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

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P.O. Box 127, Indian Rocks Beach, FL., 33785-0127

ARTIFICIAL SWEETENERS

WHICH IS SAFEST? "SWEET 'N LOW PINK SACCHARIN," "EQUAL ASPARTAME BLUE," OR "SPLENDA SUCRALOSE YELLOW" THEY ARE ALL SAFE IN MODERATION.

A sugar substitute is a **food additive** that provides a sweet taste like that of table sugar (sucrose) while containing less or no calories. Some are **natural** and some are **synthetic**. Those that are not natural are, in general, called "**artificial sweeteners**."

An important class of sugar substitutes is known as **high-intensity sweeteners**. These are compounds with many times the sweetness of sucrose (common table sugar.) As a result, much less sweetener is required. The sensation of sweetness caused by these compounds is sometimes notably different from sucrose, so they are often used in mixtures that achieve the most natural sweet sensation.

If the sucrose (or other sugar) that is replaced has contributed to the texture of the product, then a bulking agent is needed. This may be seen in soft drinks or sweet tea that are labeled as "**diet**" or "**light**" that contains artificial sweeteners and often have a notably different mouth feel,

In the U.S., seven intensely sweet sugar substitutes have been approved. They are **stevia (Truvia)**, **aspartame (Equal)**, **sucralose (splenda)**, **neotame (Nutri-Sweet)** **acesulfame potassium (Ace-K)**, **saccharin (Sweet 'n Low)**, and **advantame**. Another, cyclamates are used outside the U.S. but have been prohibited in the U.S. since 1969. There is some controversy over whether artificial sweetener usage poses health risks. The FDA regulates artificial sweeteners as food additives and has eventually **found no risks**. **Stevia** is exempt under FDA policy due to its being a natural substance in wide use before 1958, and has thus been approved by FDA. The majority of sugar substitutes approved are artificially synthesized compounds. Some bulk **natural sugar** substitutes are known, including **sorbitol** and **xylitol**, which are found in berries, fruit, vegetables and mushrooms.

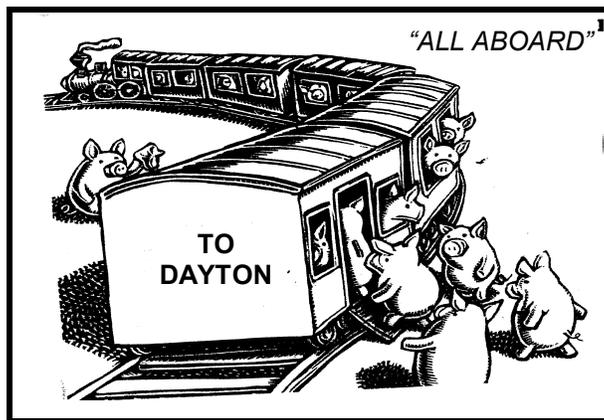
Some **non-sugar sweeteners** are polyols, also known as "**sugar alcohols**." These are less sweet than table sugar but have similar bulk properties and can be used in many food products. Sometimes the sweetness profile is "**fine-tuned**" by mixing with high-intensity sweeteners. (*mixing natural sweeteners with synthetic ones*).

These products are used to assist in weight loss, prevent erosion of teeth, in diabetes Type 2 and because they are usually cheaper than regular carbohydrate foods.

A 2014 study by Israeli scientists presented experimental evidence that artificial sweeteners may **exacerbate**, rather than prevent, metabolic disorders such as diabetes type 2. They reported that artificial sweeteners increased the blood sugar levels in both mice and humans by altering the composition and function of the gut flora. There is no evidence that these products induce cancer. Regardless, the use is increasing and the Israeli findings **have not been substantiated**.

Equal (Aspartame) is currently the most popular artificial sweetener in the U.S. However **sucralose (Splenda)** may soon replace it.

Equal was discovered in 1965. It is about 200 X as sweet as sugar



DID YOU MISS GRAND ROUNDS?

If you did, you can listen on access address

<http://50.97.94.44/stream>

The Archive page address is:

<http://50.97.94.44:2199/start/tkeister>

& notify warren.brown1924@gmail.com for Cat. II CME credit.

NEED CATEGORY I CME?

Go to www.mpmcme.org enter; go to "medical surgical archives" and a list will pop up...pick the lecture you want (includes mandatory ones) & when completed take the simple test and submit it to "Lee" for accreditation. When your medical license is up for renewal, notify Lee & she will submit the papers required. Tell her you affiliated with the hospital through MARCO and Dr. Warren Brown.

(Tnx to Morton Plant Hospital, Clearwater, Florida, an associate of the University of South Florida medical school.)

LATE BREAKING NEWS

Dayton HAMFEST, May 19-21st....Marco suggests you stay at the Clarion Inn Dayton Airport Hotel, 10 Rockridge Rd., Englewood, Ohio 45322. Phone 937 832 1234 for reservations—ask for the Marco discount.

HIGHLIGHTS OF THIS EDITION

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"A Note from our President," "Mary's Ebola Exercise," page 3.
"Letters to the Society," "Newsense", page 4.
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"Macular Degeneration," as per Marco Grand Rounds," page 6.
Funnies and MARCO officers, on page 7.
"MARCO's History," & Grand Round standings, on Page 8.
"Lupus," as per Marco Grand Rounds, page 9.
"Can Man Fly to Mars?" & More Letters to the Society, Page 10
"Simple Courage," book revue on page 11.

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 <u>confidential</u> 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.

sucrose) but cannot be used in baked products as heat destroys it. It has been found safe by over 100 regulatory agencies in other countries.

In the U.S. the FDA banned the sale of cyclamate in 1969 after it was found to cause bladder cancer in laboratory animals. It is still used in Europe.

Saccharin (*Sweet n Low*) was the first artificial sweetener and was first synthesized in 1879. It is 400 X as sweet as sugar and is often used to improve the taste of toothpastes, dietary foods and dietary beverages. The bitter aftertaste of saccharin is often minimized by blending it with other sweeteners.

Fear about saccharin increased when a 1960 study showed that high levels of saccharin may cause bladder cancer in rats. In 1977, Canada banned saccharin due to the animal research. In the U.S., the FDA considered banning saccharin in 1977, so a moratorium was put requiring a warning label and also mandated a further study for its safety. In 2001 the warning label was lifted. It is no longer considered dangerous.

Stevia (*Triviari*) is a natural sweetener from the Stevia plant and is widely used in South America and Australia.

Sucralose (*Splenda*) is 600 X as sweet as sugar. It is produced from sucrose when 3 chlorine atoms replace 3 hydroxyl groups. It is used in beverages, frozen desserts, chewing gum and baked goods. About 15% of sucralose is absorbed by the body while most of it passes out of the body unchanged. The FDA approved sucralose in 1998.

Acesulfame potassium (*Ace-K*) is 200 X sweeter than sugar. It is stable under heat and thus is used in baked goods and protein shakes.

Mogrosides derived from the monk fruit was approved in 2010 and is used in certain Kellogg cereals in the U.S.

Summary: Sugar substitution has been found to be safe in moderate usage. One must consider that over-dosing in anything—including plain water—can be disastrous.

THE FIRST HAM

Heinrich Hertz, German physicist (1857-1894) who died at the age of 37, was the World's first HAM. In 1887, Hertz was experimenting with the radiation of electricity. He discovered that if he applied electricity to a loop of wire, he could cause a spark to jump the gap to another loop a short distance away—and with no connecting wires!

Heinrich concluded correctly that electromagnetic waves traveled between the source gap and the spark gap at the speed of light. The source and the gap could be separated by only a few feet, otherwise the spark could not be detected. He showed that light waves and electromagnetic waves were identical.

An earlier experimenter, James Clerk Maxwell had predicted such waves back in 1864.

In appreciation and respect for Hertz's contribution, we have renamed the familiar unit of frequency to honor him. Today, instead of speaking of cycles, kilocycles or megacycles, we use the term Hertz, (Hz) kilo (KHz), and Mega-Hertz (MHz).

Marconi made wireless practical... Apparently Hertz did not see the possibility of using electromagnetic waves for long distance communication. Guglielmo Marconi, carried Hertz's simple experiment further by connecting one side of the "sending spark gap" to wires buried in the ground. The other side of the gap was connected to a "skywire" or antenna. Marconi utilized the telegraph code, devised by Samuel Morse in 1832, in his new invention. Using this equipment, electromagnetic waves generated by the crackling spark traveled more than a mile to a remote receiving site. Transmitters, receivers and wireless communications had arrive on the scene; the year was 1895. (On June 21, 1943, the U.S. supreme Court ruled that Nikola Tesla's radio patents predated those of Marconi!)



APPEARANCE

By MARCO's Al Breland KA7LOT, San Diego, CA

I strongly feel that a physician's appearance and grooming are important in starting to develop a relationship... **"In the first seven (7) seconds of contact a customer forms 11 impressions about you and your organization.** The first five are constant and last six are variable. They are: the patient-doctor relationship...Consider the following, originally from the world of business, but equally applicable to medicine...They are: 1. Clean 2. Attractive (*are you dressed appropriately for what you do*). 3. Credible. 4. Knowledgeable (*do you know what you're talking about.*) 5. (Are you) responsive. 6. Friendly. 7. Helpful. 8. Empathic. 9. Courteous. 10. Confident. 11. Professional.

Then the patient will make one of three decisions: 1. They like you and will keep doing business with you. 2. They are indifferent and will do business with you until there is a opportunity for change. 3. They dislike you and will terminate business.

Reasons people stop doing business with an organization: 1% die. 3% move. 5% Start doing business with a friend. 9% Start doing business with a competitor. 68% have an attitude of indifference by employees.

Marconi worked diligently to increase the range of communication. More sensitive devices were invented to reproduce the sound of the code. In time practical distance reached 200 miles. Countries all over the world copied Marconi's experiments and his wireless equipment. By Dec. 1901, using a mighty spark gap transmitter, Marconi was able to thrust his signals 1,800 miles across the Atlantic from Wales to Newfoundland.

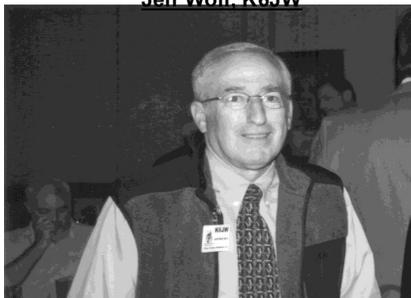
Keep in mind there were no tubes, transistors, integrated circuits or even capacitors, resistors or measuring meters. You couldn't go into a ham radio store and pick up a kit of parts. And there were no government regulations, frequency allocations or organizations representing Amateurs. Anyone who wanted to experiment built the necessary parts and plugged into the construction of his or her amateur radio station.

Then the rotary spark gap was invented. Rather than use a fixed gap for the spark, this device used many gaps which rotated on a wheel at high speed. It produced oscillations at the rate of 50,000 per second.

And then Nikola Tesla (1856-1943) arrived in the U.S. from Yugoslavia. He was 6' 4" tall, thin, Slavic cheekbones and deep-set blue eyes that were able to see through complex things which he described as *"appearances of images often accompanied by strong flashes of light."* He was an avid reader with a photographic memory who was able to converse in six different languages.. He foretold of the day a small tube charged with magic electrons would enable messages and sounds to be sent across great distances without wires—Television!

A NOTE FROM OUR PRESIDENT,

Jeff Wolf, K6JW



As my term as your President nears its end, I want to express my thanks to the Board for its support over the past two years that I've been in office. As some will no doubt recall things were a bit rocky following the 2014 meeting in Dayton. After long and faithful service beyond the call of duty, **Danny Centers, W4DAN** announced his intentions of leaving the Board. We were incredibly fortunate that **Marcia Lochner** stepped up to take over the reins of the Secretary's job in Danny's place. Danny left big shoes to fill, but Marcia has done a great job and we should all be appreciative of her willingness to serve and dedication to the job over the past two years.

Warren Brown, KD4GUA has continued to do a grand job editing our newsletter, *Aether*, and his leadership of the MARCO Sunday Grand Rounds continues to be amazing. **Arnold Kalan WB6OJB** has overseen MediShare with a sure hand while **Bruce Small, KM2L** has done a superb job of keeping us reminded of our organization's history. **Mary Favaro AE4BX** straightened out our confusing banking situation, for which I'm extremely grateful, and webmaster **Dave Lieberman KT8E** has kept us live on the internet. Last but not least, I thank **Chip Keister N5RTF** for his continued efforts with the CW net and his maintenance of the radio-internet link along with **Bobbie Williams WIBEW**. To all of these folks as well as our **Regional Directors**, I express deepest thanks for a great two years.

Before doing it, what seemed to me would be the most daunting job of the president, planning and executing the off-year (*i.e. non-Dayton*) annual meeting, turned out for me to be true pleasure. To those MARCO folks who made the trek to L.A. and to those locals who were willing to offer their assistance, I am most appreciative. I hope you all had a good time, for I know that I did.

At the upcoming meeting in Dayton, the gavel will pass to a new President, **Richard Lochner K9CIV**. I wish him well and offer him my total support as he takes over from me. I'm sure that MARCO will be well by him over the coming two years of his term.

And, finally, to all MARCO members, I can only tell you that our organization, dedicated to service for those in need and using amateur radio for the highest of purposes, is extraordinarily worthy of your continued support. Be proud, be happy, be well, and continue to support MediShare with your generous donations. They are truly the lifeblood of our fraternity.

73 es trix JEFF K6JW.

HOW TO GET RICH THE EASY WAY

Assume the population of the U.S. to be 325 million. If each person were to give you one cent, you would have \$3.35 million—and *not one donor would complain about the loss of a penny.*

Then make a list of every person in the U.S. and start with the name at the top of the list and have everybody give that person one cent. That person would then be a millionaire. Next, move to the second person on the list and do the same. When you have gone through the entire list, everyone is a millionaire.

"I don't make jokes, I just watch the government and report the facts." Will Rogers.

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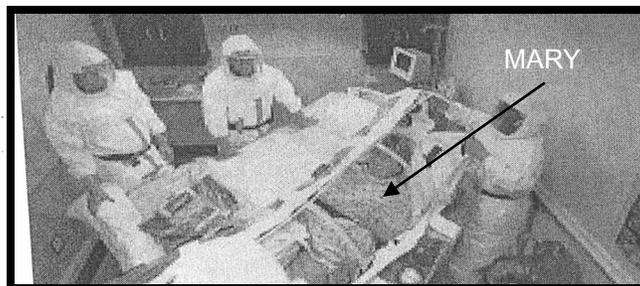
MARY FAVARO, & HER EBOLA EXERCISE.

"This article was from the time I was a fake ebola patient for an exercise last year. Took a while to get the photo, and YES, I lied about my age!

I was told to go to the Georgetown (*South Carolina*) ER at 6 am with my prepared story of being only a volunteer driver for the families of ebola victims in Africa. Supposedly, never contacting the patients themselves. I wore protective gear, "*when we had it,*" Came home to North Carolina, initially felt fine, came to Andrews, SC to visit my sister, and was blaming my cousin's tuna salad for my upset stomach and diarrhea.

The exercise was to grade both the hospital and staff. I was to report if the front office asked about travel and if the nurse she called responded appropriately. They eventually all put on the space suit gear with respirators in them and 3 sets of gloves. They kept me in an isolation room. I was told to try to stroll out to go to the bathroom, but they caught me and kept me in the room and brought in a porta potty.

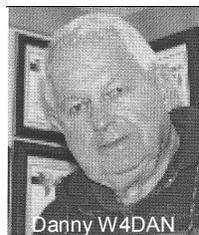
It was a long but interesting morning. They tried to track which filling stations from Andrews to Georgetown I may have stopped in and contaminated their rest rooms. They got the names and addresses of all my family contacts, asked which airports I traveled through on the way home, where else I had been etc.



Then at noon, the hospital special ambulance with plastic "*coffin*" arrived. They asked me if I was claustrophobic and I replied, "No." I was zippered up, a respirator for air was plugged in and we went lights and sirens to the hospital. There, we had to go in a special door and down a long corridor to the sterile room where hospital personnel were blocking every feeder hallway and rooms so no one else could enter the corridor. They were taking pictures of me also—what a sight!. Then I was put in their sterile room and 10 people looked at me from behind a glass widow and gave instructions to the nurses. A long stethoscope was pulled from the window and someone behind the window had the earpieces. Every time they touched me they had to change their outer gloves.

Eventually, at long last, Jenny LaTour, our coordinator arrived to drive me home. They wrote the article to describe their functions. It was an interesting day.

Mary Kaye Favaro,
Myrtle Beach, SC/



DANNY'S ADVICE:

GOING TO DAYTON HAMFEST?
MARCO suggests stay at
CLARION INN DAYTON AIRPORT HOTEL
10 Rockridge Rd., 45322
PHONE: 937 832 1234 for reservations—ask for
MARCO discount.

Formulas to Remember...*Half Wave length dipole antenna.* Length in feet=468/Frequency in MegaHz. *Example: How long should an 80 meter dipole be? Answer 468/3.725 (freq)= 125.6 feet.*

Quarter Wave Length dipole antenna: Length in feet = 468/frequency in MegaHz divided by 2. *Example: How long should an 80 meter quarter wave dipole be? Answer: 468/3.75 (freq)/2=62 feet.*

AS THE FREQUENCY INCREASES THE WAVELENGTH DECREASES.

LETTERS TO THE SOCIETY:

**Kudos from** (no luck this issue!)

From **Jim Patterson, W8LJZ**, Detroit, concerning the question of whether doctors should wear mustaches and beards: "I did battle over a beard I grew as a probationary worker at my steel company in 1970. I lost it twice as my boss did not like the beard and used safety as an issue. After my proby time I grew it back off and on through the years...later the beard issue was partially resolved when if the respirator was able to make a seal around your face you could wear a beard or other facial hair.

From **Mary Farvaro AE4BX**, Myrtle Beach, SC..."UGH, No beards!!! Realize all the little food and drink particles stuck in it. Probably fungus underneath it all on that hairy face. Maybe a neat little mustache would be OK, nothing overhanging the lips.

From **Rich Lochner**, Knox, IN..."I must vote for beards & mustaches for doctors. Grooming is important. Had mine for almost 50 years, it is not a fad for me."

From **Danny Centers, W4DAN**, Cleveland, TN ..."Common sense tells me that it is more hygienic to be clean shaven. Clean shaving is good grooming."

From **Arnold Kalan**, Pacific Palisades, CA..."I vote for no facial hair on doctors."

From **Chip Keister, N5RTF**, New Orleans, LA..."As long as primates have hair on our heads and arms, shaving one's face just gives a false sense of hygiene. *In Psychiatry, beards are expected!*

From **Carl Rowland**, Denver, CO., "I prefer a clean-shaven physicians. My wife prefers a clean-shaven man although she didn't seem to mind when I grew a beard!

The general consensus was: **Beards and mustaches are acceptable providing they are trimmed appropriately.**

From **Gordon Levine WB6JVP**, Anaheim, CA...Concerning the article, "So You Want to be a LID?" "I agree on the proliferation of poor, sometimes lousy operating practices of "newbies" and (gasp) sometimes "oldies." However, language changes and adopts over the years. Otherwise we'd still be at the grunting stage.

Giving my call in CLEAR phonetics even when MY frequency at MY location sounds loud and clear is just common courtesy. There are many hams with hearing difficulties, especially in the higher audio frequencies, where the intelligibility hangs out. Hearing aids seldom work well in the situation because NOISE (QRN, QRM) is largely high audio frequency and usually gets amplified with the voice. Certain letters can sound the same with them. Learned this the hard way when my DX QSL requests came back, "Not in log." I copied the call wrong and in the pileup couldn't ask for clarification. In addition noise conditions at the other end may be considerable worse than at your QTH. Note...easier (and shorter) to say QTH than "my location is..." If I am finishing a voice QSO, I see nothing wrong after signing, to add "anyone around, QRZ?" rather than putting out another CQ. Sometimes there are others waiting to be invited in. I agree on the distinction between that and QRZing the channel. Standard abbreviations are useful, they are specific and save time. A prime example is MAYDAY...it gets our attention fester than "Somebody, anybody, help, I'm sinking!" For the record. I have been licensed since 1955, and do have major hearing problems. I look back at those days 50+ ago when a ham could be part of a round robin QSO with 10 or more hams around the world making their 2 minute comment

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.



Who needs a body? With the development of ever-better digital assistance we will soon be able to place all of our mannerisms, recollections, feelings, beliefs, attitudes—everything about our lives, into the cloud, thus creating a simulation of ourselves outside our bodies. This leads to the question, "how good does this have to be before it is considered part and parcel of the person itself? And when the person's body finally succumbs, does this enabler claim legal rights? By 2030, it is predicted, there will be a social movement whereas grandmother, sister or friend will be legally recognized as a continuation of themselves. Welcome to the world of "cyberconsciousness."

The Defense Dept. R&D agency "DARPA plans to launch a 130-foot long, 140-ton long-range autonomous surface ship—operating without a crew—this month (April 2016) The largest robotic seagoing vessel will be tested for 18 months. If all goes well, it will begin service in various capacities.

Air pollution is the 4th leading cause of death globally, killing 5.5 million each year, and is a bigger risk to health than alcohol abuse and unsafe sex, according to the Univ. of Wash.s Global Burden of Disease Study. India and China accounts for 55% of air pollution deaths.

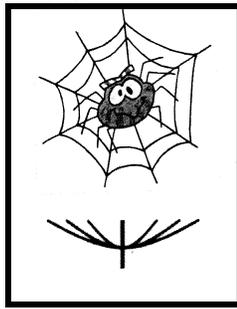
NO taxes for 45%....According to Tax Policy Center, a Brookings's Institute venture, 45.3% of Americans or 77.5 million, won't pay a dime in federal individual income tax this year, though some will still pay state taxes. Half of them don't pay an income tax because they have no taxable income, and the other half get tax breaks. The top 1% of Americans pay 43.6% of the total federal income tax, and the top 20% pay 87%. Still, most everyone must pay excise taxes, like the taxes on gasoline and alcohol.

Tea, heart health connected...Among the latest studies pointing to the health benefits of drinking tea, Johns Hopkins researchers said they've found that people who drank 1-3 cups of tea a day were 35% less likely to have a heart attack or stroke, compared to non-tea drinkers. The report, which examined data from more than 6,000 people enrolled in a study that began in '00 also found tea drinkers less likely to have calcium buildup in the heart's coronary arteries.

The average American adult lives 18 miles from their mom, a N.Y. Times study found, and only 20% more live just a few hours away. Families are the closest in the Northwest and South and live further apart on the West Coast and Mountain region, as people are more spread out in rural regions. Married people live farther from their parents vs. singles.

The quicker the flight the less the jet lag? Those who have flown across the country know that a 5-hour flight can cause jet lag. In 1990 two men flew the SR-71 Blackbird across the country in 60 minutes. Was their jet lag greater, equal to or less than that of a person who took 5-hours to make the trip? Answer: It was the same. Jet lag is caused by the time-zone adjustment, not the length of the trip itself.

What is it about the hexagonal beam that has made it so wildly popular? It's nothing more than a two element beam. There are a lot of beams with more gain and the thing looks ungainly to say the least and draws looks of vague skepticism from neighbors who already suspected something weird was going on and now are pretty convinced of it.



Well, here's why the hex is so hot...it offers six bands fed by a single table. There are no SWR issues to finagle with. You put the thing together and it works the first time. And it works well. You can install it on the roof chimney or on a simple cheap mast. You can even hang it from a tree and it's relatively cheap. It fits on a small lot, withstands the wind well up to 100 mph and disappears into a background of trees and works well at modest heights.

It can be assembled with a screw driver and pliers by a complete idiot. When you get it on the air, suddenly guys are returning your call that you just begged for when you had that vertical. It's just an antenna that lets you get on the air and compete with the big shots and not lose your voice trying to break a pileup.

The spiderbeam...Both the hexbeam and spiderbeam are Yagi directional wire beams. The Spider beam is built on a cross shaped frame while the hex is built on a hexagonal frame. Both work very well. Both resemble a blown-out umbrella!

The Spider is a three element beam for several bands and two elements for the other bands. The hex is a two element beam for all bands. So the Spider is going to have a bit more gain on several bands than a hex.

The two weigh about the same but the Spider is about 33' across at its widest point compared with 22 feet for the hex.

If you buy a Spider beam, you are in for some work. You will get a spool of cord and a spool of wire, some tubes, plate and lots of bolts and such along with a thick set of instructions on measuring and affixing attachments before you can install wire elements and support cords on the frame. Assembly of the frame itself is another erector set chore. Then you get to worry whether you cut it right if it doesn't seem to perform as expected.

On the other hand, most of the hex beams are available in a "plug and play" version where a minimum of assembly is needed and no measuring and cutting and fitting. Now you can buy assembly service for the Spider beam that would make it about equivalent to a "plug and play" hex, in terms of assembly for \$150 extra.

It's hard to say how the two compare in stormy conditions but if you take a close look at the structure you will notice the hex is symmetrical and thus has no tendency to turn in the wind. That is not quite the same with the Spider.

Price? That depends on which hexagonal beam you are looking at but the price for a five band heavy duty Spider is about \$539 plus the \$150 for assembly service so you can do your own comparison with the hex. A five gain "plug and play" hex is about \$599.

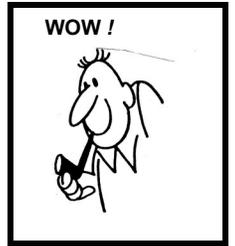
So you are getting slightly better performance, questionable storm survivability, a substantially larger size and price tag for a Spider as compared with most hexagonal beams available.

Bruce Small, KM2L, on Grand Rounds, stated he has had a hex gain antenna for several years and gets good results with it. He claims it has survived many snow storms and is very reliable. His signal speaks for itself.

SHARPIES....Jesus was from Nazareth but the word "Christ" is from the Greek meaning "Messiah." The word "Kaiser" and "Czar" are the German and Russian terms for Caesar. The phrase "Banned in Boston" came from the minting of the 1890's \$5 coin depicting Lady Liberty with a naked left breast which was "banned in Boston." The word "Josh" came from a deaf mute in San Francisco by the name of Josh who during the 1800s rubbed gold dust on a 5-cent silver coin and passed it for a \$5 gold coin. "You're not joshing me, are you?"

When I was young, living in Seattle, my father had one of the first telephones in our neighborhood. The polished case and shiny receiver were fastened to the wall. I was too little to reach the telephone, but listened with fascination when my mother used to talk to it. **Then I discovered that inside the device lived an amazing person—her name was "Information Please."** Information Please could supply anybody's number with the correct time.

My first experience with this genie-in-the-bottle came when I whacked my finger with a hammer. The pain was severe but there was no one home to give me sympathy. I climbed a chair and picked up the telephone. "Information Please," I said...a click then a small clear voice spoke to me. "Information." "I hurt my finger." the tears came now that I had an audience. "Isn't your mother at home?" came the question. "Nobody's home but me," I blubbered. "Are you bleeding?" the voice asked. "No," I replied, "I hit my finger with a hammer and it hurts." "Can you open your icebox?" she asked. I said I could. "Then chip off a piece of ice and hold it to your finger," said the voice.



After that, I called "Information Please" for everything. She helped me with my math and told me my pet chipmunk, that I had caught in the park would eat fruit and nuts. When our pet canary died, I called "Information Please" and told her the sad story. She listened. I asked her, "Why is it that birds should sing so beautifully and bring joy to all families, only to end up as a heap on the bottom of a cage." She must have sensed my deep concern, for she said quietly, "Paul, always remember that there are other worlds to sing in," I felt better.

When I was 9-years old, we moved across the country to Boston. I missed my friend very much. As I grew into my teens, the memories of those childhood conversations never really left me. Often, in moments of doubt and perplexity I would recall the serene sense of security I had then. I appreciated now how patient, understanding and kind she was to have spent her time on a little boy.

A few years later, my plane put down in Seattle. Without thinking I dialed my home town operator and said, "Information Please." Miraculously, I heard the small clear voice I knew so well, "Information." I hadn't planned this but I heard myself saying, "Could you please tell me how to spell fix?" There was a long pause then came the soft spoken answer, "I guess your finger must have healed by now." I laughed, "So it's really you," I said. "I wonder if you have any idea how much you meant to me during that time." "I wonder," she said, "If you know how much your calls meant to me. I never had any children, and I used to look forward to your calls." I told her how often I had thought of her over the years and I asked if I could call her again when I came back to visit. "Please do," she said, "Just ask for Sally."

Three months later I was back in Seattle. A different voice answered "Information." I asked for Sally. "Are you a friend?: she asked. "Yes, a very old friend," I answered. "I'm sorry to have to tell you this," she said, "Sally had been working part-time the past few years because she was sick. She died five weeks ago."

Before I could hang up she said, "Wait a minute. Did you say your name was Paul?" "Yes." "Well, Sally left a message for you. She wrote it down in case you called. Let me read it to you. The note said, "Tell him I still say there are other worlds to sing in. He'll know what I mean." I thanked her and hung up. I knew what Sally meant.

(Contributed by Jim Patterson, W8LJZ, Detroit, author unknown.)

HOW THE WHITE HOUSE GOT ITS NAME

During the War of 1812, the British stormed Washington D.C. and set fire to the American President's quarters in retaliation for the U.S. invasion and sacking of Toronto, Canada. Thanks to a heavy rain storm (hurricane), the fire was extinguished but the building was badly damaged and covered with black soot. In an effort to make the building presentable in a hurry, it was covered with white wash and since, the President's home has been referred to as the "White House."

MACULAR DEGENERATION

As presented on Marco Grand Rounds of the Air, March 6, 2016

6

Age-related Macular Degeneration (AMD) is a medical condition which may result in blurred or no vision in the center of the visual field. Early there are often no symptoms. Over time, however, some people experience a gradual worsening of vision that may affect one or both eyes. While it does not result in complete blindness, loss of central vision can make it hard to recognize faces, drive, read, or perform other activities. Visual hallucinations may also occur but these do not represent a mental illness.

Macular degeneration typically occur in older people. Genetic factors and smoking also play a role. It is due to damage to the macula of the retina. The severity is divided into **early**, **intermediate**, and **late** types. The late type is additionally divided into “*dry*” and “*wet*” forms, with the dry form making up 90% of cases.

Prevention includes not smoking, exercising, and eating well. Vitamin supplements do not appear to be useful for prevention. There is no cure or treatment that returns vision already lost. In the wet form, anti-VEGF (*Vascular Endothelial Growth Factor*) medication is injected into the eye or less commonly laser coagulation or photodynamic therapy may slow worsening. Supplements in those who already have the disease may slow progression.

It is the fourth most common cause of blindness after cataracts, preterm birth, and glaucoma. It most commonly occurs in people over the age of fifty and in the U.S. is the most common cause of vision loss in this age group. About .4% of people between 50 and 60 have the disease, while it occurs in .7% of people 60 to 70, 2.3% of those 70 to 80 and nearly 12% in those over 80.

Signs and Symptoms: Distorted vision in which a grid (*Amsler Grid*) of straight lines appears wavy and parts of the grid may appear blank. Patients often first notice this when looking at things like miniblinds in their home or telephone poles while driving. There may also be central scotomas, shadows or missing areas of vision. There is also slow recovery of visual functions after exposure to bright light. Visual acuity drastically decreases down from 20/20 to 20/80. There is blurred vision. Those with nonexudative macular degeneration may be asymptomatic or notice a gradual loss of central vision whereas those with exudative macular degeneration often notice rapid onset of vision loss often caused by leakage and bleeding of abnormal blood vessels. There may be trouble discerning colors, especially dark ones from dark ones and light ones from light ones.

Macular degeneration by itself will not lead to total blindness. For that matter, only a very small number of people with visual impairment are totally blind. In almost all cases, some vision remains, mainly peripheral.

The area of the macula comprises only about 2.1% of the retina, and the remaining 97.9% (*the peripheral field*) remains unaffected by the disease. Even though the macula provides such a small fraction of the visual field, almost half of the visual cortex is devoted to processing macular information.

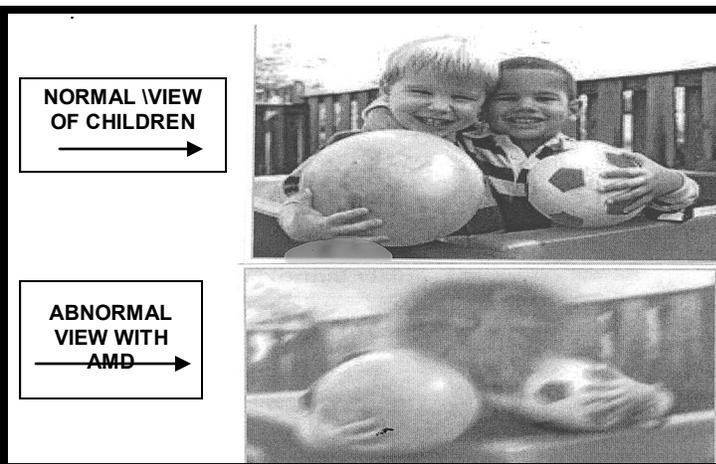
Risk Factors: Smoking increases the risk of AMD by two to three times that of someone who has never smoked, and may be the most important modifiable factor in its prevention. Other factors include Hypertension, Atherosclerosis, High Cholesterol, Obesity, Fat Intake, Exposure to sunlight.

Genetics: Recurrence ratios for siblings of an affected individual are three to six fold higher than in the general population.

Pathophysiology: The pathogenesis of age-related macular degeneration is not well known, although a number of theories have been put forward, including oxidative stress, mitochondrial dysfunction and inflammatory processes.

The imbalance between production of damaged cellular components and degradation leads to the accumulation of detrimental products (“*retinal garbage*”), for example, intracellular lipofuscin and extra cellular **drusen**. Incipient atrophy is demarcated by areas of thinning or depigmentation that precede geographic atrophy in the early stages. In advanced stages, atrophy and/or development of new blood vessels (*neovascularization*) result in death of photoreceptors and central vision loss.

In the dry (*nonexudative*) form, cellular debris called **drusen** accumulates between the retina and the choroid causing atrophy and scarring to the retina. In the wet (*exudative*) form, which is more severe, blood vessels grow up from the choroid (*neovascularization*) behind the retina which can leak exudates and fluid and also cause hemorrhaging.



Dry AMD: This begins with characteristic yellow deposits (drusen) in the macula, between the retinal pigment epithelium and the underlying choroid. Most people with these early changes (*referred to as age-related maculopathy*) still have good vision. People with drusen may or may not develop AMD, in fact the majority of people over age 55 have drusen with no negative effects. The risk of developing symptoms is higher when the drusen are large and numerous and associated with disturbance in the pigmented cell layer under the macula. Large and soft drusen are thought to be related to elevated cholesterol deposits. Central geographic atrophy, the “*dry*” form of advanced AMD, results from atrophy of the retinal pigment epithelial layer below the retina, which causes vision loss through loss of photoreceptors (*rods and cones*) in the central part of the eye.

Wet AMD: Neovascular or exudative AMD, the “*wet*” form of advanced AMD, causes vision loss due to abnormal blood vessel growth in the choriocapillaries, through Bruch’s membrane. The proliferation of abnormal blood vessels in the retina is stimulated by vascular endothelial growth factor (VEGF). Unfortunately, these new vessels are fragile, ultimately leading to blood and protein leakage below the macula. Bleeding, leaking and scarring from these blood vessels eventually cause irreversible damage to the photoreceptors and rapid vision loss if left untreated.

Diagnosis: There is loss of contrast sensitivity, so that contours, shadows and color are less vivid. When viewing an Amsler grid, some straight lines appear wavy and some patches appear blank. In dry AMD drusen spots can be seen in Fundus photography. In wet AMD using angiography we can see leakage of bloodstream behind the macula. Fluorescence in angiography allows for the identification and localization of abnormal vascular processes.

Treatment: For Dry AMD no medical or surgical treatments available. Wet AMD can be treated with laser coagulation, and more commonly with medication that stops and sometimes reverses the growth of blood vessels. There is strong evidence that laser coagulation will result in the disappearance of drusen but does not affect choroidal neovascularization. *Occuvite* vitamin therapy is also being utilized.

Studies have found that antiangiogenic (VEGF) drugs such as bevacizumab (*Avastin*), ranibizumab, pegaptanib and aflibercept help. These drugs are injected directly into the eye (usually at least 7 X a year). Laser coagulation is feasible in only limited cases. Only about 15% can be effectively treated with laser photocoagulation surgery. The surgery works better when the abnormal vessels are clustered close together in a certain area.

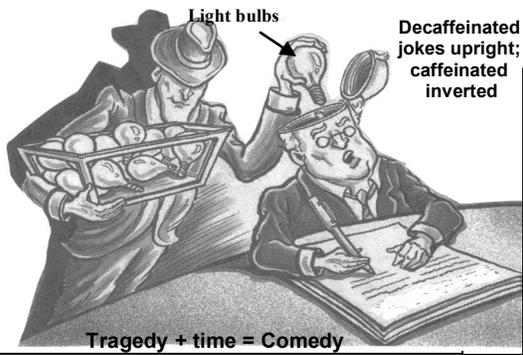
Photodynamic therapy is now phasing out to treat wet AMD. This involved giving the drug verteporfin I.V ; light of a certain wavelength is then applied to the abnormal blood vessels. This activates the verteporfin destroying the vessels.

Cataract surgery could possibly improve visual outcomes though there have been concerns of surgery increasing the progression of AMD.

Adaptive devices: Because peripheral vision is not affected, people with AMD can learn to use their remaining vision to partially compensate. Adaptive services include magnifying glasses, special eyeglass lenses, and computer screen readers

Research: Studies indicate drusen are similar to Beta-Amyloid plaques in other age-related diseases such as Alzheimer’s and ASCV. This suggest that similar pathways may be involved in the causes of AMD and other age related diseases.

LIGHTEN UP...



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.Doctor, Doctor, I think I am invisible. "Who said that?"

"Do you believe in life after death?" the boss asked one of his employees. "Yes, sir," the new employee replied. "Well, then, that makes everything just fine," the boss went on, "After you left early yesterday to go to your grandmothers' funeral, she stopped in to see you!"

The prospective father-in-law asked, "Young man, can you support a family?" The surprised groom-to-be replied, "Well, NO. I was just planning to support your daughter. The rest of you will have to fend for yourselves."

A man came to visit his grandparents and he noticed his grandpa sitting on the porch in his rocking chair wearing only a shirt, with nothing on from the waist down. "Grandpa, what are you doing?" "You ought to see!" The old man looked off in the distance without answering. "Grandpa, what are you doing sitting out here with nothing on below the waist?" he asked again. The old man slowly looked at him and said, "Well, last week I sat out here with nothing on and I got a stiff neck." This is your grandpa's idea.

Confucius Did Not Say: "Man who wants pretty nurse must be patient." "Man who drives like hell is bound to get there." "Wise man does not keep sledge hammer and slow computer in same room." "Man who stands on toilet is high on pot!" "Passionate kiss, like spider web, leads to undoing of fly."

I took down my Rebel flag & peeled the NRA sticker off the front door. I disconnected my home alarm system and quit the Neighborhood Watch. I bought two Pakistani flags and put one at each corner of the yard. Then I purchased the black flag and ran it up the flagpole. Now the local police, sheriff, FBI, CIA, Homeland Security, Secret Service and other agencies are all watching my house 24/7. I've NEVER felt safer and I'm saving \$69.95 a month that ADT used to charge me. **SAFE AT LAST!**

HUSBAND STORE...A store that sells new husbands has opened in Melbourne, where a woman may go to choose a husband. Among the instructions at the entrance is a description of how the store operates. You may visit this store ONLY ONCE! There are six floors and the value of the products increase as the shopper ascends the flights. The shopper may choose any item from a particular floor, or may choose to go up to the next floor, but you cannot go back down except to exit the building! So, a woman goes to the Husband store to find a husband. On the first floor the sign on the door reads FLOOR 1—These men have jobs. She is intrigued, but continues to the second floor, where the sign reads: FLOOR 2. These men Have Jobs and Love Kids. "That's nice," she thinks, "but I want more." So she continues upward. The third floor sign reads: FLOOR 3—These men Have Jobs, Love Kids and are Extremely Good looking. "Wow," she thinks, but feels compelled to keep going. She goes to the fourth floor and the sign reads: FLOOR 4—These men Have Jobs, Love Kids, are Drop-dead Good Looking and Help with Housework. "Oh, mercy me!" she exclaims, "I can hardly stand it!" So she goes to the fifth floor and the sign reads: FLOOR 5—These men

A man applied for a job at Hooters...They gave him a brassiere and asked him to fill them out.

Have a Strong Romantic Streak. She is so tempted to stay, but she goes to the sixth floor, where the sign reads, FLOOR 6—You are visitor 31,456,012 to this floor. There are no men on this floor. This floor exists solely as proof that women are impossible to please. Thank you for shopping at the Husband Store. PLEASE NOTE: To avoid gender bias charges, the store's owner opened a New Wives store across the street. The first floor has wives that love sex. The second floor has wives that love sex, have money and like beer. The third, fourth, fifth and sixth floors have never been visited.

Hello, I'm Bruce

MEMORIES OF YEARS AGO

8

CME RANKINGS, March 10, 2016

BOB CURRIER MARCO GRAND ROUNDS OF

THE AIR. (Corrections to Marco)

14.342, Sundays, 11 am Eastern, One Hour Cat. II CME



Bruce Small, KM2L

Marco Historian

30 YEARS AGO IN MARCO

The March-April 1986 edition of the MARCO Newsletter marked a change in command, as president Dick

Doncaster WB3AJC was set to pass the mantle to Fred Simowitz K0FS at the upcoming meeting in Dayton.

The issue contained a transcript of John Haerie WB5IIR's on-air discussion of 40-meter antennas, part of a comprehensive and informative series that was later published as a book.

We welcomed new members Fritz Bogris KB20, William Welch K1CLN, Casper Aleo KA3OBK, Robin Staebler N0GOY (and subsequently many other call signs), David Lewsi KL7ETZ, Robert Dalzell WA6VEY, Edgar Bangsil N2DNK, Len Fishman KC2EW and Mark Coral KA1CJY.

TWENTY FIVE YEARS AGO IN MARCO

One of the raging controversies in March-April 1991 was the FCC's edict that physicians could sign waivers for handicapped individuals to exempt them from code testing requirements. The MARCO Newsletter reprinted letters by three physicians (President Ed Ludin K2UK, Christine Haycock WB2YBA and Morris Soled W2NXS) that appeared in the current issue of New Jersey Medicine. All three expressed a dim view of this ruling.

The Medical Resources Commission (later to become MediShare) had received over \$2,000 in donations.

There were many new members to acknowledge: Harvey Zarem KK6QA, Jon Perlman KD6M, Milton Ross N4IVD, Michael Hunter K4HDU, David Sheldon WA6QZF, Dean Hidy KG5KZ, Malcom Dewar VE7CHO, Donald Wilson, KA1UMK, Randy Rykan N8MOT, Allan Kuong WA1SCS and Elmer Ribeyro OA7AAS/8.

TWENTY YEARS AGO IN MARCO

The March 1996 MARCO Newsletter urged members to attend the upcoming meeting in Dayton, as several weighty issue were on the docket. These included leadership in the wake of the passing of W8QP, K6KK and KB2ZA as well as Secretary Bill Sprague WA6CRN's desire to step down. We would also discuss the extension of membership to health professionals who are not licensed hams.

MediShare was looking for help with a request for X-ray and lab equipment from a small Nigerian hospital.

Newsletter Editor Ed Briner WA3TVG announced his conversion to a believer in the power of e-mail and the new iWWW.1 The listing of packet addresses of MACO members seen in previous years was replaced by a list of email addresses.

FIFTEEN YEARS AGO IN MARCO

Proving that history repeats itself, the April 2001 MARCO Newsletter led with the answer to the question "What are stem cells?" (Warren KD4GUA's Grand Rounds on Feb. 20, 2011, covered the same stem cells).

Prudent Bruce Small KM2L predicted that the marriage of computers and radios would produce vast changes in our ham radio lives.

This issue also reprinted an article about MediShare published in CQ Magazine in February 2001, based on an interview with Judy N3MBW and Gene Hoenig WB3FT3. the history and numerous good works of MediShare to that time were documented.

A MAN GOES TO THE DOCTOR and tells him he hasn't been feeling well. The doctor examines him and hands him three different bottles of pills. The doctor says, "Take the green pill with a big glass of water when you get up. Take the blue pill with a big glass of water after lunch. Just before going to bed, take the red pill with another big glass of water." Startled to be put on so much medicine, the man stammers, "Jeez doc, exactly what's my problem?" the doctor replies, "You're not drinking enough water."

CALL	HRS.	NAME	QTH
NU4DO	10	Norm	Largo, FL.
KD4GUA	10	Warren	Largo, FL
KC9CS	10	Bill	Seminole, FL.
KNOS	10	Dave	Virginia
W6NJY	10	Art	Beverly Hills, CA
N9RIV	10	Bill	Danville, IL
WB6OJB	10	Arnold	Pac.Pal. CA
N4TSC	10	Jerry	Boca Raton, FL
N2OJD	10	Mark	Sidney, Ohio
K9CIV	10	Rick	Knox, IN.
K9YZM	10	Mike	Crystal Lake, IL
K3IK	10	Ian	Shavertown, PA
N5RTF	9	Chip	New Orleans, LA
WB9EDP	9	Harry	Chicago, IL
W1BEW	9	Bobbie	Tennessee
KK1Y	9	Art	Seminole, FL.
W8LJZ	9	Jim	Detroit, MI
N7NLN	9	Mort	Tucson, AZ
N2JBA	8	Ed	Amenia, NY
KM2L	8	Bruce	Clarence, NY
N5AN	8	Bud	Lafayette, LA.
WB1FFI	8	Barry	Syracuse, NY
W3MXJ	8	Joe	New Orleans, LA
WA1EXA	8	Mark	Cape Cod, Maaa
WA3QWA	8	Mark	Chesapeake, VA
N6DMV	7	Paul	Torrance, CA
W3PAT	7	Marvin	Prosperity, SC
KD5QHV	7	Bernie	El Paso, TX
KE5SZA	7	John	Marietta, OK
N4MKT	7	Larry	The Villages, FL
NOARN	7	Carl	Colorado
K6JW	6	Jeff	Palos Verges, CA
W4DAN	6	Danny	Cleveland, TN
N4DOV	6	David	Ft. Lauderdale, FL.
W1HGY	5	Ted	Massachusetts
KB5BQK	5	Linda	El Pao, TX
K4RLC	5	Bob	Raleigh, NC
K0FS	5	Fred	St. Louis, MO
KE3XB	5	John	Nashville, TN.
W9JPN	4	Wally	Champagne, IL
W8EYE	4	Darryl	New Phila. Ohio
W4TX	4	Doc	Mississippi
K1WDR	4	Wayne	Parrish, FL
W0UNZ	4	Paul	Warsaw, MO
A1IN	4	Gonzo	Maryland
W4EMD	4	Asif	Carolina
KE8GA	4	George	Fairview, NC
WB8GET	4	Keith	Oklahoma
W3VEC	3	Stephen	Springfield, PA.
N8CL	3	Chuck	Albany-Buffero, NY

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	1722 (49 nets)	35.14
2016	399 (10 nets)	39.90

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

Systemic lupus erythematosus is a systemic autoimmune disease in which the body's immune system mistakenly attacks healthy tissue. There are many kinds of lupus. The most common type is systemic lupus erythematosus (SLE), which affects many internal organs in the body, most often the heart, joints, skin, lungs, blood vessels, liver, kidneys and nervous system. The course of the disease is unpredictable, with periods of illness flare-ups alternating with remissions.

The cause is believed to be an environmental trigger, which results in a misdirected immune response in people who are genetically susceptible. A normal immune system makes protein antibodies that protect against pathogens such as viruses and bacteria. Lupus is characterized by the presence of antibodies against a person's own proteins; these are most commonly anti-nuclear antibodies, which are found in nearly all cases. These antibodies lead to inflammation.

There is no cure for SLE. It is mainly treated with immunosuppressants such as cyclophosphamide and cortical steroids, the goal of which is to keep symptoms under control.

SLE can be fatal. The leading cause of death is from CV disease due to accelerated atherosclerosis. Life expectancy has improved over the decades. The 10-year survival rate is 92-95% and is close to that of people without lupus. This is due in part to better treatments, but also to identification of milder cases.

Global rates of disease varies from 20 to 50 to 70 per 100,000. The disease occurs nine times more often in women than in men, especially in women of child-bearing years (ages 15 to 35). It is also more common in those of African or Caribbean descent. Childhood SLE generally presents between the ages of 3 and 15, with girls outnumbering boys 4:1, and typical skin manifestations being a butterfly-shaped rash on the face, and photosensitivity. Lupus is Latin for wolf. In the 18th century, when lupus was just starting to be recognized as a disease, it was thought that it was caused by a wolf's bite. This may have been because of the distinctive malar rash characteristic of lupus. Once full-blown, the round, disk-shaped rash heals from the inside out, leaving a bite-like imprint.

Signs & Symptoms...SLE is one of several diseases known as "*the great imitators*" because it often mimics or is mistaken for other illnesses. Common initial and chronic complaints include fever, malaise, joint pains, muscle pains and fatigue. While SLE can occur in both sexes, the symptoms associated with each sex are different. Females tend to have greater relapses, a low white blood cell count, more arthritis, Raynaud phenomenon, and psychiatric symptoms. Males tend to have more seizures, kidney disease, serositis, skin problems and peripheral neuropathy.

About 70% of people with lupus have some dermatological symptoms. The three main categories of lesions are chronic cutaneous (*discoid*) lupus, subacute cutaneous lupus, and acute cutaneous lupus. People with discoid lupus may exhibit thick, red scaly patches on the skin. Similarly, subacute cutaneous lupus manifests as red, scaly patches of skin but with distinct edges.. Acute cutaneous lupus manifests as a rash. Some have the classic malar rash (*or butterfly rash*) associated with the disease. This rash occurs in 30 to 60% of people. Hair loss, mouth, nasal, urinary tract, and vaginal ulcers, and lesions on the skin are other possible manifestations. Tiny tears in the delicate tissue around the eyes can occur after minimal rubbing.

The most commonly sought medical attention is for joint pain, with the small joints of the hand and wrist usually affected, although all joints are at risk. Fewer than 10% of people with lupus arthritis will develop deformities of the hands and feet. People with SLE are at particular risk of developing osteoarticular T.B. A possible association between rheumatoid arthritis and SLE has been suggested, and SLE may be associated with an increased risk of bone fractures in relatively young women.

Anemia is common in children with SLE and develops in about 50% of cases. Low platelet and WBC counts may be due to the disease or a side effect of treatment. Another finding in SLE is the anticardiolipin antibody, which can cause a false positive test for syphilis.

A person with SLE may have inflammation of various parts of the heart, such as inflammation of the fibrous sac surrounding the heart, heart muscle and inner lining of the heart. The endocarditis of SLE is characteristically noninfective and involves either the mitral or the tricuspid valves. Atherosclerosis also tends to progress more rapidly in these cases.

Lung and pleura inflammation can cause pleuritic, effusion and pneumonitis. Painless passage of blood or protein in the urine may often be the

only presenting sign of kidney involvement.

The most common neuropsychiatric disorders of SLE is headache. Other manifestations include cognitive dysfunction, mood disorder, seizures, polyneuropathy, anxiety disorder and psychosis.

SLE may have a genetic link. SLE does run in families, but no single causal gene has been identified. Instead multiple genes appear to influence a person's chance of developing lupus when triggered by environmental factors.

More than 38 drugs can cause this condition the most common of which are procainamide, isoniazid, hydralazine, quinidine, and phenytoin. These cases are usually reversible upon discontinuation of the drug.

Non-systemic forms of lupus...Discoid (cutaneous) lupus is limited to skin symptoms and is diagnosed by biopsy of rash of the face, neck, scalp or arms. Approximately 5% of people with DLE progress to SLE.

Diagnosis...Lab tests...Antinuclear antibody (ANA) testing and anti-extractable nuclear antigen (anti-ENA) are the mainstays of serologic testing for SLE. The lupus erythematosus (LE) cell test was commonly used for diagnosis but it is no longer used because the LE cells are only found in 50-75% of SLE cases, and they are also found in some people with RA, scleroderma and drug sensitivities.

Treatment: The treatment involves preventing flares and reducing their severity and duration when they occur. This includes corticosteroids and anti-malarial drugs. Certain type of lupus nephritis require bouts of cytotoxic drugs which include cyclophosphamide and mycophenolate. Hydroxychloroquine was approved in 1955.

Disease-modifying antirheumatic drugs (DMARDs)...are used preventively to reduce the incidence of flares, the process of the disease, and lower the need for steroid use; when flares occur, they are treated with corticosteroids. DMARDs commonly in use are anti-malarials such as hydroxychloroquine and immunosuppressants (*methotrexate and azathioprine*). Cyclophosphamide is used for severe glomerulonephritis or other organ-damaging complications. Mycophenolic acid is also used for treatment of lupus nephritis but it is not FDA approved.

Lifestyle changes...Avoiding sunlight is the primary change to lifestyle.

Prognosis: In the 1950s, most people diagnosed with SLE lived fewer than 5 years. Today, over 90% now survive for more than 10 years, and many live relatively asymptotically,. 80-90% can expect to live a normal lifespan. Prognosis is worse for men and children than for women. Early mortality is due to organ failure or overwhelming infections.

SAVING MONEY...Two women are running a ranch in Louisiana and they decide they need a bull. One woman takes their life savings of \$600 and goes to Texas where she meets a cowboy who sells her a bull for \$599. She goes to the telegraph office to send a wire to her partner. "Have found the bull bring the trailer." When the telegraph operator tells her the price is .75 per word, she replies, "Send one word—"COMFORTABLE.**" The operator asks, "But how is your friend going to understand the telegram?" The lady replies, "My friend reads REAL slow, when she get this, she will see "COM-FOR-Da-BULL.""**



MEDISHARE REPORT, 2016
MARCO helping the less fortunate.

- Gold (\$200+ donated), Jay Garlitz AA4FL** ☆
- Silver (\$100-\$199), Jeff Wolf K6JW**
- Bronze (under \$100) Warren Brown KD4gua.**



“Is your spaceship going to be manned?” If the answer is “Yes,” microbes **could ruin** the whole mission. The truth is we simply don’t know about how long-term spaceflight affects the microorganisms inside us.

These microbes outnumber “our” cells 10 to 1, and we’re only beginning to learn how much influence they wield. Depending on their composition, those bugs can keep disease away or cause illness, slim us down or fatten us up, even induce depression or calm anxieties—all facts we have discovered in the **past decade**.

These bugs will change us in space, in ways we can’t predict, given that the longest anyone has spent in space is 2.2 years. Maybe they’ll result in obese, depressed astronauts. And being locked in a metal box rarely makes people less depressed or anxious, conditions that an off-kilter microbial colony could exacerbate. They could even leave the crew violently ill and dying. Infectious diseases spread easily in closed containers. An immune system compromised by unforeseen microbial changes could only make matters worse.

A typical human’s microbiome, the collection of tiny organisms that live on and inside the body, may contain up to 10,000 species. “They’re all doing something different, and they’re all connected. These organisms and we ourselves are also connected to our environment. On a spaceship, “environment” means air, metal, silicon, plants, water and other passengers, each with its own microbe collections. The microbes clinging to those people, places and things will become part of each astronaut.

It makes you wonder, “What, really is a human?” If the organisms that live inside us can change our immunity, appearance and mental stability, they aren’t just part of us: **They are us!**

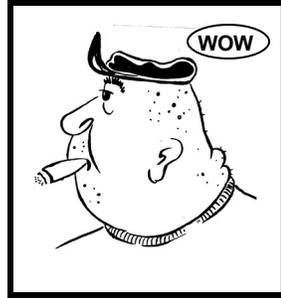
Investigations are underway on just how microbes can change depending on their environment including space, and how those changes affect humans. These aren’t trivial adjustments. During a space flight, astronauts are exposed to stresses such as radiation, microgravity, and change in the diet. Long-term exposure to these stressors may alter the composition of the crew microbiome at a level that poses a risk to their mission.

We already know how some microbes, outside the human body, alter their behavior in space. In seven separate space shuttle missions, researchers found that *E.coli* reproduced twice as fast. And Salmonella Typhimurium, which could lurk in the food aboard, could become more virulent and deadly after just a few days on shuttle mission STA-115—imagine the stomach-virus epidemics that have plagued cruise ships, but compounded by the challenges of outer space. Medicines have shorter shelf lives, too, so the pills astronauts leave with might be ineffective by the time they return. The normally deadly *Staphylococcus aureus* quickly becomes benign in microgravity.

We know only the basics of how these microbes change. Individual genes can turn on and off in different circumstances, and space is an awfully different set of circumstances than Earth. While DNA remains the same, a microbe’s ability to “read” a given DNA sequence can change unpredictably. This, only hints at what might happen to the microbes inside astronaut’s bodies.

Space agencies are getting into the microbiome game. NASA has teamed up with genomics research firm the J. Craig Venter Institute to fund a study of space station astronauts. For six months starting in Sept. 2014, people in orbit provided gifts of feces, saliva and blood. Back on Earth, researchers are now combining the samples’ biological baggage with environmental readings. like temperature and humidity, mashing them up to tell a full story of how circumstances affect the microbe population inside the digestive tract. And last March, the space agency began a twin study comparing the microbiome of astronaut Scott Kelly with his Texas-based twin (and former astronaut) Mark Kelly. What we learn from these and future studies will be the first small steps allowing Starship travelers to make giant leaps into space.

(Information for the above was taken from Sarah Scoles fine article which appeared in the March 2016 edition “Discover” magazine.)



From **Charles Nohava N8GMB...**(Chuck was asked why he was no longer on Grand Rounds of the Air...he replied:) I moved just before Christmas and have no outside antenna now. I have 1.5 acres with a very tall house, more rooms and room to spread out. My past home had 14 acres and a lake to take care of. The home needed staining and caulking, on a hill with a stream running under the house, always damp, even with 70 pt. dehumidifiers going all the time. It was too much work and expense with friends getting stuck in the long driveway during the winter. The mold this past year, especially in NE Ohio with so much water and deep trees, was terrible for many, including me and my wife.

Our new area home is so much drier and not under oak trees and should be much easier. Our new home is very dry with a separate in-law suite for my clients with its own kitchen and entrance. A 60’ driveway that I can shovel or snow blow. So much less work, a bigger mortgage but much less expense to keep up. The new home is too tall for my R70000 on a pole. Once it warms up, I will get a 80-6 mtr. Widom antenna that will handle 1500 watts. My ham shack will be in the basement so I will have to get a waterproof metal box to bring out the cables. I will have to get a carpenter to drill through the area below the siding just above the cement blocks. I should have enough clearance for the 133’ off ctr. antenna. That will be much cheaper and easy to maintain..

Another problem with Grand Rounds, is the change in time for the net and going to church for us. (This has been a problem since we switched from 10 a.m. Eastern to 11 a.m. The change was helpful to West Coast stations who previously had to go on the air at 7 a.m. Pacific Coast Time and propagation improved as we started transmitting closet to midday ionization). Our church starts at 9:30 a.m. and goes through lunch time and at times to 3 pm for celebrations. We are much more involved in the church now...so, a big time conflict started months ago. ...I wish I knew a way around it. (Art KK1Y, also had a problem having to change churches and his XYL gave him some static.)

Early this summer we will be more settled and I should have my new antenna up. We are getting our auto backup natural gas generator put in this April. We are now in Lake County, Ohio about 22 minutes south of where we lived before with less snow since we are south of the Lake Erie snow belt. I hope I did not bore you with what happened to me. Chuck, N8GMB@aol.com

Jay Garlitz AA4FL, Hawthorne, FL. And his lovely XYL, were in the Tampa Bay area where their son presented a talk to the University of South Florida on March 13th. We (KD4GUA) and XYL Greet enjoyed lunch together.

ADVICE NEEDED ASAP !



I am an 18-year old single mother of twins. I am having an affair with a married man of 26 and whose wife is a professional wrestler. She is one tough lady, and I don’t want to tangle with her.

She walked in on us one afternoon in their apartment. Fortunately, I had my clothes on (most of Rick’s were off.) He is a very fast thinker, introduced me as a chiropractor and said I was giving him an adjustment. She then told me she was having trouble with her back and asked me to give her an adjustment, too.

I faked it as best I could. She was very pleased, said I had helped her more than any chiropractor who had ever worked on her and asked for an appointment the next day. I have been going over there regularly. Yesterday was her sixth adjustment. She pays me \$20 a visit. Can I get in trouble for practicing medicine without a license?

Reply : “The kind of trouble you are worried about is nothing compared to what might happen if the lady wrestler learns the truth. Stop seeing Rick at once and tell your “patient” you have given up your practice and tell him to “take-off.”

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 W2ZZM 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 successfully left the ship—only the Captain remained aboard the *Flying Enterprise*. The tow-tug “*Turmoil*” had arrived and plans to tow the ship to Falmouth, England are taking place.....

Kenneth Dancy, tug crewmember, had successfully jumped to Captain Carlsen’s aid aboard the *Flying Enterprise* from the tug *Turmoil*. Focused on the purpose of his giant “step”—to help get a tow under way—Dancy began to climb the rail with the line in one hand. He got near enough to Carlsen to hand him the light rope., Carlson crouching on the deck, crabbed his way back to the bollard, pulling the line with him.

Dancy, one-hand, on the taffrail, fed the first stretch of line through to Carlsen and then wedged his own feet into a crevice on the outside of the ship. He wrapped an arm around the rail, so that he could use both hands, and he hung there, hauling all the time on the line from *Turmoil*.

When the lines began to pour through steadily, Dancy looked behind him. The tug had now pulled off and would apparently never get near enough again to take him back. In any case, his presence alongside Carlsen could make all the difference. De facto, Kenneth Dancy had joined the crew of *Flying Enterprise*. Still on the outside, he clambered sideways along the taffrail. This brought him nearer to where Carlsen crouched.

Carlsen was trying to steer the early lines though the chocks and round the bollard. Now he grabbed some of the many handholds with which he had familiarized himself everywhere and got over to the taffrail. On his knees, he shook hands through the rails with Dancy, who said, “*Congratulations, Captain Carlsen.*”

Carlsen beamed the first smile he had been able to show another human for almost a week and said, “*Welcome to the flying Enterprise*” and helped Dancy aboard.

Then came an utterly typical Carlsen remark: “*Did the tug cause any damage when she bumped me just now?*”

Dancy thought: “*You’re on a ship in this condition and you’re worrying about a little bump?*”

He got to work beside Carlsen, and they secured the looped tow to the bollard. **It failed.** Over the sea between the two vessels, the early ropes snapped asunder. Parker, on the *Turmoil*, pulled back and away, leaving the two men on the freighter under no doubt that there would be no further attempts that day. Night drew, the wind climbed. Everyone had been working hard, and Dancy needed to get acclimatized. Besides, some questions had arisen as to whether the winch on *Turmoil* had developed a fault.

Carlsen led his new mate to the radio shack, showing Dancy how to negotiate the tilting decks—the monkey walk, bent forward from the waist, palms flat on the wet, oily surface. The men reached the radio

room. Carlsen entered as though into a normal living room, Dancy into circumstances he had never seen in his life and had difficulty addressing the havoc, the damage, the water everywhere.



Now Dancy began to learn how long it took to do everything on a listing ship. With Carlsen showing the way by flashlight, they fetched mattresses from other cabins. As Carlson went off to make a last radio contact for the night, Dancy picked his own place to sleep at the foot of the leather settee and tried to make himself warm despite his soaked clothes and the wind whistling through the open door.

Carlsen returned, climbed into “*bed*” and fell asleep. Dancy took longer, listening in the dark to the appalling noises that came from everywhere in the ship. *Flying Enterprise* trembled like a bad fever. When a heavy sea hit her, she shook worse than an earthquake. Everything loose shifted and slammed and clanged and rattle and rolled.

While Carlsen and Dancy had been eating breakfast the next morning, Commander Thompson and *John W. Weeks* had prepared to steam away to Plymouth for urgent refueling. They were relieved at eight o’clock by another U.S. destroyer, the *Willard Keith*, named after a young officer who’d died on Guadalcanal in 1942. One-third the weight of *Flying Enterprise*, she had a complement of nearly 350 men, a greyhound of the sea, she could reach a top speed of thirty-five knots and she’d sailed in from Brittany under Commander Leslie O’Brien from Arkansas.

Carlsen, on his radiotelephone, used his time economically. He thanked Commander Thompson and his men for all the food and care; he introduced himself to *Willard Keith* and explained his emergency system of sending up blue flares if he—and, now Mr. Dancy—had to leave the ship suddenly’ and he arranged the next moves with Capt. Parker.

Tug *Turmoil* came by and stood off the starboard bow; her crew had prepared the light line, the leader of all the other, heavier ropes. This time they got all the lines aboard, where Carlsen and Dancy threaded it, and all the lines that followed, through the “*fairleads*,” the metal guides that Carlsen could never have managed single-handedly. These fixtures steer and stay the ropes on a ship, and give added control, to the tow.

The two men on the freighter stepped back from the bollard, that shackle seemed as normal as a shackle should be—firm and immovable, holding fast. They went to the starboard rail, the ship’s highest side and from there watched the tow begin; all seemed to be in order. And so, a small convoy—the stout, slow thrusting tug, the lopsided steamer, and the gray rakish destroyer—set off in a northeasterly direction on a journey nearly four hundred miles, across the unpredictable Atlantic.

His spirits buoyed, Carlsen led Dancy on a tour of the ship—with another man’s help, he could now reach supplies previously denied him. Most of the stores from which he wanted to draw needed one pair of hand to hold the doors open while the other pair searched behind them.

First, came a life vest for Dancy. Since the previous night he had been making do with a child’s—undoubtedly one that had been worn by a Carlsen girl on a voyage with her father. Next, Carlson said he wanted some butter because he could not reach the grease supplies down in the engine room and they needed to lubricate the shackle, the fairleads, and all the chocks and guides, to keep the hawser free of chafing. On a long tow, and especially if the weather came up again an un-oiled cable, even five inches of thick steel, could start to fray where it rubbed. Carlsen also wanted to find some dry clothing for Dancy and himself.

Out on deck again, Dancy saw Carlsen eyeing the American flag, still flying, through now with its edges much raveled from having been lashed by the storm. In none of the hot photos in the newspapers do we see any trace of the flag flying upside down, the traditional distress signal. Nor, in ordinary practice, would the freighter have been flying any flag at sea, unless special signals had been called for. Flag etiquette more commonly applies to port display and special occasions

And now we temporary leave the *Flying Enterprise* being so-far, successfully under a 400-mile tow—it’s two man crew maintaining the integrity of the owners by not abandoning ship. BUT, what was the mysterious cargo that Capt. Carlsen wanted unknown?

NEW FACES* for MARCO & RENEWALS, as of March 9th 2016

- .Adams, Jim K4JWA
- Adams, Mary KD8IPW
- Baral, Daniel* W3DCB
- Brigham, Ralph KG4CSQ
- Centers, Danny W4DAN
- DelBalso, Angelo WA2NNZ
- Fink, Mark WA3QWA
- Fitzpatrick, Jr. Jim W19WI
- Knickerbocker, G. K3RJA
- Kring, Roy N3IRY
- Laughlin, Darrell W8EYE
- Lukas, Paul N6DMV
- Milazzo, Carol KP4MD
- McNew, William N9RIV
- Nevins, Robert KF1J
- O'Connor, John KE5SZA
- Pakula, Stephen W6MED
- Patterson, Jim W8LJZ
- Petruzzi, Mark WA1EXA
- Przekop, Harry WB9EDP
- Scher, Alan WD8PKF
- Simowitz, Fred K0FS
- Spencer, James KD9YDD
- Stewart, John J. AA5KV
- Smith, Robert KD6ECP
- Thompson, Robt. WD8ING
- Varga, Michael NR3C
- Zipperstein, Jerry N4TSC



NO RADIO, NO ANTENNA?
 Keep in touch with MARCO on "listserve" E-Mail your request to join to BruceSmall73@gmail. Com If on the list simply contact marco-ltd@googlegroups.com

And/or

Tune in to Marco Grand Rounds on your computer: www.reliastream.com/cast/start/tkeister

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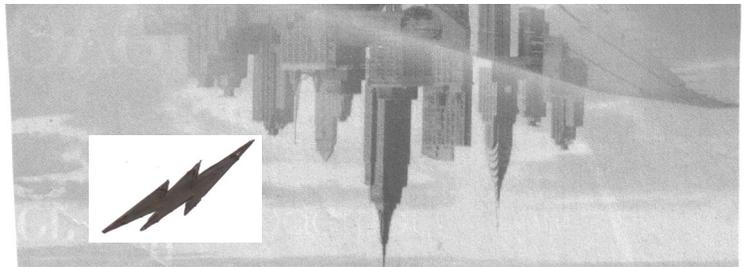
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