CQ de WA2LQO

Seventy Two Years: 1944 -2016

The official independent voice of the Grumman Amateur Radio Club.

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GARC Meetings are held on the 3rd Wednesday ***see page 3 for new time and place.***

How Ham Radio Prepared Me to Be an Engineer

by Bob Wexelbaum, W2ILP

(Continued from September 2016)

Upon arrival at the Seattle-Tacoma Airport the Army troops and I were all bussed to barracks at Fort Lewis. The following morning I was surprised to see that the barrack that I was assigned to was half empty. I learned that many soldiers that had been ordered there had not yet arrived, and would arrive days later with notes from airlines stating that their flights had been delayed or cancelled. My rush to get to Fort Lewis on time should not have caused a panic. This was to be a case of what the Army calls: "hurry up and wait." It was the same reasoning that caused troops to be awakened at 5:00 AM to attend an activity scheduled for 10:00 AM so that even after showering and shaving there would be lots of waiting time when GIs could all "practice learning to wait" which was a part of our military training that conditioned us to understand that our individual importance was of low priority, when ranked against our group uniformity. We were thus programmed to be guided in only one of three generic ways: The right way; the wrong way; and the ARMY WAY. In most cases the ARMY WAY is the most uniform way (like when troops march wearing the same uniforms, in step with the same drummer.) In some cases the Army way may be the most chaotic random way (like when troops practice "rat races" to see which guys can evacuate the barracks first, while carrying their foot lockers and trying to shove down anyone in their path). Seldom is the ARMY Way the most logical. In the case of the arrival time of the troop ship that would transport us overseas; it was supposed to be secret but it was actually well known by most of the military personnel and civilians who were involved. This was to be the first time that a troop ship was to leave from Seattle and journey to Korea. Previously all troop ships that went directly to Korea left from San Francisco. Seattle residents recognized this new portal gateway to Korea as something different and exciting in an area that had become most famous for the large Boeing bomber factory in WW2.

The first thing I had to do was to get my duffle bag because I had only the one dress uniform that I had arrived in. All of my fatigues and boots and other Class As were in my duffle bag. Fatigues in those days were green everyday work uniforms. [Today Army fatigues are tan and camouflaged with brown spots.] I was ordered to go to the rail terminal at Fort Lewis to get my bag. There were lots of duffle bags there but mine was not among them. I learned that mine had been sent back to Camp Gordon, because it could not be delivered to me when I was not yet at Fort Lewis. I requested that it be searched for at Camp Gordon and again sent to Fort Lewis. Meanwhile I had to make do with my underwear and my one dress uniform and dress shoes because that is all that I had. I steam ironed my uniform, and took everything else to the base laundromat. I made the mistake of washing my white underwear with a khaki bag that I used for my dirty laundry. I was forced to buy that bag at Camp Gordon (so that everyone would have the same exact stuff to display for foot-locker tray inspections.) The dye of the bag ran and it painted all my white things. I washed them again twice using chlorine bleach but the end result was that my underwear remained a shade of yellow. I was the only guy to dress for work and physical exercising in a Class A uniform and yellow underwear and thus was the laughing stock of all the guys in my barrack. I was immediately recognized as someone who was "different" and not a usual GI. I was the only Signal Corps soldier in the barrack at that time as well. I coped well with my situation because I was used to being "different" wherever I went (K to College). Sometimes it was for unfairly

prejudiced reasons. My defense was to become the barracks clown and get them to laugh at me rather than hate me for being different. Had not Jewish comedians become accepted by making fools of themselves? I unfortunately made a very big mistake, however, by telling a sick joke about southerners rather than about Jews. I said, "The definition of a southern virgin is a girl who can run faster than her brother." The next thing I knew… I had been wrestled down and was getting my head pounded on the barrack's wooden floor by a soldier who believed that he had to defend his honor. I tried to stop him by saying, "If you believe that that joke is true then you are a bigger fool than I am." The southerner did not want to deal with my apologizing paradox. I was saved by the barrack's master sergeant who broke us up. Each barrack had a sergeant who was in charge of keeping order, which included preventing fights between GIs. We were lectured about respecting and not injuring each other because doing so would be helping our enemies. The sergeant had been to Korea on two previous tours of duty. He was not in the Signal Corps. He was in the Artillery but he surprised me by telling me that he was a licensed Ham! I had forgotten his call sign but searched through my old call books for his full name and call sign. This was not easy because I did not remember exactly how to spell his last name. I remembered that he was from the W1 area. Here is the result of my research:- He was W1YZN, Vernon J. Le Duc of Barnstead, New Hampshire. He was much older and wiser than I. [He has probably been a silent key for quite a while by now.] I was glad when I found him listed because without verification I would have felt guilty of dreaming him up by myself. He was instrumental in keeping me informed about what to expect on the troop ship journey and about Army conditions in Korea. I don't know how I would have survived without his friendship, for I had no other Army friends to share my personal thought with at that time. He was a muscular farmer who was descended from French pioneers. French people had been early settlers in what is now the north eastern part of the US (just as the Maxim family were), as well as in eastern Canada.

Sgt. Le Duc borrowed a jeep from the motor pool and took me with him to visit a MARS station at nearby McCord Air Force Base. We talked to the operators there asking if they were handling traffic from Korea. They were getting a lot of urgent Red Cross messages from European MARS stations but few from Korea. There were none coming in from the 8th Army MARS station in Seoul. We were asked to find out why this was so if we could get to Seoul. Korean national hams were not permitted to transmit at that time so it was hard to recognize when DX propagation would be at its best and what might be the best direction for aiming HF beam antennas. Next month I will continue my story about my trip to Korea, including my 18 day sea voyage and my arrival at Inchon.

CONEY ISLAND NOSTALGIA
By Jack Hayne W2BED

Ed, WB2EAV wrote about working in the Coney Island area last month. This brought memories of Coney to Jack, WB2BED who wrote the following.

Ed, I was born and raised in Brooklyn and loved going to Coney for a hot dog at Nathan's. I remember all the noise the servers would make with the tongs to attract customers, and hot corn served from large basins on the boardwalk. On a weekend pass in 1949 I took my West Point midwestern classmates to Coney to indoctrinate them in the good life of Brooklyn. They loved it … and so did I.

As you know I fenced at West Point and continue to do so. Hazing of plebes was a ritual in those days, but there were team varsity tables in the mess hall for the different sports, and plebes at varsity tables were not hazed. I was table commandant of the fencing table for a while, and one day I arrived for breakfast not having saved; a onetime mishap. Well, there are two days in the year that plebes can let it out and haze the upper classmen without retribution. On one of those nights on the varsity table I was presented with a caricature that showed the stubble on my chin. As a cadet I was coach of the plebe and varsity teams.

I asked Jack for more details about his distinguished military service. Here is what he wrote:-

I attended USMA at West Point from July 2, 1945 to graduation day June 7, 1949. Pearl and I were the first to be married in the Old Cadet Chapel. Everyone wants to use the large Cadet Chapel, so we requested the Old Chapel two years in advance. I met Pearl during WWII in 1943 shortly after I was drafted. One year after graduation I was in Korea at the north end of the Pusan Perimeter. Pearl wasn't very happy.

PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

At the last meeting I was telling the guys about something that recently occurred to me and they suggested that I write about it. I recently realized that there was one moment – a single instant in time – that changed my life beyond comprehension, although I had no idea of its monumental impact at the time.

By the time I started high school I had some exposure to electronics. My father had some stuff of his own, and with my kid brother we had once put together a kit electric motor and a crystal set radio receiver (In those days it was a galena ore crystal, no sissy 1N34s yet.) I also had to learn the fundamentals of Morse code to advance to Second Class in the Boy Scouts.

In 1961 I was a high school junior during the exciting days early in the manned spaceflight program, and the school officials allowed students to bring in personal radios on launch days. Of course the usual gear was one of those still new Japanese transistor radios that had recently become something of a fad. However, when I arrived in Social Studies class, sitting nearby was a classmate and acquaintance with an earphone plugged into – so help me – a pack of Marlboro cigarettes! Absolutely flabbergasted at so many levels…Cigarettes in school? An earphone plugged into a pack? With two knobs sticking out? ...I asked him what it was all about. Turns out that a recent issue off Radio-Electronics magazine had an article about building a portable AM broadcast radio (less speaker) in a crushproof cigarette pack, and he had built one himself. To say I was intrigued was an understatement…I was totally blown away. The one coherent thought I had was "I gotta get me one of those." The school library had a subscription to the magazine and I had no problem getting the article and literally memorizing every aspect of it. My classmate provided some assistance, but mostly I was on my own, getting the parts from Lafayette Radio on 6th Avenue and Canal Street. (I lived on the lower east side as a kid). It was a clever design, even by today's standards. The chassis was cut from the cardboard backing of a paper pad, fastened with tape and coated liberally with clear nail polish for rigidity and waterproofing. It neatly slid inside the cigarette box, similarly treated. The largest components were the four type NE batteries (half an AAA, and not easily available now) soldered into place, the ½" diameter volume potentiometer, and a ¾" diameter 365uuF variable tuning capacitor. The circuit had one transistor as a regenerative detector, followed by three transistors of audio amplification. The detector had RF and tickler coils made of 28 gauge magnet wire wound around the periphery of the chassis where they served as an antenna. I had to buy half a pound of the wire, and still have what's left of it lying around. I probably could draw the schematic from memory.

That summer we moved and I met a contemporary who had a ham radio license. By the time school started in September I had the Novice call sign WN2EAV. By Columbus Day I had the Technician call WB2EAV.

As a senior in High School applying to colleges, I needed to select a major, and based on recent events I decided on Electrical Engineering. There were times when I questioned that choice, but I persevered and graduated with an EE degree. Looking back, I wouldn't have it any other way. I have enjoyed my engineering career despite usual issues that we all put up with at work. I did reasonably well and am proud of what I accomplished. The best part is that I got to play with so many of the coolest toys ever! (Flight tests, Playing chicken with freight trains in a blizzard, and so much more.)

The impact of that day is impossible to overstate; It created my entire life. I was working as an engineer on my first job when a coworker was asked by his new wife if he had someone to fix up with her girlfriend. There is no way in a million years that I would have met this girl – my wife – if I wasn't working as an engineer. Of course, I likely would have met someone else, but I wouldn't have lived where I've lived, and any kids would certainly be different than the two I am so close to, even as adults.

Ed, WB2EAV

GRUMMAN AMATEUR RADIO CLUB
MINUTES OF GENERAL/BOARD MEETING 9/21/2016

The meeting was called to order by Ed at 7 PM.

TREASURER'S REPORT – Ed, WB2EAV

Finances are in good shape.

REPEATER REPORT – Gordon, KB2UB

Repeaters are working.

VE REPORT – Ed, WB2EAV

Three applicants applied. Two for Technician . One for General. They all passed.

VEs present were: Ed, WB2EAV, George, WB2IKT, and Bill,WB2QGZ..

GARC NETS: Net Controller Karen W2ABK **40 Meters: 7.289 MHz at 7:30 AM EST Sundays**

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.

ARES/RACES NETS: Mondays

PROGRAM

Gordon, KB2UB brought in some amazing pictures of his trip to Alaska, showing the ship he was on, glaciers, amazing scenery and a dog sled.

We had a special guest at our meeting. Pat Masterson, KE2LJ came and told us about his life in Florida, his ham Radio Club, hobbies, and driving trains. He is well and enjoying living in Florida.

NEW BUSINESS

George Sullivan's W2IKT picture is in the October QST magazine on page 107, aboard the MS Eurodam Ship on his way to Europe. Look for his picture.

MEETINGS

Board Meetings of the GARC are held on the 3rd Wednesday of each month, starting at 7 PM. They are combined with General Meetings they are presently being held at Haypath Park (where our recent FDs were held).

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. The membership roster has not been updated to delete Silent Keys and to enter new e-mail addresses for remaining members and friends. Please inform Pat Masterson if you want to update or edit roster information.

PUZZLE

This month's question is:

Which frequency band is shared by radio amateurs and WiFi users?

A. 21 MHz
B. 47 GHz
C. 250 GHz
D. 500 GHz

Last month's question was:

Who hypothetically risked the life of a cat in a box?

A. Erwin Schrodinger
B. Werner Heisenberg
C. Stephan Hawking
D. Niels Bohr

Answer: The correct answer is A.

GARC Officers

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Newsletter

CQ de WA2LQO is published monthly by the Grumman Amateur Radio Club for its members and friends. Editor: Bob Wexelbaum, Retiree 631-499-2214 rwexelbaum@verizon.net. Contributing writers: All GARC members (we hope). To submit articles or ham equipment advertisements contact the editor.

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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 – Technician: Element 2, General: Element 3, and Amateur Extra Class: Element 4. Time and location may be changed, and sessions may be cancelled if no applicants make appointments. The fee for 2016 is $14. All applicants must pre-register with Ed Gellender wb2eav@yahoo.com All new applicants should be aware that they must write their Social Security number on the application form if they have not gotten an FRN number. Applicant for an upgrade must bring both their present license and a photo copy of it. All applicants should bring picture ID such as a driver's license. Study material may be obtained from ARRL-VEC at http://www.arrl.org, W5YI-VEC at http//www.W5YI.org or other VECs. All VECs use and update the same Q&A pools.

Editorial

I had promised to tell you why WiFi stinks and how to fix it but to tell the truth I bit off a lot more than I can chew. There is not enough room in this newsletter to cover that topic and to be honest I would have to first understand how WiFi technically works myself before I could properly explain its present and future limitations and what the ITU, the FCC, the WiFi router manufacturers and the cable and fiber providers need to do to make WiFi available everywhere for secure emergency communication in worst case scenarios. I see that the Japanese have 4 channels in the 250 GHz band while the US only has 3 and this seems to be a reason for WiFi to smell worse here. In discussing Tegmark's theories I find myself in a similar situation. There I bit off much more than I can chew. I realize that readers of this newsletter may not be familiar with the experiment that involves risking the life of Schrodinger's cat even if they had been exposed to it in college. I have forgotten what I learned. Besides Tegmark's explanation, I have found two other books in my library that try to explain this topic. One is too elementary and over-simplified, while the other is much more complex, and delves greatly into the half-life of any atomic chemical element that (unlike hydrogen) has more than one ring of electrons orbiting around it. Then I would have to explain Bohr's explanation of there being different energy levels in different electron orbits which can make the decay of atomic energy non-linear with time. I would even have to explain mathematically why Zeno, an ancient philosopher, incorrectly believed that an arrow shot to a target could never get there mathematically, because it would have to first travel ½ of the way and then ½ of the remaining way and so on. We know that ½ + ¼ + 1/8 + 1/16 + infinite halves = 1. Which, BTW, applies also to radio signals. The truth is that they mathematically cannot go on forever because there is a finite limit, no matter how many dB they get serially attenuated by as they travel away (like Zeno's arrow) at increasing time and distances. The greater the initial power level the father they may be received, but there is always a final end limit. This applies as well to the initial peak power imparted by Zeno's bow.

73 de w2ilp—(Incrementally Limited Propagation)

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FIRST CLASS MAIL
Do Not Delay

A BOOK REPORT
(Continued from August 2016)

I had prepared to be a high school teacher of Physics and earned a MS in Ed. I first earned a BS in Electrical Engineering. It is unfair for me to criticize Max Tegmark when he hypothesizes about stuff that is above my level and also unfair to expect the readers who read my critiques here to agree or disagree with me. I can however expect all of you ham readers to understand things that Tegmark says which you may have learned about as hams. To begin I must relate what Tegmark has to say about his personal life at Berkley that is relevant to his understanding of Maxwell's equations. On his first day at Berkley, Tegmark met an Australian girl who permanently became his roommate. She succeeded in getting him excused from having to take an electromagnetics course, which he believed would be a waste of his time. After each chapter Tegmark writes a summary which he calls "The Bottom Line" He states after Chapter 1, "Everything, even light and people, seems to be made of particles". This is contrary to the laws of Maxwell. We know that light and radio waves are not particles. After saying everything is all particles Tegmark introduces the concept of a "waveform function." Without wave motion, nothing could exist because if you could get any chemical element to totally cease the activity of its orbiting electrons by freezing it to absolute real zero, it would have no mass and could no longer exist. Every chemical molecule in your antenna contributes to what is known as thermal noise because of electron activity. The present day astronomers scan the universe and date all that they receive by the relative time of its arrival from the theoretical time of the Big Bang. They believe that the oldest received microwave signals occurred when the each elements was born. They believe that the simplest element, Hydrogen, was the first to exist, and then each heavier element arrived in periodic table order as the universe expanded. Thus they attribute the oldest "mysterious" background noise to be the result of the birth of the elements which, according to Niels Bohr, are the building blocks of everything. Radio astronomer cosmologists receive this old "baby picture" noise with microwave antennas. It is thus part of cosmic history. It is not linear but fluctuates because the energy level of electron rings varies. Highly accurate measurements now exist that agree with theoretical predictions. Tegmark has had experience with large dish antennas as well as interferometer antenna arrays used for receiving. Max Tegmark (aka Max Shapiro) is not a ham. He has no call sign that can be found by using the QRZ look up. His theories and those of other physicists (such Erwin Schrodinger) are very strange. Tegmark is strange. So was Schrodinger. He might have had a strange cat. (To be continued)

–w2ilp-(Interesting Loony Personalities?)…Don't make a wave…if you aren't licensed.