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## THE CUTTING EDGE: ENHANCED RECOVERY PROTOCOLS

### HOSPITALS ARE STARTING TO ABANDON THE TIME-HONORED DRILL FOR SURGERY PATIENTS—INCLUDING FASTING, HEAVY IV FLUIDS, POST-OP NARCOTICS & BED REST

(As reported on MARCO Grand Rounds of the Air.)

**There is growing evidence that the lack of nutrients, fluid overload and drug side effects can do more harm than good.**

Instead hospitals are turning to "enhanced recovery protocols that are easier on patients, help them get better faster with fewer infections and other complications and reduce health-care costs.

The changes, pioneered in Europe over the past 15 years, now are being adopted more widely in the U.S.

Hunger and thirst from pre-surgical fasting can add to patients stress and anxiety, and cause weakness as well a postoperative nausea. Side effects of fluid retention, narcotics and immobility can interfere with getting bodily functions back to normal, resulting in longer, harder recoveries overall. With traditional regimens, patients can remain in the hospital for 10 days or more with complications rates of up to 48% and an average \$10,000 in additional costs, according to researchers at Duke.

With enhanced recover protocols, patients still can't eat after midnight before an early morning surgery. But two or three hours before surgery they do get a carbohydrate-loaded drink fortified with electrolytes, minerals and vitamins. They are pre-treated for pain with non-narcotic painkillers and epidurals that are kept in place postoperatively. With careful monitoring, patients receive only necessary levels of IV fluid during surgery. Soon afterward they get out of bed to walk and may ingest solid food and they are discharged earlier with careful instructions for home care.

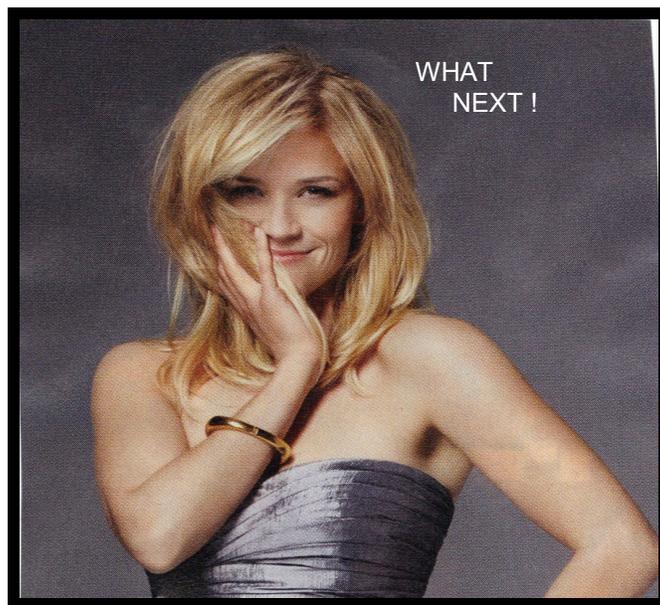
*"This is contradictory to the way we've practiced for 50 years, but it is becoming more and more evident that this is really more effective and better for patients,"* says the assistant professor of surgery at the University of Virginia. *"Surgery is already a significant trauma on the body and we want to help keep patients as normal as possible for as long as possible."*

A study published in Feb. 2015 found the new protocol used in 109 colorectal-surgery patients at the University of Virginia system, reported reduction of hospital stay by 2.2 days compared with 98 patients who had conventional treatment before the program. It reduced complications by 17% and increased patient satisfaction with pain control by 55%. There was a cost savings of \$7,129 per patient.

The study revealed reluctance on the part of some surgeons and anesthesiologists to change ingrained habits but they are often convinced by the results.

A 2011 study in JAMA Surgery found that despite the clear benefits of enhanced recovery protocols, old traditions prevail.

Surgeons traditionally infuse high volumes of fluid after wartime studies showed it improved survival in trauma patients, but it isn't necessary in the average patient. *"Giving extra IV fluids to overcome the starvation we've imposed on patients leads to worse outcomes such as preventing a return to normal bowel function."*



#### DID YOU MISS GRAND ROUNDS?

If you did, you can listen on  
<http://www.reliastream.com/cast/start/tkeister>  
or <http://67.213.213.143.8014/stream>,  
or <http://67.213.213.143.8014>

& notify [warren.brown7@aol.com](mailto:warren.brown7@aol.com) for Cat. II CME credit.

#### LATE BREAKING NEWS

The Dayton Hamvention is over...Our Annual Meeting is over, so let's head back to our rigs and start warming the air waves again. Check page 9 for details of the March Marco Board meeting in the airport hangar at Zaporini (*Unbreakable*) Airport in Torrance, California.

**Field Day**, the ARRL's leading event will be held 1800 UTC Saturday, June 27 through 1759 UTC Sunday, June 28. Field Day provides an opportunity for Amateur Radio to tell its story to our friends, neighbors, communities and the leaders of our nation. This is the largest on-air Amateur Radio event in the world—unfortunately, this will block out our "Grand Rounds of the Air for Sunday June 28th.

**Keep MARCO vibrating...send a Ham friend a gift Membership...members outside the U.S.A. should make dues payments in U.S. currency.**

**WRITE TO US!**  
 We welcome your comments.  
 Mail to Marco, P.O. Box 127,  
 Indian Rocks, FL,  
 33785. Email to  
 Warren.brown1924@gmail.com  
 Letters may be edited for  
 brevity & clarity.

**MARCO NET SCHEDULE**

<u>DAY</u>	<u>EASTERN</u>	<u>FREQ.</u>	<u>NET CONTROLS</u>
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

(Alternate confidential Grand Rounds frequency—  
 on or about 14.344 or as announced on the air.)

**MARCO'S CW  
 NET IS NOW  
 CALLED THE  
 "Bob Morgan  
 Memorial  
 Net"**  
 Sundays, 10:30 am,  
 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.**

Rules on fasting before surgery are based on assumptions that anesthesia reactions might cause patients to throw up during a procedure and hamper breathing. Research, however, has shown clear liquids within two hours actually decreases that risk.

Operating room teams are sometimes reluctant to adopt the less-restrictive policies out of concern patients won't follow directions and come in for surgery having had a glass of milk or cola, and then surgery has to be delayed. But when patients consume clear liquids correctly, they feel much better after surgery.

A 57 year old technology product manager in Charlotte, NC, had surgery at 17 and again in his mid-30s for Crohn's disease. He remembers "waking up feeling like I was hit by a bus, and the morphine couldn't kick in fast enough." Both times, he retained fluid in his legs and had to spend a week in the hospital consuming only a liquid diet. When his condition flared again, he dreaded a third surgery, but last year, after two emergency-room visits, he realized he couldn't put it off any longer. He was assured that the new protocols would make it easier. Two hours before surgery, he drank a carbohydrate-rich beverage. To prevent pain, he took non-narcotic medications including Tylenol, and doctors inserted an epidural, which stayed in place for two days after surgery. His IV fluids were monitored carefully during surgery so he got the ideal amount. The patient says he needed very little oral narcotics and felt so little pain after surgery the he was texting his friends. He was walking the first day and able to eat solid food. "This was a completely different experience for me compared to my two previous surgeries," he said.

Kaiser Permanente Northern California is currently rolling out the enhanced recovery protocol in its 21 medical centers, focusing first on colorectal surgery and hip fracture patients. It plans to expand the program soon to total joint replacement.

After surgery, when pain is often worst, patients are still offered narcotic medications, but minimizing the use of narcotics helps eliminate side effects like constipation, nausea and dizziness



**TOOTHLESS TIGERS?**  
**Excerpts from David Sumner K1ZZ's**  
**excellent article in May's QST**

If you look on page 8 you will note a drop in our station's checking into Marco's Grand Rounds of the Air for the year 2013. That was the year of the "Terrorists." Marco was forced to move from 14.307 MHz to the present 14.342 MHz to lose the bad actors who were playing havoc with our transmissions.

What happened? We bombarded the FCC with letters and emails requesting the FCC to do something—to punish those using foul language and interrupting conversations—but nothing happened, until finally late last year the FCC acted—or did it? They fined the guilty parties upwards of \$25,000 but apparently never followed through.

Now David Summers K1ZZ has the fortitude to present the story on page 9 of the May QST magazine. Excerpts follow:

**Every community has a few bad actors. Because there is an "entrance exam" we like to think that Amateur Radio ought to be an exception. Our population is over 700,000 amateurs and fortunately the number of problem children is rather low.**

**Many problems can be addressed through various forms of peer pressure. Some can only be dealt with that way; but behavior that violates the norms of our community may be annoying or even disgusting, but not necessarily illegal. However, malicious interference—any transmission made for the purpose of disrupting someone else's communication—clearly crosses the line. In extreme, persistent cases we must look to the Federal Communication Commission to enforce its rules. In fact we must insist on it.**

**Once in a while, the FCC does take enforcement action against one of its amateur licensees or someone operating without a license. We publicize those cases, in part as a deterrent, knowing that someone else's aberrant behavior led to a substantial fine should discourage similar behavior.**

**Unfortunately, the opposite is also true; persistent malicious interference coupled with the perception that nothing is being done about it leads to more of the same. Copycats emerge. Also, while our standard advice about malicious interference is to ignore it as best you can and never acknowledge when it's people find that to be easier said than done. Out of frustration they try to retaliate and succeed only in making matters worse.**

**The FCC's Enforcement Bureau has a huge and growing responsibility, and limited resources that cannot keep pace. To its credit, the Commission's management recognizes that it cannot simply keep doing what it's been doing and expect things to get better. The status quo is not satisfactory; Here's why.**

**The Commission does indeed take enforcement action on amateur cases; the perception that nothing at all is being done is inaccurate. But there are a few high-profile situations that have been going on for a long time, sometimes for years., without visible enforcement action. There are others where the initial step or sending a Notice of Violation was taken, but the behavior has continued for months with no evidence of further action. In a least one recent case, the Commission issued a Notice of Apparent Liability for Forfeiture, proposing a hefty fine—but with no apparent follow-up after 8 months. One case has dwindled for over 8 years! Such delays undermine the credibility and effectiveness of the Commission's enforcement program. The ARRL met on March 18-20 with the Enforcement Bureau on Capitol Hill.**

Continued on Page 10

**New procedures update care before, during and after surgery:**

**Traditional Recovery:** Nothing by mouth after midnight before surgery..

**Enhanced Recovery:** Encourage hydration with clear fluids including a carbohydrate-rich drink two to three hours before surgery.

**Traditional:** High volumes of IV fluids during surgery.

**Enhanced:** Careful monitoring of IV fluids to avoid overload.

**Traditional:** Patient isn't always encouraged to walk and eat on the same day of surgery.

**Enhanced:** Patient encouraged to get out of bed and begin eating on the day of surgery.

**Traditional:** Post-surgery pain control mainly by narcotics, which can cause nausea and dizziness and may interfere with bodily functions.

**Enhanced:** Non-narcotic pain medication and epidurals before surgery, minimal use of post-surgical narcotics.

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**WHAT ARE YOUR FEELINGS ABOUT THIS NEW PROTOCOL? Do you feel this is just another way to reduce costs or is it an honorable way to relieve anxiety, pain, and discontent. Drop us an email at warren.brown1924@gmail.com and we'll publish the results next issue.**

## IMMUNOTHERAPY: Unleashing the Body's Attack Dogs

The five-year survival rate for advanced melanoma, the deadliest of skin cancers, has hovered at a dismal 10-20%—until the recent discovery that the breakthrough drug ipilimumab (**Yervoy**) takes the brakes off the immune system so it can recognize and extinguish malignancies. The application of this exciting new treatment extends to many other cancers.



Basic science research on the biology of T cells—the attack dogs of the immune system—laid the foundation for the development of **Yervoy** (*ipilimumab*) which works by blocking a molecule that normally keeps T cells on a short leash. The drug can silence melanoma for years in 22% of patients. Immunotherapy is now a validated standard-of care treatment for cancer patients and is an established modality along with surgery, chemo, radiation and targeted therapy.

Two new drugs that unleash the body's immune system against certain tumors (*melanomas*) are, Merck's **Keytruda** and Bristol-Myers' **Opdivo**, the later now being used against certain lung cancers. Pfizer's new **Ibrance** is to treat breast cancer.

Genetic testing screening for mutations in the BRCA1 (*Breast Cancer 1*) and BRCA2 genes, which elevate a person's risk for both ovarian and breast cancer. A woman with a BRCA mutation has a 30-85% lifetime chance of having breast cancer and a 27-44% chance of getting ovarian cancer. If she has already been diagnosed with breast cancer, she has a 40-60% chance of getting cancer in the other breast. Today, in many cases, breast cancer as well as lymphoma are *controllable diseases* as well as *curable diseases* thanks to immunotherapy plus.

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### THINGS YOU MIGHT NOT HAVE KNOWN ABOUT YOUR CELL PHONE

**FIRST (Emergency)** The Emergency Number worldwide for Mobile is 112. If you find yourself out of the coverage area of your mobile network and there is an Emergency, dial 112 and the mobile will search any existing network to establish the emergency number for you. This number 112 can be dialed even if the keypad is locked.

**SECOND (Hidden Battery Power)** Imagine your cell battery is very low. To activate, press the keys \*3370#. Your cell phone will restart with this reserve and the instrument will show a 50% increase in battery. This reserve will get charged when you charge your cell phone next time.

**THIRD (How to disable a stolen mobile phone)** To check your Mobile phone's serial number, key in \*#06#. A digital code will appear on the screen. This number is unique to your handset. Write it down and keep it safely. If your phone is stolen, you can phone your service provider and give them this code. They will then be able to block your handset so even if the thief changes the SIM card, your phone will be totally useless. You probably won't get your phone back, but at least you know that whoever stole it can't use/sell it either.

**FOURTH (Free Directory Service for Cells)** Cell phone companies are charging us \$1.00 to \$1.75 or more for 411 information calls when they don't have to. Most of us do not carry a telephone directory in our vehicle, which makes this situation even more of a problem. When you need to use the 411 information option, simply dial: (800) FREE411 or (800) 373 3411 without incurring any charge at all. Program this into your cell phone now.

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## WHAT IS IMMUNOTHERAPY ? HOT STUFF !

In the war against cancer we have discovered a powerful NEW tool: *the immune system!* The FDA recently fast-tracked approval of 3 new immunotherapy drugs, called **PD-1** (*Protein Death*) **inhibitors**, designed to help white blood cells hunt down and destroy tumor cells indefinitely. Chemo almost always stops working. This new therapy is training the immune system to attack something foreign, hopefully, for the rest of the patient's life.



**HOW IT WORKS: It's the job of the T-cells to act as the body's infantry to protect the body. When presented with bits of foreign protein from intruders (cancer cells), they activate and destroy infected cells.**

To prevent an uncontrolled immune response, T cells carry a switch: a surface protein called the **protein death 1 (PD-1) receptor**. When engaged, it inhibits T cells' proliferation., thus limiting the size of the body's infantry.

Tumor cells overexpress proteins called **programmed death ligands** that fit into PD-1 like keys to a lock essentially turning T cells **OFF**.

New drugs, such as Merck's **Keytruda** simply binds to PD-1 receptors and blocks cancer cells' access. The immune system unleashes additional T cell infantry which then find and attack tumors.

Thus, the tumor cells are slowly destroyed by the newly activated unrestrained T cells.

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### LISTERIA IN ICE CREAM KILLS TWO IN MIDWEST

**What is Wisteria?** Listeria are small anaerobes that are found worldwide in the environment and in the gut of nonhuman mammals, birds, arachnids and crustaceans. Recently, there has been a recall of Blue Belle ice creams because of contamination.. Listeria monoexogenes is the predominating pathogen in humans. Incidence in the US is about 7 cases per million per year, peaking in the summer. Attack rates are highest in newborns and in older adults. Immunocompromised patients are at high risk.

Listeriosis is bacteremia, meningitis, cerebritis, dermatitis, an oculoglandular syndrome, intrauterine and neonatal infections or rarely endocarditis caused by Listeria. Symptoms vary with the organ system affected and include intrauterine death in perinatal infections.

Infection usually occurs via ingestion of contaminated dairy products, raw vegetables or meats and is favored by the ability of the bacteria to survive and grow at refrigerator temperatures. Infection also may occur by direct contact.

Primary listeremia is rare and produces high fever without localizing symptoms and signs. Endocarditis, peritonitis, osteomyelitis, cholecystitis and pleuropneumonia may occur. Listeremia can cause intrauterine infection, chorioamnionitis, premature labor, fetal death and newborn infection.

Meningitis is due to listeria in about 20% of cases in newborns and in patients 60 years or above. 20% progress to cerebritis, either diffuse encephalitis or rarely, abscesses.

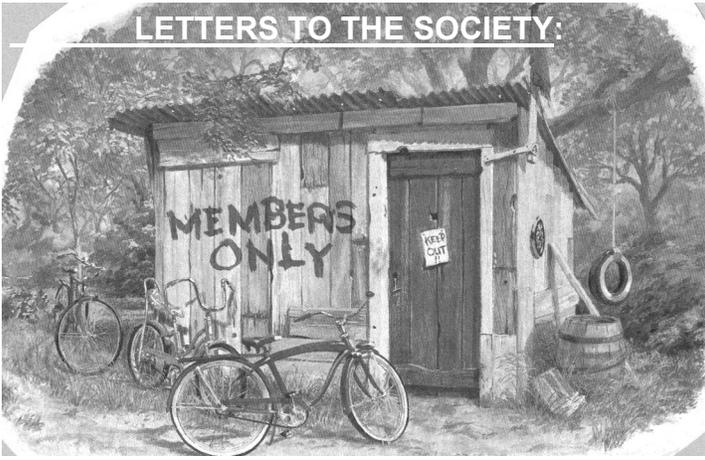
Listerial infections are diagnosed by culture of blood and/or CSF. The lab must be informed when *L. monocytogenes* is suspected because the organism is easily confused with diphtheroids. In listerial infections, IgG agglutinin titers peak 2 to 4 weeks after onset.

Treatment is best with ampicillin 2 gm IV q 4 hr plus adding an aminoglycoside. Cephalosporins are not effective. Erythromycin and trimethoprim sulfamethoxazole are also effective.

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**Where have all the NEON signs gone?** Have you notice there are no neon signs anymore? Neither are there the following cars: Packard, Studebaker, Hudson, Neon, Desoto, Plymouth, Oldsmobile, Pontiac, Kaiser, Frazer, Edsel, Tucker, American Motors, Crosleys, Willys, Hupmobiles, Rickenbackers...*can you name anymore?*

**LETTERS TO THE SOCIETY:**



Kudos from

**Bill Otten, KC9CS, Seminole, FL.,** writes: “The Golden brothers, the inventors of the automobile air conditioner walked into Henry Ford’s office and sweet-talked there with Henry about the most exciting innovation in the auto industry since the electric starter. They were able to talk him into viewing their invention in the car parked nearby. The old man got very excited and invited them back into his office where he offered them \$2 million. The brothers, Lowell, Norman, Hiram and Maxwell refused the offer unless they had their “Golden” name on the dashboard. Ford hesitated and finally offered \$3 million allowing them to place only their first names on the dashboard—and that is how to this day, all auto air conditioners sport their first names, “Lo, Norm, Hi, and Max.”

**Dave Justis, KNOS, Wicomico, VA.,** who has done a lot of investigational medicine submitted an article on injecting foreign objects into individual cells, “Many biologists favorite experiments involve placing foreign biomolecules inside cells and then looking at what happens. This often means inserting nucleic acids to up-or-down regulate expression of proteins but the possibility of adding bigger biological entities, such as whole intracellular pathogens, antibodies or organelles, might prove to be equally fascinating. Researchers routinely generate pores using electroporation, acoustic pressure, laser pulses, or by squeezing cells through microfluidic channels. Although teams could readily induce pores in cells, their large cargo diffused too slowly to actually enter the cell before the pores resealed. Now Eric Pei-Yu Chiou of the Univ. of California, Los Angeles has found a way by using BLAST (biophotonic laser-assisted surgery tool) consisting of a silicon chip with a porous membrane on top. An array of short vertical silicon channels supported the membrane and allowed fluid passage for cargo delivery. *Any questions? Contact Dave on MARCO Grand Rounds, on Sunday morning Eastern.*

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**FORMULAS TO REMEMBER**

**To determine the number of calories needed to maintain weight:**  
Present weight x 15 = the number of calories needed to maintain weight.  
**To lose weight use the formula:** Calories needed to maintain weight-calories eaten divided by 4000 = pounds lost daily.

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**To convert Fahrenheit temperature to Centigrade,** subtract 32 from Fahrenheit, multiply by 5 and divide by 9.

**To convert Centigrade to Fahrenheit** divide degrees Centigrade by 5, multiply x 9 and add 32.

The **Fahrenheit Scale**, created by Daniel Fahrenheit, is based on the melting point of ice and the temperature of the human body. The **Celsius Scale** was created in 1742 by Anders Celsius. It’s based on a division of 100 equal degrees, with 0 being the freezing point of water and 100 being the boiling point.

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**HALF WAVE LENGTH DIPOLE ANTENNA:** Length in feet = 468/frequency in MHz. Example: How long should an 80 meter dipole be? Answer: 468/3.75 (freq) = 125.6 feet.

**QUARTER WAVE LENGTH DIPOLE ANTENNA:** Length in feet = 468/frequency in MHz divided by 2. Example: How long should an 80 meter quarter wave dipole be? Answer: 468/3.75 (freq)/2 = 62 feet.

Remember, as the frequency increases the wavelength decreases.

**Minimum days men should wait between orgasms = present age –7 divided by 4.** (from an ancient Taoist text.)

**EDITOR’S NOTE:** Walter Winchell began broadcasting in 1933 to an audience of 25 million people. The Winchell style was unmistakable. He talked rapidly at 197 words per minute..the voice was high-pitched and not pleasant to the ear; but it was distinctive. The staccato quality made every item compelling. He claimed he talked so fast because if he talked more slowly people would find out what he was saying...he began his radio program with a series of dots and dashes operating the key himself. Telegraphers throughout the country complained that what Winchell tapped out made no sense. He realized he hadn’t the faintest knowledge of Morse code but he refused to have an experienced telegrapher provide the sound effects for him. He wrote like a man honking in a traffic jam.



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**Martin Dugard** in his new book “*Killing Patton*” describes former 54-year old General **Dwight Eisenhower** as a “man who never saw real combat,” and one who was so anxious to please his boss, Gen. George Marshall, by ending the war by Jan. 1, 1945, that he smoked four packs of cigarettes daily. “*Nicotine & caffeine are the only way Eisenhower can manage the stress! He can’t play golf in the midst of war. And right now, it’s still several hours too early for either a weak scotch and water. He is probably alone in his upstairs apartment with a dime-store cowboy novel, or perhaps even a furtive romantic liaison with Kay Summersby, his personal chauffeur.*” At age 36, the divorced Irish brunette wears a captain’s rank has been assigned to Ike for two years.” **The book is extremely well done**—it boasts Bill O’Reilly as a co-author, but who knows—a ghost writer?

**Dr. Stuart Gitlow, retiring President** of the American Society of Addiction Medicine recently stated he is concerned by the possibility of adding marijuana to the mix of alcohol and tobacco as yet another substance with the potential to do more harm than good.. Gitlow noted marijuana works like any other addictive drug. “*There’s no debate at all with the medical community that it’s addictive...that’s a given,*” he said. “*It’s like any other psychoactive drug...it is not addictive in the majority of those using it once or twice. However, there’s no way of knowing if a person is going to have a problem with the drug until they try it and then they are playing Russian roulette.*” “*Of major concern is it’s toxic manifestations—it makes you stupid,*” he stated bluntly. “*It lowers IQ, causing slowing of the processing speed. It causes abnormalities of attention and focus. It basically dumbs you down.*” Gitlow reiterated his frustration at claims of marijuana being a medical marvel. “*There is no medical purpose. No one has ever proven through a double-blinded trial a medial benefit of marijuana.*” (NOTE: Some of my Alzheimer friends might just try going off the weed! )

**There’s a new website** you can’t miss: It’s [bulletproofexec.com](http://bulletproofexec.com) It’s owner, Dave Asprey posts such interesting articles as “wearing orange-tinted glasses, which block out blue-spectrum light, allowing people to sleep so well that they need only 6 hours or less...another—the minimum number of days a man should wait between orgasms is age minus 7, divided by 4. In his “Bulletproof Café” in Santa Monica he features electrically grounded chairs & tables to dissipate static charges and vibration platforms people can stand on to energize their lymphatics.

**Two new drugs that unleash the body’s immune system** against certain tumors, Merck’s **Keytruda** and Bristol-Myers’ **Opdivo**, each costs around \$12,500 a month per patient, or \$150,000 if taken for a year. Pfizer’s new **Ibrance** treatment for breast cancer costs \$9,850 a month, or \$118,200 if taken for a year. Pfizer spokesmen stated the money is fueling the innovation and discovery of immune therapy and future cures.

**The World Happiness Report:** The annual report from the UN’s Sustainable Development Solutions Network, rated Switzerland the happiest country in its 2015 report, followed by Iceland, Denmark, Norway and Canada. [The U.S. was No. 15](#); the least happy nation was Togo .

**Painkiller dulls pleasure too...**Every week, more than 50 million Americans take acetaminophen, the active ingredient in Tylenol to ease their aches and pains. But a new study at Ohio State has revealed the drug also dulls emotions—including happiness. Maybe the 50 million should take aspirin, then we wouldn’t be number 15!

## HEART FAILURE & STEM CELLS

From Lecture Feb. 10, 2015, by Leslie W. Miller, M.D., Clearwater, FL.  
Presented on MARCO Grand Rounds Feb. 22 & March 1, 2015.

Coronary deaths are down by half but heart failure has almost tripled to 7 million in the U.S or 2.6% of the population and 7-10% of those over 70. It is more prevalent in younger men and in older women. Survival from heart failure averages 50% of all types at five years. More days are spent in the hospital for heart failure than any other diagnosis. It is the Number one readmission diagnosis and short length of stay correlates with increased readmission risk. It is most important to follow the latest guidelines and give enough of the right medicine.

Guidelines for acute congestive heart failure: First: Give an ACE inhibitor or blocker (target dose, Lisinopril 20 mg. p.o. or Candesartan 20% relative risk reduction) along with Hydralazine and nitrates if needed. Add a Beta Blocker (Metoprolol, Toprol, Propranolol, which increases the ejection fraction 7-10% with a relative risk reduction of 25-65%. Digoxin .065 daily (in small doses; larger doses have been found to increase mortality from sudden death & other causes) and diuretics (Lasix 40 mg bid) along with Aldactone 25 mg/day if K+ above 5.

LCZ647 (no name yet) is the first new drug in 14 years that shows a survival advantage (20%) and is in Class III studies at this time. It is a combination of an angiotensin receptor blocker & a Neutral Endopeptidase Inhibitor (inhibits BNP breakdown).

**Beta Blocker is the most important oral heart failure med. Increasing the ejection fraction 7-11%.** If the heart rate goes below 60 with walking, reduce dosage.

Factors affecting response to drug therapy are age, race, gender, etiology, dose, genomics.

### REGENERATIVE MEDICINE

(Use of Stem Cells OR/and Genes to activate the body's Native Repair System to help recover or repair any damaged or dysfunctional organs, tissues or vessels.)

**What is a Stem Cell?** Stem cells are the body's repair mechanism capable of endless "immortal" rejuvenation/replication that is capable of differentiating into all types of tissues in the body. They originate in the bone marrow and spread into skeletal muscle, cardiac myocytes, smooth muscle, blood cells, neural/brain, adipose, fibroblasts, bone, and endothelium tissues. Fat cells are the reservoir for stem cells.

**What is a Progenitor Cell?** A progenitor cell is a biological cell that, like a stem cell, has a tendency to differentiate into a specific type of cell, but is already more specific than a stem cell and is pushed to differentiate into its "target" cell. The progenitor cell is stimulated into action by the Stem Cell. The most important differences between stem cells and progenitor cells is that stem cells can replicate indefinitely, whereas progenitor cells can divide only a limited number of times. Controversy about the exact definition remains and the concept is still evolving. Most progenitors are described as oligopotent (few types). They may be compared to adult stem cells. But progenitors are said to be in a further stage of cell differentiation. They are in the "center" between stem cells and fully differentiated cells. They act as a repair system for the body. They replenish special cells, but also maintain the blood, skin and intestinal tissues.

The majority of progenitor cells lie dormant in the tissue. They exhibit slow growth and their main role is to replace cells lost by normal attrition. In case of tissue injury, progenitor cells can be activated. Growth factors or cytokines are two substances besides stem cells that trigger the progenitors to mobilize toward the damaged tissue.

**Mechanism of Action:** Injury followed by damage. Stem cells stimulate the native repair mechanisms resulting in improvement. Stem cells are most abundant in the newborn and decrease in numbers as we age. Stem cells are found in all tissues as resident progenitor cells but are most abundant in the bone marrow, adipose (fatty) tissue, umbilical cord, placenta, menstrual cells.

Stem cells are derived from liposuction and placed in a centrifuge where collagenase digestion of lipoaspirate occurs.

Stem cells derived from mesenchymal muscle (MSC) cells from other people are immuno privileged, there is no allogenic (foreign) cell antigens present. They are therefore called "Immuno Privileged."

At Morton Plant Hospital in Clearwater stem cells derived from young 20 year-old preferably female muscle cells are being used to

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inject into damaged older heart tissue (scars from infarction areas) with rejuvenation and decrease in heart failure symptoms. The "*Dream Trial*" consists of a 1,700 patients International trial Class II/III both Ischemic and non-ischemic heart failure etiology with intramyocardial delivery of 150 M MSC's (mesenchymal cells) injected directly into the damaged myocardium via catheter.

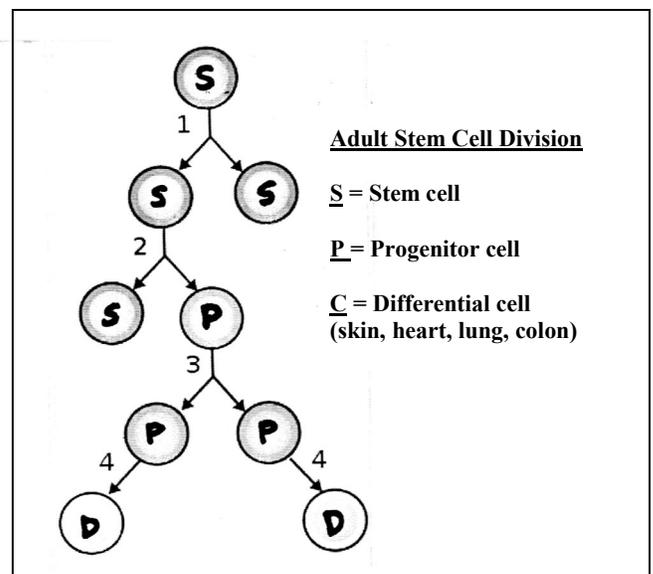
Candidates for the *Dream Trial* must be between 18 and 80 with an ejection fraction of less than 40 who have been hospitalized for heart failure 1 to 9 months earlier with no acute MI, CABG, stroke during the past 3 months. They must be able to walk for 6 minutes x 2 with an overnight stay in the hospital and follow up 10, 30,90,120 days and 1 year.

Stem cells, once placed, live only a few days, having done their job of stimulating the progenitor cells in the muscle tissue.

Another Genetic Engineering of Lineage Specific Cardiopoietic Stem Cells: C-Cure study: Skin fibroblasts exposed to a "cocktail" of growth factors (4 genes) and tropic substances that drives the cells into functioning cardiomyocytes. Phase III of 200-250 patients in Europe have shown decreases in scar tissue, increase in mass and increase in the ejection fraction of 26%! There are 13 Phase IIB trials and 3 other Phase III trials now underway in finding ways to prolong heart life.

**Summary:** This is the end of the beginning. We are learning to utilize the body's native repair system. Stem Cells & Genes have been shown to be SAFE. Efficacy to date is modest. New Era starting. MSC and iPS cells (stem cells derived from fibroblasts) are the most promising. We are entering the decade of new strategies with serious results coming in about two years. Stem cells are given one time whereas drugs must be continued and no toxic or side effects with stem cells. Ejection fraction has been shown to rise 6% in 6-12 months. Some patients are super responders, some not. Microvascularization is increased.

Danny W4DAN, Cleveland, TN. Has submitted the following:  
**Researchers are hopeful that a type of stem-cell capsule could cure patients with Type I Diabetes. The test began last October when a San Diego man had two pouches of lab-grown pancreas cells, derived from human embryonic stem cells inserted into his body. The research is being done by ViaCyte. Other studies by "BetaLogics Venture" and Harvard biologist Douglas Melton are carrying out studies attempting to develop new insulin secreting beta-cells into the body.**



## WHY NOT SEND A HAM FRIEND A MEMBERSHIP IN MARCO

NOT RESTRICTED TO MEDICS. ANY HAM WHO IS A POTENTIAL PATIENT IS ELIGIBLE.

Keep MARCO vibrating!

**Hypothyroidism** is a common endocrine disorder in which the thyroid gland does not produce enough thyroid hormone. It can cause tiredness, poor ability to tolerate cold, and weight gain. In children hypothyroidism leads to delays in growth and intellectual development, which is called **cretinism** in severe cases. The diagnosis of hypothyroidism can be confirmed with blood tests measuring thyroid stimulating hormone (TSH) and thyroxine levels (T4).



Worldwide, too little iodine in the diet is the most common cause of hypothyroidism. In countries with enough dietary iodine, the most common cause of hypothyroidism is the autoimmune condition **Hashimoto's thyroiditis**. Less common causes include the following: previous treatment with radioactive iodine, injury to the hypothalamus or the anterior pituitary gland, certain medications (*amiodarone, interferon alpha, lithium-based mood stabilizers*), a lack of a functioning thyroid at birth, or previous thyroid surgery.

Hypothyroidism can be treated with manufactured levothyroxin; the dose is adjusted according to symptoms and normalization of the thyroxine and TSH levels. In Western countries, this condition occurs in .4% while subclinical hypothyroidism, a milder form characterized by normal thyroxine levels and an elevated TSH level, is thought to occur in 4.3-8.5%. The sub-clinical condition exists in 6% of women and 1.3% in men. The percentage rises to up to 10% in women over 70.

**Signs and symptoms:** Most people with this condition have no or only mild symptoms. **Hashimoto's thyroiditis** may present with a mass effect of a goiter or enlarged gland. There usually is fatigue, dry skin, poor memory and concentration, feeling cold, constipation and dyspepsia, weight gain with poor appetite, shortness of breath, hoarse voice, hair loss, slow pulse, swelling of the limbs, carpal tunnel syndrome and possibly pleural effusion, ascites and pericardial effusion. A delayed relaxation after testing the ankle jerk reflex is a characteristic sign in hypothyroidism. Myxedema coma is a rare but life-threatening state of extreme hypothyroidism. The illness is characterized by very low body temperature without shivering, confusion, a slow heart rate and reduced breathing effort. There may be enlargement of the tongue.

Even mild or subclinical hypothyroidism has been associated with impaired fertility and an increased risk of miscarriage. Women are affected by hypothyroidism in .5% of pregnancies. **Children:** Newborn children with hypothyroidism may have normal birth weight and height although the head may be larger than expected and the posterior fontanelle may be open. Normal growth & development may be delayed. Goiters may follow with aging. **Causes:** Hypothyroidism is caused by inadequate function of the gland itself (*primary*) or by not enough stimulation by thyroid-stimulating hormone (*central hypothyroidism*). The later is rare.

Iodine deficiency is the most common cause of primary and endemic goiter worldwide. In areas with sufficient dietary iodine, hypothyroidism is most commonly caused by the autoimmune disease **Hashimoto's thyroiditis**. This may be associated with a goiter. It is characterized by infiltration of the thyroid gland with T-lymphocytes and auto antibodies against specific thyroid antigens such as thyroid peroxidase, thyroglobulin and the TSH receptor.

After women give birth, about 5% develop postpartum thyroiditis which can occur up to nine months afterwards. This is characterized by a short period of hyperthyroidism followed by a period of hypothyroidism; 20-40% remain permanently hypothyroid.

Autoimmune thyroiditis is associated with other immune-mediated diseases such as diabetes mellitus type 1, pernicious anemia, myasthenia gravis, celiac disease, rheumatoid arthritis and systemic lupus.

**Pathophysiology...**Thyroid hormone is required for the normal functioning of numerous tissues in the body. In health, the thyroid gland predominately secretes thyroxine (T4) which is converted into triiodothyronine T-3 in other organs by the selenium-dependent enzyme iodothyronine deiodinase. T3 binds to the thyroid hormone receptor in the nucleus of cells, where it stimulates the turning on of particular genes and the production of specific proteins.

The hypothalamic-pituitary-thyroid axis plays a key role in maintaining thyroid hormone levels within normal limits. Production of TSH by the anterior pituitary gland is stimulated in turn by thyrotropin-releasing hormone TRH, released from the hypothalamus. Production of TSH and TRH is decreased by thyroxin by a negative

feedback process. Not enough TRH, which is uncommon, can lead to not enough TSH and thereby to not enough thyroid hormone production.

TSH	T4	Interpretation
Normal	Normal	Normal thyroid function
Elevated	Low	Overt hypothyroidism
Normal/low	Low	Central hypothyroidism
Elevated	Normal	Subclinical hypothyroidism

**Diagnosis...**Lab testing of thyroid stimulating hormone TSH levels in the blood is considered the best initial test for hypothyroidism; a second TSH level is often obtained several weeks later for confirmation. Levels may be abnormal in the contest of other illnesses and TSH testing in hospitalized people is discouraged unless thyroid dysfunction is strongly suspected. An elevated TSH level indicates that the thyroid gland is not producing enough thyroid hormone and free T4 levels are then often obtained. Measuring T3 is discouraged in the assessment of hypothyroidism.

Many cases are associated with mild elevations in CK and liver enzymes in the blood. They typically return to normal when hypothyroidism has been fully treated. Levels of cholesterol, LDL and lipoproteins can be elevated.

Very severe hypothyroidism and myxedema coma is characteristically associate with low sodium levels in the blood together with elevations in antidiuretic hormone, as well as acute worsening of kidney function due to a number of causes.

A diagnosis of hypothyroidism without any lumps felt within the thyroid does not require thyroid imaging; however, if the thyroid feels abnormal, diagnostic imaging is then recommended. The presence of antibodies against thyroid peroxidase TPO makes it more likely that thyroid nodules are caused by autoimmune thyroiditis, but if there is any doubt, a needle biopsy may be required.

If the TSH level is normal or low and serum free T4 levels are low, this is suggestive of central hypothyroidism (*not enough TSH or TRH secretion by the pituitary or hypothalamus*). There may be other features of hypopituitarism, such as menstrual cycle abnormalities and adrenal insufficiency. There might also be evidence of a pituitary mass such as headaches and vision changes. Central hypothyroidism should be investigated further to determine the underlying cause.

**Prevention...**Hypothyroidism may be prevented by adding iodine to commonly used foods. Many countries (130) mandate salt iodization.

**Screening...**in the newborn using THS wth addition T4 testing prn.

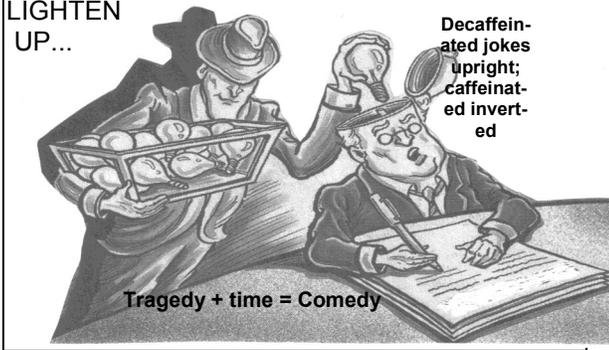
**Liothyronine...**Adding liothyronine (synthetic T3) to levothyroxine has been suggested as a measure to provide better symptom control, but this has not been confirmed. Desiccated thyroid extract is an animal-based thyroid gland extract, most commonly from pigs. It is a combination therapy containing forms of T4 and T3. It also contains calcitonin (*a hormone produced in the thyroid involved in he regulation of calcium levels*), T1 and T2; these are not present in synthetic hormone meds. It 's use is now subsiding.

**Epidemiology...**Worldwide about one billion are estimated to be iodine deficient; however, It is unknown how often this results in hypothyroidism. Women are 7 times more likely to develop hypothyroidism than men.

**Subacute Thyroiditis** (*de Quervain's, Giant Cell*) an acute inflammation usually caused by a virus. Pain in anterior neck and fever often confused with dental pain. Symptoms of hyperthyroidism common, self-limited disease usually subsides in few months but may result in permanent hypothyroidism.

**Simple nontoxic goiter...**May be diffuse or nodular, noncancerous hypertrophy with normal thyroid studies. Cause unknown—most common cause of thyroid enlargement.

**Thyroid cancers...***Papillary Carcinoma*, 75% of all thyroid cancers, women 3:1, ages 30-60, surgery curative. *Follicular Carcinoma*, 10% of all thyroid cancers usually in elderly, surgery mostly curative. *Medullary*, 3%, *Anaplastic*, 2%, usually fatal.



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**11 People on a rope...** Eleven people were hanging on a rope, under a rescue helicopter in flight, 10 men and 1 woman. The rope was not strong enough to carry them all so they decided that one had to leave, otherwise they were all going to fall. They weren't able to choose that person, until the woman gave a very touching speech. She said that she would voluntarily let go of the rope because as a woman she was used to giving up everything for her husband and kids or for men in general and was used to always making sacrifices with little in return. As soon as she finished her speech all the men started clapping.

\*\*\*\*\*

**Australian, Canadian, & US men between 50-75 years** will on average have sex 2-3 times per week, whereas Japanese men in the same age group, will have sex 1-2 times per year. This is very upsetting news to most of my friends, as they had no idea they were Japanese.

A guy sends a text to his neighbor... "Bob, I'm sorry, I've been tripped with guilt and I have to confess: I have been helping my self to your wife when you're not around, probably more than you know it is no excuse but I don't get it at home. I can't live with the guilt any longer. I hope you accept my sincerest apology. It won't happen again." The man, feeling outrage and betrayed, grabs his shot gun, goes into the bedroom and without a word shoots his wife dead. Moments later, the guy gets a second text: "I really should use spell check! That should have been you with", "with"... Sorry for the mistake.

Did you hear about the French groom who was so exhausted by the elaborate wedding reception that he fell asleep the minute his feet hit the pillow.

**A wealthy Arab Sheik** was admitted to the hospital for heart surgery, with a rare type of blood. Finally, a Scot was located and willingly donated his blood for the Arab gentleman. The Arab showing his appreciation sent the Scotsman a new BMW, 5 carats of diamonds and \$50,000 ; A few months later the Arab was readmitted and once again needed blood. The Scotchman was contacted and told the Arab that he would provide his blood if he received the same gifts as the last time. The Arab replied, " No, laddie, not this time, you see, I now have Scottish blood in me veins.."

\*\*\*\*\*

**A Lady decided to give herself a big treat for her 85th birthday** by staying overnight in an expensive hotel. When she checked out next morning the desk clerk handed her a bill for \$450. She exploded and demanded to know why the charge was so high. "It's a nice hotel but the rooms certainly aren't worth \$450 for just an overnight stay!" The clerk told her that \$450 is the "standard rate," so she insisted on speaking to the manager. The manager informed the woman: "This hotel has an Olympic-size pool and a huge conference center which are available for use." "But I didn't use them," she said. "Well, they are here and you could have," explained the manager. Finally, she wrote a check for the manager. He was surprised when he looked at the check, "But madam, this check is for only \$50." "That's correct, I charged you \$400 for sleeping with me," she replied. "But I didn't!" exclaimed the very surprised manager. "Well, too bad. I was here and you could have."

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**Muslims** don't recognize Jewish people as God's Chosen People! Jewish people do not recognize Christ as the Messiah. Protestants do not recognize the Pope as the leader of the Christian world and Baptists don't recognize each other at the liquor store.

\*\*\*\*\*

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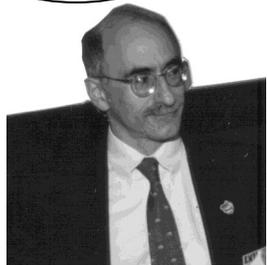
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**WHERE DID ALL THE NEON LIGHTS GO?** Remember them? How many defunct automobiles can you name? How about Packard, Studebaker, Hudson, Nash, Desoto, Plymouth, Oldsmobile, Pontiac, Kaiser, Frazer, Edsel, Neon, Willys-Knight, Crosley, Rickenbacker, Star, Hupmobile, Tucker—**Send in, any additional to warren.brown1924@gmail.com**

Hello, I'm Bruce



**MEMORIES OF YEARS AGO**

**IN MARCO**

*Our History Book*

**Bruce Small, KM2L**

**Marco Webmaster**

**25 YEARS AGO IN MARCO**

May 1990's edition of the MARCO NL opened with a review of the annual meeting, held in Dayton, and included a critique of the business meeting. The momentous decision was to establish a charitable fund for the purpose of soliciting donations for the various hospitals that MARCO is involved with. Doc Kissinger K3KSI, entertained the banquet audience with tales of his time in Afghanistan in the 1960's. Member Barry Kutner W2UP, won the HamVention CW proficiency test.

The picture gallery featured youthful- appearing Roger Higley W8CRK, Eric Ludin N2EL, Polycarp Gadegbeku WB4PLC, Fred Simowith K0FS, Ira Wexler W3HEF, Dick Doncaster WB3AJC, Harry Baron N3EMX, Ken Coven W0ZQJ, Ed Westcott W4UUVS, Robin Staebler NN3L, Don Mallinson K2TNY, John Thompson K3MD, Doc Kissinger K4KSI, Doug Badell N9IGB, Barry Stegall KE8ZP, Bill Sprague WA6CRN, Bill Hubbard W5HXR, Bill McGrannahan K0ORB, Ed Ludin K2UK and Ed Briner WA3TVG.

**TWENTY YEARS AGO IN MARCO**

The April 1995 edition of the MARCO Newsletter declared that the recently-concluded annual meeting in Charleston, SC was fun and provided a recap of the weekend's events. An excited Ed Briner WA3TVG thanked Marco's board for selecting him along with Bill Sprague WA6CRN as the first two members of the MARCO Hall of Fame. Ed also spilled the news that he had been selected for HamVention's Special Achievement Award. This issue included a full MediShare International report, courtesy of Smitty, W6JZU.

The Newsletter finally got smart and printed pictures of lovely MARCO ladies: Ruby Briner, Melinda Wittich, Marilyn Currier, Mary Kaye Favaro, Terry Small, Jan Badell and Marian Morgan. He hid the guy's pictures (Bud KE2DT, Walt KR4VK, Ted KQ4IC, Bruce KM2L, Bob VE3OQM and the Ma\*\*\*\*\* N N96 NNRCO trio) in the back.

**FIFTEEN YEARS AGO IN MARCO**

A REVIEW OF THE Revolution in Diabetic Care led off the June 2000 issue of the MARCO Newsletter. We also learned How Lasers Work. The annual meeting in Dayton was marked by the selection of Keith N3IM as President-elect and the announcement of Clearwater, FL as the site of the 2001 meeting. This was the year that we broadened the Regular Membership category in MARCO to include anyone who is a licensed professional in the health care field who holds an amateur license.

Smitty W6CS brought us up to date on events in Ukraine and Malawi in his MediShare International column.

**TEN YEARS AGO IN MARCO**

The June 2005 MARCO Newsletter asked the question "What is Pirate Radio," and then answered it. A lively Grand Rounds discussion on physician sloppiness in physical examination technique was also reprinted. This meaty issue also discussed whether ham radio is hazardous to your health, and offered guidelines for keeping safe.

Minutes of the 2005 MARCO annual meeting, held in New Orleans, reported that Arnold WB6OJB was nominated as President-Elect, and Danny W4DAN was chosen as Assistant Secretary. Paul N6DMV's fascinating life story continued, with this chapter dealing with the period of the Hungarian Revolution.

**BOB CURRIER MARCO GRAND ROUNDS OF THE AIR.**

14.342, Sundays, 11 a.m Eastern, One Hour Cat. II CME

CALL	HRS.	NAME	QTH
KD4GUA	17	Warren	Largo, FL
KC9CS	17	Bill	Largo, FL.
N6DMV	17	Paul	Torrance, CA
NU4DO	16	Norm	Largo, FL
N2JBA	16	Ed	Amenia, NY
N5AN	16	Bud	Lafayette, LA
N4TSC	15	Jerry	Boca Raton, FL
N9RIV	15	Bill	Danville, IL
W6NYJ	15	Art	Beverly Hills, CA
WB6OJB	14	Arnold	Pac.Pal., CA
KNOS	14	Dave	Virginia
W2PAT	14	Marv	S.Carolina
N5RTF	14	Chip	New Orleans, LA
KM2L	14	Bruce	Clarence, NY
WB1FFI	14	Barry	Syracuse, NY
N2OJD	14	Mark	Sidney, Ohio
W1BEW	13	Bobbie	Tennessee
KE5SZA	13	John	Marietta, OK
KK1Y	13	Art	Seminole, FL
N4MKT	13	Larry	The Cottages, F
KD5QHV	13	Bernie	El Paso, TX
K6JW	12	Jeff	Palos Verdes, CA
W1HGY	12	Ted	Mass.
N9YZM	12	Mike	Crystal Lake, IL
W8LJZ	12	Jim	Detroit, MI
WB9EDP	12	Harry	Chicago, IL
K4JWA	11	Jim	W. Virginia
W2MXJ	11	Joe	New Orleans, LA
K9CIV	10	Rich	Knox, IN
WA1EXA	10	Mark	Cape Cod, Mass.
N7NLN	9	Mort	Grand Canyon, AZ
W4MEA	9	Max	Hixson, TN
K0FS	9	Fred	St. Louis, MO
KD8IPW	9	Mary	W. Virginia
W4DAN	9	Danny	Cleveland, TN
KE5BQK	8	Linda	El Paso, TX
K4RLC	8	Bob	Raleigh, NC
W1RDJ	7	Doug	Cape Cod, Mass
WA3QWA	7	Mark	Chesapeake, VA
N0ARN	7	Carl	Colorado
WA1EXE	6	Mark	Cape Cod, Mass.
W8EYE	6	Darryl	New Phila. Ohio
WB5BHB	5	John	Vanceleave, MS
N4DOV	5	David	Ft. Lauderdale, FL
KE3XB	5	John	Nashville, TN
AE4BX	4	Mary	Myrtle Beach, FL
W0RPH	4	Tom	Denver, CO
W9JPN	4	Wally	USA

YEAR	TOTAL CHECK-INS	AVERAGE PER SUNDAY
1998	694	14.46
1999	766	15.95
2000	1,035	20.29
2001	1153	22.60
2002	1383	26.15
2003	1489	28.63
2004	1534	29.50
2005	1517	29.17
2006	1531 (one extra Sunday)	28.89
2007	1591 (one extra Sunday)	30.02
2008	1524 (Only 46 nets)	33.14
2009	1533 (46 nets)	33.32
2010	1591 (44 nets)	36.22
2011	1514 (44 nets)	34.41
2012	1602 (44 nets)	36.41
2013*	1400 (44 nets) (New Freq)	31.82 (Year of Terrorist)
2014	1756 (47 nets)	37.36
2015	604 (17 nets)	35.53

Record number of stations checked-in was 51, on Feb. 24, 2013

\*This was the year we had to change frequency due to the terrorist, thus losing a lot of stations in the freq. shift.



## **MARCO ANNUAL MEETING, MARCH 20, 2015**

**Submitted by President Jeff Wolf K6JW**

The annual Membership Meeting of the Medical Amateur Radio Council was held on March 20, 2015 at the Western Museum of Flight in Torrance, California.

Present were Malin Dollinger KO6MD, Arthur Kahn W6NJY, Jay Garlitz AA4FL, Bernard Krasowski KD5QHV, Linda Krasowski KE5BQK, T. "Chip" Keister N5RTF, Bruce Small, KM2L, Joe Breault WB2MXJ, Paul Lukas N6DMV, President Jeffrey Wolf K6JW, Newsletter Editor Warren Brown KD4GUA and MediShare Director Arnold Kalan WB6OJB.

The meeting was called to order at 9 :03 AM, PDT. Those in attendance introduced themselves.

In the absence of the Secretary, the minutes of the last meeting were read by N5RTF and approved.

**The Secretary's report** was presented by Jeff due to the absence of Sec. Marcia Lochner. The report included three donations to MediShare. There are 221 members of MARCO, including 20 with complimentary membership. We have 124 paid up members. The President does not have the names of those who are in arrears. The Secretary has reserved a block of rooms for MARCO during HamVention at the Clarion in Dayton.

**The Treasurer's report** was presented by Jeff due to the absence of Treasurer Mary Favaro AE4BX. Due to Mary's efforts, MARCO's funds were transferred from the account formerly managed by the late WA1HGE to a Wells Fargo Bank near Mary's home. MARCO's principal officers are all now signatories. MARCO's General Fund balance as of March 6, 2015 was \$11,600.73. The MediShare account balance as of March 6, 2015 was \$6,074.18. AA4FL clarified that the disbursement to him listed as "*expedition*" was, in fact, reimbursement of the fees for hosting our web domains. WB6OJB indicated that is figure (\$775; *see below*) for member contributions did not agree with the amount reported. It was not clear what fiscal year was used in the Treasurer's calculation.

The status of the Secretary was discussed. Our by-laws specify that officers must be regular members of MARCO. Marcia, the current Acting Secretary, is not a licensed amateur radio operator, and thus is not eligible. She was informally appointed Assistant Secretary last year and has filled the role since the resignation of W4DAN from the Secretary's position. A motion to formally appoint Marci Lochner as Assistant Secretary was made, seconded and carried. At the Marco membership in 2016, it will be necessary to elect a Secretary who is a regular (*i.e., licensed*) member.

N5RTF moved that we appoint N7NLN as Director for the 7th call area. This motion passed. K6JW indicate that he would contact him to be certain he would accept the position. (*he later refused the position*).

**MediShare report:** WB6OJB reported that since the last meeting, donations to MediShare totaled \$775.

**Aether and Grand Rounds Report:** KD4GUA would like more radio-oriented submissions to the newsletter. He will recognize those donating \$100 or more to MediShare in the Newsletter, although it will not list the specific amounts donated. Those receiving the recent pdf copy of the *Aether* gave it a positive review; he will continue to mail it via our email list. KE5BQK suggested that one issue per year contain an envelope for members to use to donate to MediShare. KD4GUA was concerned that this would increase our postal cost. The issue was deferred and left unresolved. K6JW recognized Warren for his reliable, high-quality work in producing both the newsletter and Grand Rounds.

**Web committee:** The Marco Website is edited and managed by Dave Lieberman KT8E, and KM2L should not be listed as "*Webmaster*" in MARCO's publications. Discussion ensued over the listing as Webmaster as opposed to the Web Committee. The issue was not actually resolved, and it appears that KM2L will be listed as Webmaster until resolution can be obtained. The Web Committee has, over the years, received misdirected email intended for MediShare, a health insurance company. AA4I set up an auto-forwarding response so that these communications go to the proper recipient without intervention. The software also sends notification of the forwarding to the original sender. So far, this has worked well. KM2L continues to maintain MARCO's blog.

**One of the enduring mysteries of life is what draws two people toward each other?** Not necessarily the romantic type but the type that brings two person together in friendship.

Scientists would have us look at pheromones, those chemical messengers each person gives off through his skin and breath. Research indicates that the right pheromone can trigger a love affair. It may not keep it going, but it can be a powerful starter. Unfortunately, there's no way to control our pheromones. We're stuck with the ones we have.

Another element of personal magnetism is the subconscious. If one's beloved mother was a tiny dark-haired woman, his/hers subconscious will see to it that they will probably be drawn to short, brunette women throughout life, whether they are romantic, friends, landladies or traffic cops. We are moved to reactivate happy memories as best we can.

Common backgrounds are a factor in friendships, but only at the outset. A shared passion for Ham radio will bring people together. So will the memory of fighting a war.

A sense of safety is a big reason for our remaining close to someone. When a person walks into a room or answers a CQ he/she represents either a threat or a promise. We can feel neutral of a while, but not long. Within minutes of talking to a stranger, we will place them into one of two cubby-holes; an OK "safe" person or a not OK "fearful" person.

Maybe fear and safety are terms too strong. Call it comfort. One usually likes to know people who are brilliant, witty, well traveled, debonair. But some of these are high on intellect and short on human kindness. At the end of the road, most want to be with companions who are comfortable. Shared suffering can be a compelling bond. If two people have both lost a child they would share a common grief. Dried tears of yesterday will lead you to my door and me to yours.

Magnetism and friendship take many forms. When it pulls, be it on the air or in the living room, we're wise to go along with the pull—life is full of surprises, some very rewarding.

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**Radio-Internet Coordinator report:** N5RTF provides streaming audio of Grand Rounds when he can hear net control. Bobbie W1BEW acts as an alternate receiver site.. KM2L also hosts a Skype conference call and patches in the audio of the lectures as heard at his station. N5RTF also acts as net control for the CW net that precedes Grand Rounds. He states that there are usually about four check-ins.

**Old Business:** None

**New Business:** WB6OJB relayed a request for support by MediShare from "*Shoulder-to-Shoulder*." This organization runs a dental clinic in an underserved area of Honduras. MARCO Director Roger W8CRK will be volunteering there later this year, and initiated the request for support. It was moved by AA4FL and seconded by KE5BQK that we donate \$250 to support W8CRK's effort, with a request that he provide feedback after his return. The motion was carried.

AA4FL shared a number of his thought about the organization's future. He stated that it is important to attract younger membership, and that our weekly on-air lecture series may not be appealing to this group. Medical/Dental DXpeditions may be a way to introduce younger practitioners to ham radio. Jay may be involved in a 2016 expedition to Kiritimati along with a Brazilian group and Pacific Medical Air.

Another thoughts to involve MARCO, perhaps through ARRL, with academically-affiliated hospitals to assist in developing emergency communications capability.

AA4FL also recommended that MARCO become involved in social media. He moved that we establish a Face book group, to be maintained by the Web Committee...this motion was passed.

N5RTF moved that MARCO establish a \$500 scholarship for licensed ham operators who are applying for graduate-level training in the medical arts. This would be run through the ARRL. This motion was passed. AA4FL will contact ARRL on this matter.

N5RTF suggested that we setup a Paypal button on our web pages for MediShare donations. The details will be worked out by the Web Committee.

The meeting was adjourned at 11:05 PDT on KD5QHV's motion.



With that as background, it is understandable that we received the news of the planned restructuring of the Enforcement Bureau field staff with more than a little skepticism. Given everything that's on their plate—of which Amateur Radio is just a small part—reducing the number of field agents from 63 to 33 and the number of field offices from 24 to 8 hardly sounds like progress.

One element of the plan is the establishment of a **“Tiger Team”** of field agents based in Columbia, Maryland and available for deployment as needed. Presumably they would be sent into an area to work on a serious problem at high intensity for a set period and then would move on. That might be effective in some cases but not in all. Jammers may be seriously misguided but they're not necessarily stupid. They know that if they operate unpredictably they are less likely to be caught. It may take months for affected amateurs to document a pattern of operation—but even then, how likely is it that the FCC will send in the “Tiger Team” solely in response to amateur complaints? It's more likely that our problems will receive attention, if at all, in combination with complaints from other services in the same geographic area. Catching the jammer will be as much a matter of luck as of anything else and if the item's visit is unproductive, it may be a long time before they return.

To be fair, at least on its face the planned restructuring—described as “Enforcement Field Modernization Phase 1”—is not all bad news. Its advocates, specifically the FCC Managing Director and Enforcement Bureau Chief, say that it will make radio frequency spectrum enforcement the primary focus of the field offices and that all field agents will have electrical engineering backgrounds. Offices such as in New York City, where the field agents are now spread too thin, will get more resources. Equipment will be pre-positioned so agents can be flown in and will not have to drive vans great distances. The existing management structure may indeed be top heavy and could benefit from some streamlining

As the saying goes, the proof of the pudding is in the eating. If the Commission goes forward with this plan it must deliver a meal that is palatable to skeptics like us.

Fortunately we have not been bothered by the *terrorists* to any extent but they recently came back using foul language and interruptions on a minor scale...it is evident apparently that they still maintain their radio licenses and still haven't paid their fines. Amateur Radio needs more people like David Sumner, K1ZZ.

**HOW TO BEAT THE TELEMARETERS**

Three little words that work....**“Hold on please...”** Saying this, while putting down your phone and walking off (instead of hanging up immediately) would make each telemarketing call so much more time-consuming that boiler room sale would grind to a halt. When you hear the phone company's *“beep-beep-beep”* tone, you know its time to go back and hang up your phone.

**Did you ever get those annoying phone calls with no one on the line?** This is a telemarketing technique where a machine makes phone calls and records the time of day when a person answers the phone. This determine the best time of day for a “real” sales person to call back. What you can do after answering, if you notice there is no one there, is to immediately start hitting your # button on the phone 6 or 7 times as quickly as possible. This confuse the machine that dialed the call and it kicks your number out of their system.

**THE DIFFERENCE BETWEEN “SENSITIVITY & SPECIFICITY**

True Positive / True Positive + False Positive = Sensitivity  
For example: 70 True Positive/70 True Positives+ 10 False Positives= 70/80 =87% Sensitivity.

True Negative / True Negative +False Negative = Specificity  
For example: 70 True Negatives / 70 True Negatives+10 False Negatives= 70/80 = 87% Specificity.

**Differentiating sensitivity from specificity is sometimes confusing.**



**COMING TO YOUR HOSPITAL? Three residents looking for a job. Guaranteed to improve your re-admission rate.**

**THE THREE STOOGES...**Chief Honcho Moe (1897-1975), with stethoscope above, was born Moses Harry Horwitz in Brooklyn, N.Y. Two of his brothers would join him in show biz: older brother Samuel, known onstage as Shemp, and younger Jerry, who took the stage name Curly.

Moe's mother liked Moe's long curly hair and wouldn't let him cut it. At 10, he couldn't take the teasing anymore and cut it off with scissors. The haircut that looked like everything had been chopped off below a bowl became his trademark look.

In 1909, he dropped by Brooklyn's Vitagraph Studio, which made silent movie shorts and began doing unpaid errands for the actors. Running errands led to bit parts and he was on his way.

After serving on board a Mississippi steamboat he returned to Brooklyn and in 1916 signed as a duo with his brother Shemp in vaudeville. They jammed 23 shows into weekends and remained a stage hit until 1922. That's when a childhood friend, Ted Healy, hired Moe to join his act. Soon Shemp, plus song-and dance man Larry Fine, were also on board. They toured as Ted Healy and his *Three Southern Gentlemen*, for \$100/week.

Soon Healy and Shemp were out and Moe's brother Jerry was in and they had a new name, **“The Three Stooges.”**

In 1934, they signed with Columbia to make comedy shorts to show between feature films. On screen, Moe, as the leader, used slaps and raps to keep the others in line which soon became their trademark.

Curly had a stroke in 1946 and Shemp returned for the next 77 films. When he died in 1955, four shorts had actor Joe Palma pretend to be Shemp, then Joe Besser became the new Stooge until 1948. Larry had a stroke early in 1970 and died in 1975 and later that year Moe died at age 77.

Despite the obvious evolution of automobiles, clothes and even language over the many decades, the Stooges' shorts haven't become dated. Their popularity lives on accepted to be the most popular and influential comedy group in the history of American film—their motto, *“Oh, you're an intelligent imbecile!”*

**THE ARRL VOLUNTEER EXAMINER**

Today, there are over 37,000 ARRL Volunteer Examiners in all 50 states and more than 40 countries. If you would like to become an ARRL Volunteer Examiner, you must hold at least a General class license and pass an open-book review based on *The ARRL Volunteer Examiner Manual*.

ARRL Volunteer Examiners administered nearly 75% of all FCC Amateur Radio exams in 2014—an all-time record. More than 900 a week! While the majority of exams were for Technician licensees, 2014 also saw a 13% increase in license upgrades.

The easiest way to renew your radio license free each 10 years, is to fill out the ARRL License Renewal Notification form that is sent to every member 4 months before his or her license expires, and return the form to the ARRL in the mail.

**BACKGROUND:** At a recent Marco meeting in Myrtle Beach, SC., Wayne Rosenfield, K1WDR came to the Aether News Editor with a wonderful story of the heroism by a ham operator named Capt. Kurt Carlsen W2ZXM of the “*Flying Enterprise*,” a ship caught in a hurricane in the North Atlantic in 1951. Ironically, the News Editor, at the time, was a Navy medical officer aboard the USNS General Leroy Eltinge that stood by to possibly rescue passengers aboard that very ship. On top of that, the News Editor’s “Elmer” was a South African ham, Olliver Pierce WU4i, who at that time was corresponding by radio with Carlsen. Below, is this wonderful story, “*Simple Courage*,” written by Frank Delaney, ISBN 1-4000-6524-0, available at Amazon.com

In late December 1951, Capt. Kurt Carlsen, 37, had run into a hurricane off the South English coast aboard his cargo vessel *Flying Enterprise*. The Captain ordered “abandon ship” and a line was passed from a rescue lifeboat and passengers and crew were ordered to jump into the raging waters with lifelines attached, but the Captain remained on board. Prior, by the time she was ready to return to New York from Hamburg, *Flying Enterprise* was loaded with consignments of which have contributed to the half century of questions hanging over her—just why did *Flying Enterprise* become a mystery ship and why did her Captain refuse to leave his ship. The ship left Hamburg on Dec. 21, 1951 for New York and the unexpected. A storm soon arose and in the midst of the storm the *Flying Enterprise* snapped open amidships and was quickly strapped and cemented back in place. Meanwhile the storm raged....a huge wave finally sent the ship listing 25 degrees on the left side....and the crew and passengers prepared to abandon ship—but not the Captain.....

On the sea, visibility grew poor again; soon it would be described as “nil.” By now a flotilla had settled nearby to help this ship, which they couldn’t see through the spray but could almost feel: *Southland*, *War Hawk*, *Sherborne*, *Westfal Larsen*, the German freighter *Arion*, and *General A. W. Greely*. *Greely* had taken 24 hours since the distress signal to arrive and had, to Carlsen’s delight, a Danish commander, Nils Olsen. His first glimpse of this ship that he had come to help moved him to write an arresting entry in *Greely’s* log.

The *Enterprise* was laying on her port side listing from sixty to seventy degrees and wallowing about helplessly in the trough. Her port side weather decks and cabin decks were awash and with a heavy roll to port it appeared as if her cross trees would almost touch the water. At the time it seemed impossible for her to stay afloat much longer and in the event of another gale I believed that what watertight integrity she retained would collapse sinking her immediately.

Carlsen’s candidate to lead off the abandon-ship order, Frau Muller, reached his side; he talked to her nonstop, reassuring her. As the boat came in, she was seen to respond to his gestures and climb onto the ship’s rail. When Carlsen tapped her on the shoulder, Frau Muller, with heartbreaking courage, jumped into the Atlantic—and sank. She surfaced immediately; her face and her hair and her clothing had been coated with the thick oil from *Westfal Larsen*.

The oil may have helped somewhat—but how does one measure “*somewhat*” in waves that rose higher than a house? Elsa Muller wiped the oil from her eyes—and lost the rope. She found it again and yanked on it, as though she might haul the lifeboat toward her. On the drenched and swooping deck above, her husband and children looked down at the small figure fighting this massive sea. The *Southland* men drew her in, and all hands helped her aboard. Immediately, the boat retreated as though positioning itself to return for another passenger. But instead of coming in again, the lifeboat moved farther out—and disappeared into the spray.

What Carlsen couldn’t have known was that the crewman in charge of the *Southland* boat had headed back to his own ship, where he was about to tell his captain that he greatly feared being swept in under the overhanging hull of the heaving *Flying Enterprise*.

Henry Brazil, the second mate of *Southland*, who ran his ship’s rescue effort, recalled the danger: “On the first attempt I came about 20’ away and threw a heaving line, but the decks of the *Enterprise* were awash, and every time I come up, the sea would go below the bulwarks, and I was afraid I would get caught in the wash, and then I couldn’t get away any more. So from then on I decided to lay off. When I rescued the first passenger, it was by throwing the heaving line.”

As Brazil battled through the waves back to *Southland*, his one survivor, Elsa Muller, repeated over and over to the lifeboat crew one of the few words of English she knew: “Children.”



The skipper of *Southland*, William Lawton, agreed with Brazil on the risks of getting trapped by the wash under *Flying Enterprise’s* port hull. Yet Brazil went back again, if more cautiously than before.

During his absence, Carlsen and George Brown puzzled over the disappearance of the lifeboat, and Brown said, “Why don’t we launch our boat?” On Carlson’s orders, John Drake, his first assistant engineer, and John Crowder, his second, climbed into the port boat. Brown watched: “Then the weather was getting rougher. it was definitely getting rougher.” He went to help.

As Brown began to loosen the metal-and-canvas gripes by which the boat was fastened to the davits, the watching crew members and Carlsen—suddenly yelled at him to stop. Not surprisingly, Carlsen’s pessimism had proven strongly founded; any attempt to launch the port lifeboat could bring serious injury.

With winds rising to Force 6 and falling back to Force 4, M.V. *Sherborne* launched her boat, which made a journey toward *Flying Enterprise*. Her crew saw that no passengers could be rescued easily or securely in those seas and turned back toward the mother ship—whereupon she capsized, pitching her four men into the water. *Sherborne* herself managed to pick them up.

Next, *War hawk* launched her boat, and its crew never even got near *Flying Enterprise*—the lifeboat capsized almost as soon as it pulled away from *War Hawk’s* side. Those lifeboat crewmen also managed to get back to their mother ship.

On *Flying Enterprise*, only one person knew of these—quite literal—upheavals. In the radio shack, David Greene monitored transmissions from the other ships to each other and to him. His main difficulty lay in trying to conserve his batteries and yet get on the air often enough to eavesdrop on the exchanges between the rescue ships. That was how he heard that boats were capsizing out there in the spray. Her relayed each development to Carlsen.

At one stage, judging from the traffic he was overhearing, Green feared that no more boats were going to come; then, luckily, he said, “Somebody hollered in the doorway and said, ‘Here come the boats.’” It was a surprise to him. Also, he had begun to learn, the rescuing ships had a different perspective on how *Flying Enterprise* rolled and how she laid in the water. Greene took in the observations that they offered—how and from where people might most safely jump off the ship—and got that advice out to Carlsen on the boat deck.

The *Southland* lifeboat came back, having deposited Elsa Muller—but it stood off for about an hour. A kind of grim comedy of hand waving began, in which the men in the *Southland* lifeboat waved to *Flying Enterprise*, indicating that passengers should begin jumping into the water, while Carlsen gestured emphatically at the lifeboat to beacon it in. Carlson, irked, said to Brown, “*We got to get these passengers off, why don’t he come in closer?*”

Brazil remained cautious—understandably, in waves now so high. “I would say that I could walk off the lifeboat to the deck sometimes and at other times I’d say I was more than 15’ below,” he recalled. He couldn’t see *Flying Enterprise* half the time because he went so far down in the trough.

By now, nineteen-year-old Leanne Muller had descended the ladder and, hand over hand along the rail, came to where Carlsen stood on the boat deck. The rescue had run into a deadlock—with a boat that felt it could not come in closer and passengers who did not want to jump in and swim so far. Brown made a decision.

“I told the Captain that if he wanted, I would take a chance with one passenger, and jump. He was scared to let us go at first. “Not scared—perhaps justifiably concerned; the sea continued to wash-up t where they stood, visibility waxed and waned, and the weather seemed to be worsening again. As Brown reported, “I know what he was scared of. He was scared that we would get washed back into the ship’s plates.”

(Continued next edition)

**NEW FACES\* for MARCO & RENEWALS, as of May 8, 2015**

Bylander, Ernest KE5GPH  
 Fatta, Louis V. KB9OOM  
 Fink, Marc WA3QW  
 Edward Rubin N2JBA  
 Varga, Michael NR3C  
 York, John\* KG5GHU

Interested:  
 DeJong, Garret KB1EDY



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 Internet address: lochner.marcia5@gmail.com**

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Sunday	11 a.m.	14.342	KD4GUA

MARCO Grand Rounds is held every 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 credit, Category II CME with your check-in

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