in the in the past the net was on the same frequency as the *Grand Rounds on the Air* in an effort to hold the frequency for the voice net to be in the clear at the top of the hour. The net today means so much more to MARCO...

You are invited to participate. With radio license issuance in the US dropping the morse code requirement there are many members who have not had experience with CW. Our net is a great way to gain CW proficiency.

There are many advantages to learning morse code, a yes-brainer. There is increasing evidence that not only GM plasticity but also changes in white matter are important in the context of learning processes, see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5526915/>.

Use CW through the MARCO net to keep those neural connections intact and resist the aging process! Links to other sources follow. Add to the discussion by posting to the MARCO google group: [marco-ltd@googlegroups.com](mailto:marco-ltd@googlegroups.com)


[ARRL resources for Morse Code](#)

[Morse Code Instruction Learning, YouTube Options](#)

[Code Buddy Volunteers](#)

## MEMORIES OF YEARS AGO IN MARCO Our History Book

### Twenty Five years ago in MARCO—August 1998



**The MARCO NEWSLETTER**

Official Publication of the Medical Amateur Radio Council, Ltd.  
Robert Currier, M.D., WBSJ, President  
Bruce M. Small, M.D., KM2L, President-Elect  
Robin J. Staebler, M.D., NN3L, Secretary  
Alfred E. Greenwald, M.D., WA2CBA, Treasurer  
Edward R. Briner, D.M.D., WA3TVG, Editor

Vol. XXII No. 2 Aug - Sept, 1998

#### DR. JEFF WOLF TO SUCCEED SMITTY AS MEDISHARE HEAD

An important announcement was made recently involving the leadership of MediShare. As you know, Smitty has been searching for someone to replace him as head of this important facet of MARCO. Jeff Wolf, M.D., K6JW, volunteered to succeed Smitty in this position. Following is the announcement released by Smitty and President Bob Currier, further explaining this event:

To all MARCO members Important message from W6JZU, Robert Smithwick, chairman, MediShare:

"I am so very glad to tell you that Dr Jeff Wolf, K6JW, and I have had long discussions (about his becoming chairman of MediShare) and finally Jeff agreed to take it on. As you may know, Jeff lives in Rolling Hills, S California, and is on the air, has e-mail, energy and 'smarts', and above all, the interest enough to take it on. That was a major factor in his decision of course. "I told Jeff that I would be

This issue could best be described as the "MediShare" issue. Page one contains the news of Smitty's retirement as head of MediShare. Smitty's annual report to the MARCO Directors at the recent Dayton annual meeting begins on page 2. Finally, the Bush Hospital Foundation report, issued at the same annual meeting, and written by Dr Mike Marks, begins on page 6. We hope that all of you will enjoy reading these reports, and remember this hard work when you send in your dues next year by including a donation to MediShare.

#### BAND CONDITIONS CONTINUE TO IMPROVE

Every month the 40 meter band continues to improve. There are short periods when propagation goes bad, but most of the time it provides communication from everyone that checks in. We are seeing 7-10 checkins each evening. Twenty meters is showing improvement, with approximately 15-20 checkins each Sunday morning. The new Sunday net at 1 00pm est is slowly setting

[Click for the full edition](#)

- Medishare named a new director, Jeff Wolf, K6JW. Jeff would continue in future years accepting numerous leadership positions in MARCO. He is still active, with Jeff and wife Rowie attending the 2023 annual business meeting in El Paso, with guitar in hand, participating in the musical program for the annual banquet.
- Medishare projects and donations were detailed. In 1998 Medishare accepted donations of used equipment that were routed to Africa or the Ukraine.
- Our joint outreach with the Bush Hospital Foundation resulted in a report of the countries supported and status of projects. Including were those in Rwanda, Zambia, and different regions within Kenya.
- MARCO Medishare reported their support of an organization that instructed indigenous people from various countries in repairing and servicing medical equipment.
- Band conditions were improving with members encouraged to check-in to MARCO nets.

### Ten years ago in MARCO—August 2013

**MARCO's "AETHER" pronounced "Ether"**  
Medicine & Radio in One Medium  
Official Publication of the Medical Amateur Radio Council **82nd Edition 2000-2013**

President: Mary Favaro, M.D., A64BX  
Past President: Linda Krasowski, RN, KESBOK  
Pres. Elect: Jeffrey Wolf, M.D., K6JW  
Secretary: Danny Centers, EC, W4DAN  
Club Master: Bruce Small, M.D., KM2L  
Treasurer: Danny Centers, EC, W4DAN  
...also Internet: Chip Keister, M.D., N6KTF  
MediShare: Arnold Katan, M.D., WB6CUB  
News Editor: Warren Brown, M.D., KD4GUA

MARCO Blogsite: marco-ltd.blogspot.com  
"listserv": http://googlegroups.com

Web Site: http://www.marco-ltd.org  
Internet address: warrenbrown@aol.com

A non-profit Corporation, founded in 1965, privately supported for the public good and dedicated to the advancement of Medicine through Amateur Radio.

Vol. XXXVIII, (38th year), Edition #82 since Year 2000, August 2013 P.O. Box 127, Indian Rocks Beach, FL., 33785-0127

#### NEW MISSION FOR PHYSICIANS

**21st-CENTURY PATIENTS WILL BE DEALING WITH DIRECT-TO-CONSUMER LABS LOADED WITH GENOMIC REPORTS—**

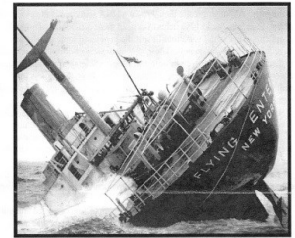
**"WHAT DOES ALL THIS MEAN?????"**

Recently, a patient came in the office with a \$200 read-out from his direct-to-consumer Lab report from his saliva specimen. It presented him with his risks for various diseases and drug responses, along with a genetic-based analysis of his likely ancestral origins and a few selected physical traits. He took it to his doctor and the doctor didn't know how to interpret it!

Today, thousands of people have gone online and accessed their genetic information. Some view this information recreationally, but to others, genetic profiles provide a new perspective on their health. The latter group has high-lighted one of the first concerns for the patient-physician relationship in the post-Human Genome Project era, now a decade old. For future physicians, this highlights a new challenge for medical education.

According to his genetic profile, the patient had an above average risk of developing type 2 diabetes. He is also a carrier for Tay-Sachs disease, and he has particular variations in drug-metabolizing liver enzymes, among other findings. After receiving his report, he embraced the information and started eating healthier foods and joined a running group. He went online to learn about Tay-Sachs and what his liver enzyme status meant for his alcohol and caffeine consumption. He also sent a copy of his report to his physician, whose knowledge and guidance, he felt, would help him make better sense of the findings. But during his next visit, his physician brushed the report aside and went on with business as usual!

The doctor simply assumed the findings were in his medical history and because he hadn't been prepared to interpret it. Teaching styles and curricula may vary from school to school, but in the present medical education,



**STARTING THIS ISSUE, on page 11....**The story of ham radio operator Capt. Kurt Carlson W2ZM and his one-man battle to save his ship, the "Flying Enterprise" after being battered by a Category 4 hurricane in the North Atlantic in December 1951.

#### LATE BREAKING NEWS

Sunday Grand Rounds now on 14,342 MHz, 11 am Eastern.

2014 Dayton HamVention/Marco Meeting & Banquet...Meeting, Friday morning, May 16, 2014; Banquet, Satur-

[Click for the full edition](#)

- Note in this edition that Jeff Wolf, K6JW, was serving as president-elect.
- Editor Warren Brown included an article on 21st century changes in patient awareness and interaction with their physicians through direct-to-consumer genomic reports.
- Genomic Medicine as part of oval practice was discussed covering risk assessment, early detection, diagnosis, prognosis and tailored treatment. This was a great preview of the upcoming ten years and changes that are still occurring today such as [salivary tests for screening for certain cancers](#).
- A follow-up to a *Grand Rounds on the Air* session on gastric bypass surgery was discussed.
- An article on nutrition was included to counter a perceived lacking of medical school education regarding this subject.
- Non-medical topics such as "Why the sky is blue—the visual spectrum", and "Getting an HF antenna to work" were also included.

## Membership Committee News

The membership committee requests your assistance in keeping MARCO's database up to date so all members data is current. We have tried a different approach this year regarding annual billing, making renewal self-initiated. In addition, we are a volunteer organization and processing renewals can be a huge task, potentially to be reduced by your compliance with the suggestions that follow.

Our recent approach to billing is to send group messages in the last quarter of the year about the need to check your renewal date, rather than waiting for emailed invoices. Our trust has been rewarded with a nice response, with many of you renewing, and extending your membership beyond your renewal term. (longer renewals are the best compliment you can offer and allow for reduced workload by our volunteer staff).

Membership dues, for new joins and renewals, are processed by email. Our online form allows you to renew and extend your membership for 1, 2 or 5 year terms (pull down list), with longer terms reducing the cost per year. There is a unified dues structure for associate and regular members. Please complete the entire form just as you were a new member as this assists us with keeping your information current in our membership database (contact phone number as well). Additional explanation is located on page 13 of this edition of the Aether.

**MARCO encourages members to consider a five year membership of \$100.** This reduces your yearly cost of membership and simplifies our annual billing by our all volunteer staff. **Existing members can choose to extend your membership at any time. [Click for the online application](#) and if desired, select the five year term from the pull down list.**

Once submitting the online form **if you have a problem with the form appearing not to submit** (spinning icon, known to occasionally occur), email the issue to Jay AA4FL at [secretary@marco-ltd.org](mailto:secretary@marco-ltd.org) to confirm it went through. The membership committee will receive your online application and process an invoice to be sent by email. Once you open the invoice use buttons at the top left are present to credit card payments (Stripe), and for PayPal. If you prefer to pay by mail list such on your application.

**Thank you for your Membership!**

In Service to MARCO and 73,

*Jay* AA4FL, and *Alanna* K4AAC

## MARCO OFFICERS, 2023-2024

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

**President: Bernie Krasowski, KD5QHV**  
P: 915.449.0234

**President-Elect: Barry Rabin, M.D., WB1FFI**

**Secretary: Jay Garlitz, D.M.D., AA4FL**  
C: 352.246.6003

**Treasurer: Diane Rodman, R.N., NM2K**

**Assistant Treasurer: Charles Lind, M.D., N8CL**

**Web Master: Dave Lieberman, KT8E**

**Radio-Internet Coordinator: T. "Chip" Keister, M.D., N5RTF**

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

**Newsletter: Warren J. Brown, M.D., KD4GUA**

### REGIONAL DIRECTORS:

(1st call district) Don Arthur M.D., J.D., K1DCA

(2nd call district) David Rodman M.D., KN2M

(3rd call district) Keith Adams, M.D., N3IM

(4th call district) Mary Favaro, M.D., AE4BX

(5th call district) Linda Krasowski, R.N., KE5BQK

(6th call district) Paul Lukas N6DMV

(7th call district) Lee Barrett, M.S.E.E., K7NM

(8th call district) Mark Young, M.D., N2OJD

(9th call district) Stu Oserman, M.D., WA9ZPL

(0 call district) Carlyle Rowland R.N., N0ARN

(Dx director) Etsuo Takada, M.D., JA0BXP

### DIRECTORS-AT-LARGE:

Bruce Small, M.D., KM2L, Immediate Past-President

Arnold Kalan, M.D., WB6OJB,

Chip Keister, M.D., N5RTF

Jeff Wolf, M.D., K6JW,

Jerry Ziperstein, M.D., N4TSC

### AD-HOC COMMITTEES:

Membership—Jay Garlitz AA4FL, Alanna Conder K4AAC,  
Michaline Przekop KC9ARP

Grand Rounds Net—Chip Keister N5RTF, Jack Spitznagel KD4IZ,  
Jerry N4TSC, Linda Krasowski KE5BQK, Harry Przekop WB9EDP

Historian: Michaline Przekop, KC9ARP



**GREETINGS FROM YOUR PRESIDENT**

August 2023

Greetings from HELL PASO!! Today is the 28<sup>th</sup> day we've been in triple digits and 27<sup>th</sup> consecutive day in triple digits! Without getting political, for those who don't believe in climate change might be time to check the



utilities bills, particularly electric and water. The immediate future shows another nine days over one hundred degrees with no end in sight.

For those of you who chase DX, we've finally got some sun spot activity, maybe a little too much! With a Coronal Mass Ejection anticipated to hit the earth tomorrow. On the other hand, With the solar flux at 214, the A index at 8 and the K index at 2 chasing DX should be pretty good! In my case, I have been chasing 9Q1ZZ/9Q1ZZ in the Democratic Republic of Congo, KH8RRC, in American Samoa, and 4W6RU in Timor Este unfortunately none of these are new ones for me, however there may be a band point toward the DXCC Challenge. Linda found a story on her phone that indicated that the solar max could be two years ahead of its planned arrival two years from now. If you like DX don't pass it up today for a better tomorrow because the condition's we are seeing now COULD BE the solar MAX and tomorrow could be too late!

Speaking about the SUN let me CONGRATULATE our net control and moderator for the whole time Linda and I have been in MARCO, Warren KD4GUA, who will complete his 99<sup>th</sup> orbit of the Sun on July 17<sup>th</sup>. HAPPY BIRTHDAY should we ALL be so lucky!! With that let me wish all the members of MARCO a happy healthy summer and for those who haven't been active recently we look forward to hearing your voices this fall!

73,

*Bernie* KD5QHV



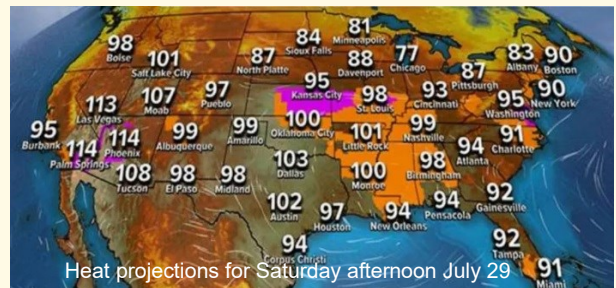
**MediShare \$99 Challenge**

**Join President Bernie in honoring MARCO member Warren KD4GUA on his 99th birthday and start of his 100th trip around the sun. Make your donation to "MARCO MediShare", mailing checks to chairman WB6OJB at his QRZ address.**

Summer is here with a vengeance. Make sure your patients, family and friends hydrate and use caution with outdoor activities. Please share the following with them so they will have awareness of the danger.

CDC—[Warning Signs of Heat Related Illness](#)

CDC National Institute for National Occupational Safety and Health—[Heat Stress and Heat Related Illness](#)



**WRITE TO US!**

We welcome your comments.  
Email [aether@marco-ltd.org](mailto:aether@marco-ltd.org)

**Disclaimer:** Letters and articles may be edited for brevity & clarity. **All content, including linked unedited member article submissions, and linked online material, are not the opinion of MARCO. The Aether's content is not Medical Advice.** Graphics and links selected are the choice of the editor and not of MARCO-ltd.

**MARCO NET SCHEDULE**

<u>DAY</u>	<u>TIME</u>	<u>FREQ.</u>	<u>NET CONTROLS</u>
Any Day	On the Hour	14.342	Hailing Frequency
Sunday	9 AM Eastern	DV QuadNet	Jay AA4FL
Sunday	10:30 AM. Eastern	14.140	CW Net, <a href="#">Chip, N5RTE</a>
Sunday	11 AM Eastern	14.342	Jay, <a href="#">Warren, KD4GUA</a>

**MARCO'S CW NET, the "Bob Morgan Memorial Net"**  
(precedes the Grand Rounds on Air net, meeting on Sundays, 14:30 UTC, 14.140 MHz)

**Page 10**

**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.**

**MediShare International News**

**Arnold Kalan, WB6QJB, Director**



The charitable arm of MARCO is active developing new projects and appreciative of your donations. Recognize other members for their accomplishments and life events with a donation that will be recognized in the *Aether*.

Donations are fully tax deductible and you will receive a note of thanks with wonderful MARCO seals that look very nice on QSL cards. MARCO is a 501 (3)(c) organization, and MediShare International is a project of MARCO.



My wife Joan and I have a strong affinity for projects related to Africa, We have been going to southern Africa almost every year since 1987, and have been to Lesotho, Swaziland, Namibia, Zambia, Kenya, Tanzania, Zimbabwe, Mozambique and Botswana. We did some research medical work in Zimbabwe in the '80's.

I have made 9 DxHolidays in Swaziland, Lesotho, Botswana, Mozambique and South Africa. They were great experiences and gave out thousands of QSO's.

**Donate**



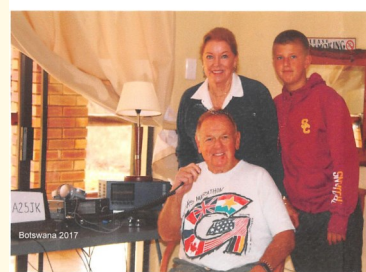
I certainly wish we had more donations to MEDISHARE. Also we need a project!! Members will donate more if we have a project to talk about. [Click to donate online](#) or mail written checks made out to MARCO, noting MediShare in the check's "for" area. Send your donation to MARCO c/o Secretary Jay Garlitz, PO Box 1333, Hawthorne, FL 32640

Thank you , Stay Well & God Bless,

*73, Arnold*

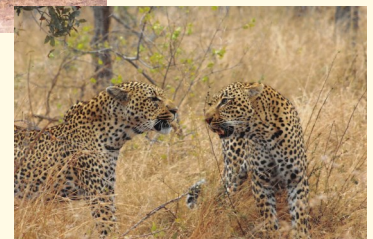


2-27-23  
great as well  
The enclosed cheques are in memory of Terry Kriesler I have arthritis so I know how the final minutes must have been for her  
Stay Well  
Arnold



Give and you shall receive! Our Medishare director acknowledges each donation with a handwritten note that includes photographs from his travels to Africa, and ham radio themed stamps accompanied by those with a focus on health related issues.

Wife Joan, grandson Ryan, and Arnold are included in the picture above from Botswana. Ryan is a scratch golfer, member of the junior PGA, and attends school at Penn State. Below are photos from Botswana and South Africa that have been included in his mailings, and there are many more!



## The Secretary's Keyboard Korner

[secretary@marco-ltd.org](mailto:secretary@marco-ltd.org)



As a secretary with a background as full-time small town provider (1,300 population), part-time dental faculty member (UF College of dentistry) and having served the profession at the national level (ADA) as a member of a council (vice-chair) of communication, my MARCO volunteerism reflects these experiences.

One can observe from the decisions of the board (officers and regional directors) in recent years that MARCO's mission has been changing focus from days when where ham radio was a unique and needed way for medical professionals to obtain scientific based CME toward bringing a perspective on medical topics from professionals who are amateur radio operators to the world of ham operators and to the public domains of the airwaves and internet.

With supervision of the board the *Grand Rounds on the Air* (committee led by Chip N5RTF) and *Aether* are refocusing their implementation. Members are part of this effort, with board meetings held by Zoom, and open to input. Look for a board meeting to be held in September that focuses on this subject, date/time TBA in the MARCO Google Group.

Some projects planned for the future (some in progress) to bring our wisdom from the past to foster current discussion, and plan for the future are:

[Archived Editions of the Aether](#)—being available to members and to the public, with the creation of an index of topics.

Transforming the [recorded audio streams](#) of our nets with the same goal in mind.

**73, Jay AA4FL**

## MARCO Membership News

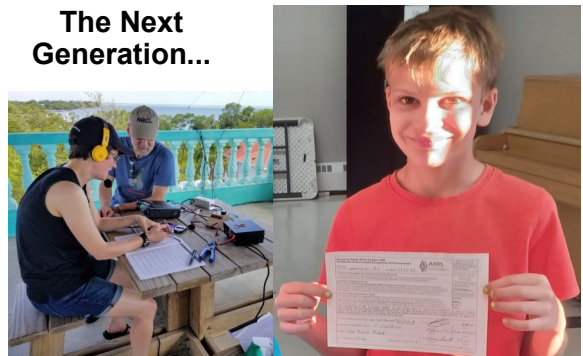
June - July 2023

New Member

**KE2ABP—James Pelletier, Watertown, NY, (2 years)**

**Medishare donations in honor of Warren Brown's 99th Birthday and the start of his 100th trip around the sun—Jay AA4FL, Arnold WB6OJB and Bernie/ Linda KD5QHV/KD5BQK**

## The Next Generation...



The Grandson of MARCO member Chuck Lind (wife Rosalind) achieved his extra license at age 11. Warren , KD2ZUA, earned his technician ticket in July 2022, followed by his general license ten days later.

Mother Maria, K2EO, joined us on our annual meeting in 2019 and cruise, activating MARCO's V31D in Belize, one of three of our western Caribbean cruise destinations. She is in the photograph above operating there with dad Chuck, N8CL.

Maria's husband David, K2DW is also a very active amateur radio operator. Review his QRZ page for more details and one can see Warren's ham operator prospects for growth as a seasoned operator who can make contributions to the future of amateur radio.

## The Art of Ham Radio

MARCO members are a creative group. The art pictured to the right is from my shack (AA4FL). The clock has been created by me from using an old dial from a radio restoration project, patterned after similar projects using old "picture" vinyl record albums. The state shaped metal art was commissioned and produced by an artist on [Etsy](#).

Please submit photos and descriptions to [aether@marco-ltd.org](mailto:aether@marco-ltd.org) of your ham radio adornments and creativity for publication in the *Aether*.



**Payment Options for Renewing your Membership or Joining MARCO**

Membership dues, for new joins and renewals, are processed by email. At the time of annual billing invoices are invoiced to each member. The default billing term is unified for all types of members, two years for \$45.


MARCO encourages members to consider a five year membership of \$100. This reduces your yearly cost of membership and simplifies our annual billing by our all volunteer staff. Existing members can choose to extend your membership at any time. Please use the online form at <https://marco-ltd.org/join-marco-amateur-radio/> and select the five year term from the pull down list. Completing the entire form just as you were a new member assists us with keeping your information current in our membership database.

Once submitting the online form **if you have a problem with the form appearing not to submit** (spinning icon), email the issue to Jay AA4FL at [secretary@marco-ltd.org](mailto:secretary@marco-ltd.org) to confirm it went through.

For New members, and current members desiring to extend their membership term, the membership committee will receive your online application and process an invoice to be sent by email.

Online payment processing is available once invoiced by email. One opens the invoice and buttons at the top left are present to credit card payments (Stripe), and for PayPal.

**Thank you for your Membership!**



Medical Amateur Radio Council

The Medical Amateur Radio Council Ltd.

**Online editions of the *Aether* can be printed by the reader for use at home but linked information available through clicks within the online document will not be available. Note in using the online edition you have control of the size of the text and images, being able to zoom in for more comfortable and informative reading.**

**This is the 142nd edition of The Aether (2000-2023) since Warren Brown, KD4GUA, became editor, and the 12th online only edition by co-editor Jay Garlitz, AA4FL.**

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

Apply or renew online using the [online join form](#), which if you are already a member will be processed as a renewal. Once you fill out and submit the online form it will be reviewed by the membership committee. Upon approval you will be invoiced by email with a link to pay online by credit card or PayPal.

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

If you need to pay by check use this application form. Send the written form to the mailing address below.

**Check your preference:**

- One year membership \$25 (USD)
- Two year membership \$45 (USD)  
(the default billing for renewal)
- 5 year membership \$100 (USD)

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Health Related Career (if appropriate)  
 \_\_\_\_\_

Call Sign: \_\_\_\_\_ Type License: \_\_\_\_\_

Phone: \_\_\_\_\_

email: \_\_\_\_\_

Birthday \_\_\_\_\_ (year, full DOB optional) Member ARRL: Y / N

Written applications for membership should be sent to

Membership Committee  
 c/o Secretary Jay Garlitz, AA4FL  
 PO Box 1333  
 Hawthorne, FL 32640, USA