

CQ de WA2LQO

Seventy Years: 1944 -2014

The official voice of the Grumman Amateur Radio Club

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HOW I BECAME A HAM (continued from February 2014)

By Bob Wexelbaum, W2ILP

Synopsis: Having discussed the many Elmers who reinforced my early interest in Ham Radio during my grade school years, I will continue to discuss inputs from my friends and my teachers during my high school years.

Every summer I tried to pass the ham license test and every summer I failed the 13 wpm code test because of my anxiety. The test would run for 5 minutes and you had to get solid copy of a least 1 minute. Since I could never get excused from school to take a ham test, I only tried during the summer or Jewish holidays, since those were the only times school was closed and the FCC office was open. Thus during my high school years I was only an avid SWL and I did a lot of listening to hams with my NC-57 receiver at that time when the bands were open to lots of DX. I listened for local hams, especially on the 10 Meter phone band. I bought a copy of last year's Radio Amateur Call Book (the kind with the flying horse on the cover) for only one dollar. As I listened to the Hams I copied their call letters and looked them up in the call book. When I got their last names and addresses I would look them up in the telephone directory. I was interested in finding Hams who lived very close to me in The Bronx; especially young Hams close to my age. I was quite successful in finding neighboring Hams who would trade radio parts with me or help me to study Ham theory. Let me break now and tell you about something that might not exactly belong here but it was an event that I can't forget. During my first year at Monroe High my honors class home room and English teacher was Miss Myers. She looked exactly like the actress Eve Arden. Some years later Eve Arden looked exactly like Miss Myers when she played a school teacher in "Our Miss Brooks". The honor class consisted mostly of Jewish kids, with a few Italian Catholic kids. The teacher was the only Protestant in the home room. One morning OUR Miss Brooks mentioned to the class some news she had just heard on her car radio that Israel was declared a state! The class broke out in such joyous whoops and hollers that poor Miss Brooks opened her mouth in confused surprise. After a full ten minutes of bedlam, she said she didn't know we would get so excited about a little new country in the Middle East. There was only one kid in the class who was sad; my friend, Stanley Milgram. He was worried that never ending wars would begin between Jews and Arabs because of Israel. Milgram had made a very serious Bar Mitzvah speech, praying that Jews would have a homeland. Despite that, he was not very religious at that time. I was never a Bar Mitzvah, partly because I preferred to study Morse Code rather than Hebrew, and partly because my parents couldn't afford to sponsor a big party for me. I remember going to a traveling carnival with Milgram. There were the usual rides and games of chance there but we were only peeking at a sexy blonde woman who ran a game where folks shot at targets to win cheap prizes. While we lingered there, trying not to be noticed by the blonde, we were approached by a young man who was carrying a New Testament. He asked us if we would accept Christ as our savior. Of course we refused. Then he started quoting passages from his Bible about salvation and so on. Milgram said he did not believe what was said in the New Testament. When asked if he was a Jew, Milgram said that he didn't believe anything that was written in the Old Testament either. I hadn't thought much about this subject myself until that time. I remember Milgram saying that Jews got more religious in places where they were persecuted but less religious in the US where they were not persecuted by official government policies. In his later life, Milgram became quite religious, contributing money to Israel, marrying a religious woman, asking for psychological advice from a Rabbi. Actually he would have been better off getting some medical advice from doctors that might have prolonged his life by performing the open heart surgery he needed. As a result of my own experiences, I

became a secular humanist. It was Milgram who had made me skeptical about mind reading and about anything that seemed supernatural. I am lucky because I have a Jewish wife who agrees with me. I am not a self-hating Jew but I don't like Zionist extremists. Enough said about that... but it is relevant to my history and I will continue to connect the dots that are more relevant to how I became a ham, which will become more evident as I proceed. The only course I failed in high school was second year Spanish, as I failed the regents exam. I had to repeat the course and take that regents exam again in the summer. There was no excuse for that. I had already used my efforts to learn Morse as an excuse for my quitting Hebrew, so I couldn't use that card again for failing Spanish. The Spanish teacher was a very prim little woman who wanted us to refer to her as La Senora Doctora Trachman. Nope; Morse code was no alibi to her. Could I find someone to practice Spanish with me, like I had found Johnny, the pipe fitter, who practiced Morse with me? I listened for a local ham who spoke good Spanish on the ham bands. I heard what sounded like, "Wouble-you vay dos hota e gregor hatche", coming from a nice feminine voice with an S9+ signal. I translated it to mean W2JYH and the operator said her handle was Dolores. I looked up W2JYH in the call book and found that call belonged to Jose Vidal of Simpson Street in The Bronx. I looked him up in the telephone directory and found his phone number. I called the number and sure enough Dolores answered. She was always home and constantly on the air chatting with other Spanish speakers in New York, Puerto Rico and Cuba as well as Central and South America. She operated on 20 and 10 Meters, using a 1 KW AM transmitter. (This was before SSB became popular.) I asked Dolores if I could come to visit her ham station, which I learned was really licensed to Jose, her husband. I did not want to ask if she would help me with my Spanish conjugations at that time because I was a very shy kid. She agreed to welcome me one afternoon during the following week. I did not dare to tell my parents that I was going to Simpson Street. First, it was too far to walk and I had to pay for a trolley, and second it was not a good area. I was not old enough to drive, but I later learned that if a strange car was spotted there by the resident hoodlums, the hub caps would be stolen in ten minutes, in an hour the engine would be gone, and then the entire car would disappear from New York State. This didn't scare me; Who would bother a poorly dressed urchin there? Many poor Latino kids were playing in the street there, ignored by their elders. I walked up the flights of stairs that were needed to get to the W2JYH apartment, which was on the top floor. The hallway smelled of spicy refried beans. Next month I'll tell you more about my visits to Dolores and Jose. Hasta luego. (to be continued)

PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

The other week I received an email from my NY State Senator about something that sounded interesting. Even though no one seems to have noticed, in his recent "State of the State" speech, Governor Cuomo took lessons-learned from Hurricane Sandy to make an impassioned plea to create a "Civilian Emergency Corps" to receive some training in basic emergency management, where the evidence points to even a little education having a disproportionately large payoff. I was intrigued and attended. The meeting filled the Bethpage High School gym, and it really was quite a show. It seems to me that this may have been the first of a series of such talks, and the governor came out himself. Of course that unleashed an entourage of every local politician imaginable. They all spoke very eloquently, and it was refreshing to see members of different parties being so nice to each other for a change. Of course the presentations were of the type that I have seen often, even in Boy Scout activities. I found a few things interesting and a few I wondered about. After ten years of telling new scouts to get an LED flashlight with AA/AAA batteries, I was surprised to see flashlights with incandescent bulbs and D cells... Things like that.. I figured it would be a slam-dunk for various Amateur Radio groups to shine. However, while CERT was heavily represented, and they do have some links to ham radio, there was nothing else. I have since spoken to some of the local ARRL and RACES people, and found out that the emergency groups in the area are less a monolithic group than a constellation of totally different entities that need to work smoothly together...but don't always do that. Despite a few odd tidbits, I found the presentations generally interesting and useful; On the other hand the lack of other hams brought some disappointment. Ed, WB2EAV

**GRUMMAN AMATEUR RADIO CLUB
MINUTES OF GENERAL MEETING 2/19/2014**

By Karen, W2ABK

The meeting was opened by Gordon at 5:30 PM

TREASURER'S REPORT – Ed, WB2EAV

Finances continue to be in good shape.

REPEATER REPORT – Gordon, KB2UB

The 145.330 repeater is inop. Gordon called Bill Scheibel, N2HFY who knows what the problem is and will work on it when weather conditions permit.

NET REPORT – Karen, W2ABK

Thursday night net at 8:15 PM on 146.745 MHz had 3 check-ins.

Thursday night net at 8:30 PM on 145.330 MHz had 2 check-ins.

Sunday morning net at 7:30 AM on 7.289 MHz had 2 check-ins.

VE REPORT – Ed, WB2EAV

5 applicants applied: 3 for Technicians, 2 for General; 1 new Tech upgraded to General. All passed.

3 VEs were present: Ed, WB2EAV, Gheorge AB2ZW and Karen, W2ABK.

OLD BUSINESS

We need programs for our meetings.

NEW BUSINESS

Discussed possibility of getting a group of GARC members to go to the ARRL Centennial Convention in Hartford, CT on July 17-19.

PROGRAM

Karen, W2ABK brought in a DVD about the story of the Queen Mary and W6RO.

GARC NETS: 40 Meters: 7.289 MHz at 7:30 AM EST Sundays

Net Controller: Eugene, W4JMX

2 Meters (repeaters) Thursdays: 146.745 MHz (-600 kHz) at 8:15 PM

145.330 MHz (-600 kHz) at 8:30 PM. Tone for both repeaters: 136.5 Hz.

GARC Net Controller Karen, W2ABK **ARES/RACES NETS: Mondays.**

MEETINGS

General Meetings of the GARC are held on the 3rd Wednesday of each month, starting at 5:30 PM, at the Ellsworth Allen Park in Farmingdale. Driving directions and map can be obtained from <http://www.mapquest.com>. It is suggested that the GARC web site be checked to be certain of meeting location, which may change after this newsletter is distributed. Board meetings are held a week before the General Meeting at the Bethpage Skating Rink. *Meetings may be cancelled or relocated. Check the website.*

WEBSITE

The GARC web site can be found at <http://www.qsl.net/wa2lqo>. Webmaster is Pat Masterson, KE2LJ. Pictures of GARC activities, archives of newsletters, roster of members, and other information about the GARC may be found there.

INTERNET LINK OF THE MONTH FOR INTERNERDS

Integrated Functions in a Complex Plane

Because it would take too long for me to mathematically describe the basics of Mandelbrot's set theory as mentioned on page 6, I have taken the opportunity to direct you to a very good tutorial, and here it is:

<http://www.mandelbrotset.net/tutorial.html>

Be sure to turn on your audio because this tutorial requires both audio and video.

Now summing up; What did Mandelbrot know that Fibonacci did not know? I may be limited in my ability to fully realize Mandelbrot's genius, but we must understand that he was working for IBM at the time that he developed his Set concept and he had access to computers as well digital graphic displays. Fibonacci was a medieval mathematician, who brought Arabic numerals to the west. He was known in his era as Leonardo de Pisa. He was the father of *Number Theory*, which is basically the study of how numbers can be applied to the real physical world or vice versa. Mandelbrot was essentially doing the same thing but was able to present a

graphical representation of RATIO DIVERSITY. He knew that real world digital photograph edges, when magnified, were not smooth. He knew that when cartoon figures were added to photographs their smooth edges would distinguish them from reality. High resolution digital photography made it possible to simulate nature by applying Mandelbrot's concept to the generation of artificial video by adding rough edges to simulations that could make life-like video generation possible. Now let us talk about the Fibonacci Ratio of 1.618... which by itself is not as diverse as the real world. We know, for example, that pi is a ratio with a numeric value of 3.14... Both ratios are numbers with never ending decimal digits. Pi is a constant by definition. It works perfectly when we are dealing with perfect geometric circles. The Fibonacci Ratio cannot deal with a perfect geometric world. It is, however, a very good average ratio, which proves to be very close to averaged natural ratios...but in the real world it must vary in order to be diverse. Using it to design man-made structures seems to be mechanically advantageous. Now let me give you an example of a natural ratio. Suppose you measure the length of your nose from the bridge to the tip and then you measure the distance from the bridge of your nose to the bottom of your chin. You then have two natural measurements and can calculate a ratio. That ratio might be close to 1.618, but it most probably will be a different number. We know that it must differ, because without such differences there would be no way to recognize different people's faces. Babies soon learn to recognize their mother's face as being different than the faces of strangers. As we grow older we are able to recognize hundreds of faces, including, family, friends, fellow employees, politicians and movie stars. That is why such ratios must be diverse, even though we need not calculate them mathematically. Hmmmm...I wonder how Clark Gable, Jimmy Durante and Jay Leno's facial ratios would compare to mine? Viva la diversity?

CORRECTION TO LAST MONTH'S ARTICLE ABOUT POPOV'S WORK

On Page 6 last month I wrote about the early accomplishments of Marconi and Popov. I was in error about the capabilities of early radio receivers. Unlike AM radio, the early radio telegraph systems were designed to work in a manner that was similar to the early land-line telegraph. The basic telegraph consisted of only a telegraph key, a battery, and a clicker (sounder). When the key was closed, a direct current circuit was completed and the clicker clicked. The telegraph lines could be very long but the circuit worked as long as a solenoid, which was part of the clicker, had enough magnetic energy to attract a metal sounder that would click once every time the key closed the circuit. Early radio telegraph receivers were designed to work with the same telegraph keys and clickers that were used for land line systems. The difference was that radio telegraph receivers had to detect a signal that was generated by a distant spark coil transmitter. The coherer was the detector that both Marconi and Popov were working to improve. I said that Russia's claim that Popov invented radio in 1895 may have only been that he detected a "carrier." That was an error. Unlike AM radio, that came later (thanks to Fessenden), the early radio telegraphy system generated no continuous wave carrier. When the key was open nothing was transmitted. We know that Popov had experimented with radio receivers before he had built transmitters. He made them in order to listen for lightning and try to predict coming storms. His demonstration on May 7, 1895, might have only been a demonstration of such a receiver, because Popov did not mention sending or receiving a message on that date. I wrote that Popov must have used galvanometers or headphones for receiving dits and dahs. This was wrong because he used only the same kind of clickers that were used in land-line telegraph systems to receive time coded clicks, rather than the dits and dahs of modern radio telegraphy, which are what Hams now call CW, encoded with International Morse Code. The TTY American Morse Code required recognizing the spacing between clicks rather than receiving dit and dah heterodyned tones.

PUZZLE

Last month's question was:-

What is the Fibonacci series? What is its relation to the design of 18th century rifles, modern building architecture, and cell phone antennas?

Please see page 6 for the answer.

This month's question is:

What was Fermat's last theorem? Why was it never believed to be proved satisfactorily?

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Newsletter

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GARC VE Exams

We normally proctor exams for all classes of ham licenses on the second Tuesday of each month, starting at 5:30 PM. The exams may be given at various locations. Ham Exams are: Element 2 – Technician, Element 3 - General, Element 4 – Amateur Extra Class. All applicants must pre-register to determine the location of a VE session by contacting Ed Gellender WB2EAV. Time and location of exams are subject to change. If there are no applicants VE sessions will be canceled. The fee for 2014 is \$14 for all exams taken at one sitting. New first-time applicants should be aware that their Social Security Number will be required on the application form unless they register with the FCC for an FRN. Applicants for an upgrade should bring their present license and a photocopy of it. All applicants should bring picture ID such as a driver's license. Study material may be bought from the ARRL-VEC or W5YI-VEC <http://www.arrl.org> or <http://www.w5yi.org>. All VECs use the same Q & A pools.

Editorial

The latest WX descriptive buzzword is “Global Climate Change”, which is now technically preferred instead of “Global Warming”. For those who have studied differential calculus [dy/dx], it may be more significantly understood to be “Global Climate Change Rates”. The recent local snow storms and short term temperature highs and lows have occurred at unusual rates with respect to linear time. The GW melting of the polar cap is only an anecdotal occurrence on one area of the Earth's surface. I don't believe that we can prove that the polar meltdown conditions are the prime cause of, or the strongly related result of, more massive GCCRs. Many scientists are modifying their opinions about the prime causes of recent GCCRs. It seems that once the freak climate change rates start, they build up momentum all over the world. Insurance companies are betting that the storm rates will continue erratically, so they are raising their rates and profit profiles proportionately in anticipation of future super storms. The recent local conditions have caused me to reschedule my primary care doctor's appointment three times (and finally only manage to see a nurse practitioner) because of weather conditions. Last month I mentioned that I had been offered a ride to a meeting of the Larkfield Amateur Radio Club, where there was to be a presentation about using 2.4 GHz routers to make local Ham networks, where Hams alone could link and tweet without pop-ups. It too was canceled. It may be rescheduled for March...unless we get still more snow, or maybe even an earthquake.

73, Bob w2ilp (Inclement Leaking Probabilities?)

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Do Not Delay

THE FIBONACCI SERIES

By Bob Wexelbaum. W2ILP

I read lots of magazines. I read “Scientific American”, “QST”, and the “IEEE Spectrum” every month. Those are not the publications which reminded me about the Fibonacci Series. Surprisingly the editor of a cooking magazine brought up this subject. He is Christopher Kimball, a man from Vermont, who edits “Cooks Illustrated Magazine”. He may be seen on PBS TV tasting foods and testing kitchen gadgets. His editorials have little to do with cooking most of the time. This relieves me from the guilty feeling that I get when I write too much stuff that has little to directly do with Ham Radio. In my humble opinion editors should have that kind of freedom. Mr. Kimball say that if we were asked to cut a line into two parts, cutting it in half into two equal parts would not allow for diversity. I dunno about that. What about yin and yang, the Chinese Ratio of (1:1), which ideally allows for balance of male and female, sweet and sour, etc.? [I suppose in economic theory there must be a “diverse” distribution of wealth if we want to avoid mundane Communism.] Kimball then explained that there is a “Golden Ratio”, where the ratio of the large part of the line to the small part is equal to the ratio of the entire line to the large part. This works out to be roughly 5 to 3 or to be more precise. 1.618... This is derived from the Fibonacci Series, in which the next number in the series is the sum of the last two numbers. The series is thus: (1 + 1 = 2, 1 + 2 = 3, 3 + 2 = 5, 5 + 3 = 8 ...). As the series continues on toward infinity it approaches 1.618... The female to male ratio of honey bees is 1.618. Many average natural ratios are close to this Fibonacci Ratio. Then the question is; Is this ratio the same as the Fractal Ratio? The answer to that is: Not exactly. That is because the Fractal Ratio is not a single number. Mandelbrot, the man who discovered Fractals, never mentions a fixed ratio in his explanation. Instead he mathematically speaks of what are called *Iterated Functions in a Complex Plane*. The Fibonacci Series is just one simple possible series that may be included in a diverse set of functions, where each function may be derived from a different series of arithmetically incremented numbers. See page 4 for an explanation of Mandelbrot’s Set concept which leads us to understand that there is not just one Golden Ratio but many ratios that are probable in nature (and art) and furthermore the Mandelbrot Set contains complex number ratios, as well as the one that Fibonacci discovered; BUT for real world *diversity*, as really found in realistic reality, the Fractal Ratio cannot be limited to a single number, although it must be limited to sets of numbers between 1 and 2.

--w2ilp-- (Iterating Limited Proportions?) --