

CQ de WA2LQO

Seventy Two Years: 1944 -2016

The official independent voice of the Grumman Amateur Radio Club.

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How Ham Radio Prepared Me to Become an Engineer

By Bob Wexelbaum, W2ILP

Continuing from where I left off last month, I will start from the time that I entered military service after leaving my job at Emerson Radio and TV Corp. At that time I held an Advanced Class Ham License and a commercial Second Class Radiotelephone License and I was a member of ARES, RACES and MARS. I was able to make a special deal with a recruiting officer that would involve volunteering to be drafted, (before being greeted with an actual draft notice) to serve for only two years in the U.S. Army, plus 6 years in the Army reserve. If I had enlisted in military service it would have been for a four year term of duty. Men who got drafted were given serial numbers on their records and dog tags that started with the letters "US," while men who enlisted (volunteered) got the letters "RA" (Regular Army). There were advantages and disadvantages to this labeling in either case that I learned about later. I was officially a US although I had volunteered like an RA.

I was mailed a subway token for travel to Whitehall Street, where I took the military oath and boarded a bus to Fort Dix, New Jersey. There I was issued complete sets of dress uniforms and green work uniforms called "fatigues", a helmet, a duffle bag, as well as dress shoes and combat boots. Everything fit me fairly well except the fatigue shirts which were much too large. I weighed only 125 pounds and was 5 feet 8 inches tall at that time.

After a night at Fort Dix, I boarded another bus to Camp Pickett, Virginia. When I found out that Camp Pickett was not a Signal Corp base I was disappointed, until I learned that I was only going to get my basic training there and would probably be able to get to a signal school as the result of aptitude tests or what the Army referred to as my "Industrial Training." I can remember that the radio technical aptitude test that I took was almost exactly the same as the Advanced Class ham exam. I later found out that I was one of the less than 0.1% of all GIs who had passed that test with 100% correct. There was also an automotive test that I did well on. That test had questions about the use of testers and tools for the maintenance of gasoline engines and automobile ignition and carburetors. A test for the ability to copy Morse Code was unlike the tests given for FCC licenses, being designed instead to test aptitude. Only three letters of the code were presented to the applicants (I-didit, R-didahdit, and T-dah). These three letters were then sent mixed in groups of five at faster and faster speeds, which had to be copied by the applicants. I think I got lost after about 15 wpm. This meant that I would not be getting trained as a telegrapher. I was also happy to learn that my poor physical performance on heights, on the basic training physical "confidence course", proved that I was not suited to

become a Signal Corp pole-lineman. During my basic training I had qualified as a Marksman, by firing an M1 rifle on a rifle range. I had stabbed the required number of dummies with a fixed bayonet, while yelling "KILL". I was able to complete a 14 mile march, with an M1 on shoulder, a helmet on head and a back pack which contained half of a pup tent and pegs, mess gear, and an entrenching tool. Alas, I could only do two proper push-ups and three pull-ups because my arms were not muscular, but I could do more than the required number of sit-ups and the other physical exercises. I found that, in spite of the fact that I was a nerdy "book-worm", I was not exactly the "sickly green creature" that one of my High School teachers had called me.

I'll only relate a couple of my basic training experiences, because they were humorous. Others need not be reported here because they don't have anything to directly do with Ham Radio anyway. Toward the end of basic we were out in the field ("on bivouac"). I remember it was Christmastime and very cold. Many of the guys had received Christmas gift mail in the field, including items of food; I got a kosher salami from an aunt. During the night many of the GIs had to "go". Going to the toilet involved leaving your tent, walking to the other side of the hill where we were encamped and digging a hole with your entrenching tool to bury your stools. One of the GIs (I swear it wasn't me) got a bright idea. He didn't go to the other side of the hill. Instead he carefully wrapped up his excretions in the fancy gift wrappings that he had saved from his mail. He then snuck the package into the Sergeants' big tent. No one would tell who had done that dirty trick... Thus we all had to be punished. It snowed and rained that morning. Four Sergeants took turns; close order drilling the entire company in the partially frozen mud until some guy dropped and had to be sent to the base hospital by ambulance. The next morning we all marched to the main part of the base where we were to receive a training lecture on "Night Fighting" in preparation for an exercise of creeping under barbed wire while under tracer bullet firings. After marching to a warm lecture hall from the cold outdoors, all the men were seated. Everyone had to wear their metal helmets during the lecture because if anyone was caught sleeping he would get rapped on the helmet to get awakened. One guy began to cough loudly. Real coughs became contagious. Fake coughs joined in. Almost everyone began continuously coughing. An officer introduced our lecturer, who was an experienced short African-American sergeant, who had recently been honorably awarded medals for fighting in Korea. The sergeant took the podium and spoke loudly thusly: "AT EASE YOUSE MENS. Youse mens is diss-easy." It worked because the GIs began to laugh; It is hard to cough while laughing. Then the sergeant gave his "Night Fighting" lecture, which consisted of only one sentence: "Remember mens ... at night it is usually dark."

After basic I was given leave time and went home to The Bronx. I spent most of leave time setting up mobile ham gear in my car. I got to see Lenny, W2DUP, the Bronx ARRL EC and other ham friends at a meeting of the Bronx Radio Club. I would have liked to have a girlfriend, like most young GIs had, but I was too shy and too socially introverted at that time. I was issued travel money and orders to report to Camp Gordon, Georgia. That was great news because I learned that Camp Gordon, GA (now called Fort Gordon), was the home of The South Eastern Signal School which was, and is, familiarly known by Army radio men as "Tessy Tech." (To be continued)

PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

DUES: It is that time of year again. Basic annual dues are \$20, \$25 for family (sharing a mailing address), and \$10 for retirees living out of the area. Make checks payable to Grumman ARC.

For decades I have been working with various kinds of wire and cable, and have always had a problem with cutting the larger stuff, especially large coaxes (RG-8/U, RG-213/U, LMR-400), etc) and multi-conductor solid wire used in home wiring (Romax). The larger dikes readily available from dollar stores and Harbor Freight are dirt cheap but don't cut well (if you hold them up to the light you can see that the cutting edges just don't line up). Professional cutters are now going for \$30 and up, with nothing inbetween.

Well, recently I have been working at a construction site with professional electricians and have noticed their tools. They all have various forms of cable cutters, some of which are quite impressive pieces of machinery that can cut incredibly thick high power cables. The more sedate cable cutters - the type I'm interested in - look like large diagonal cutters, but the jaws and cutting edges overlap as they close. I recently saw a Harbor Freight promo for a cable cutter that looked like the ones I had seen, for about 8 dollars and I bought one. It cut through some 14 gauge Romax that I had on hand like it was butter. I brought home from work an odd piece of scrap multi-conductor 8 gauge cable - a greater challenge than anything I anticipate cutting at home, and while it took some "oomph," it did cut nicely. I finally have a tool that I can use for the job.

While I am on the subject of Harbor Freight, they sell tools under the "Pittsburg Pro" line for a little more money, but still extremely reasonable, that includes 6 -7 inch dikes, needle nose and linesman pliers. I bought one of each. Can't complain about the price, and I have used them with satisfying results. Finally I have a few good tools to put in my "heavy industry" tool drawer. Ed, WB2EAV

GRUMMAN AMATEUR RADIO CLUB MINUTES OF GENERAL MEETING 12/16 /2015

This meeting was the GARC's annual holiday part; thus no formal detained minutes were taken.

TREASURER'S REPORT - Ed, WB2EAV

Finances are in good shape.

REPEATER REPORT - Gordon, KB2UB

Repeaters are working.

VE REPORT - Ed, WB2EAV: Two applicants for tech passed. VEs: WB2EAV, WB2QGZ, KC2YRJ

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

Net Controller: Karen, W2ABK

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 at Haypath Park on the 2nd Wednesday of each month at 12:00 Noon *Meetings may be cancelled or relocated. Check the GARC 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.

South Koreans Remember Their Basic Electronics Teachers

As a member of the American Legion, I receive a monthly magazine. In the December 2015 issue I was surprised to read an editorial in The Legion magazine that was written by National Commander Dale Barnett about his participation in the dedication of the Korean War Veterans Memorial Highway in 2008. He said that it is not just a stretch of Interstate 80 so much as it is a reminder of a war that claimed more than 34,000 American and 415,000 South Korean lives. This brought up the subject of the American Legion's relationship with the Samsung Corp. Recently Samsung donated \$1 million to the Korean Veterans Memorial Foundation's maintenance fund. In 1995, Samsung bestowed a \$5 million endowment for the establishment of a fund for family members of U.S. citizens who are war veterans. Since then it has enabled nearly 2,000 American students to pursue education by awarding \$5.5 million in scholarship awards.

Even today the South Koreans face provocation from the militarized tyrannical regime to their north. Recent news says that North Korea is demonstrating nuclear weapons while Iran is negotiating willingness to be fully inspected to eliminate potential nuclear weapon production if present economic sanctions are removed.

Samsung has invested in science, engineering and math (STEM) education in more than 500 U.S. public schools with a grant of \$378,000 for many students who are direct descendants of Korean War veterans.

Dale Barnett plans to visit Seoul this year to express his gratitude to our troops and our South Korean allies and to visit the demilitarized zone (DMZ). He believes that although a cease-fire has been in effect for 62 years, the region may be just one incident away from another devastating war.

Why am I bringing up the subject of Samsung's contributions here? I do not want this to appear as an advertisement for Samsung's products. I believe it is because of a legacy I feel personally proud about, even though I did not fight in any hand-to-hand combat. I worked in a radio shop training Korean personnel in basic electronics, and I helped a Korean officer translate service manuals and write about FM theory. My own accomplishments were small but I believe that the U.S. Army Signal Corps did plant the seeds from which some of Samsung engineering sprung...to become the world's largest electronics corporation. Samsung alone now provides for more than 30% of the South Korean economy; far more than Hyundai. The engineers at Samsung do acknowledge the fact that the US military had helped them learn electronics and mechanics at a time when the South Korean President, Syngman Rhee prohibited South Koreans from attending vocational schools or colleges to study Math, Science or Engineering anywhere outside of South Korea. (continued on Page 6)

PUZZLE

Last month's question was:--

What is the beamwidth of a symmetrical pattern antenna with gain of 20 dB as compared to an isotropic radiator?

- A. 10.1 degrees
- B. 20.3 degrees
- C. 45.0 degrees
- D. 60.9 degrees

Answer: The correct answer is B.

Beamwidth = $230 / (\text{the square root of } 10)^x$ where $x = \text{Antenna gain in dB} / 10$

In this problem the antenna gain is 20 dB thus $X = 20 / 10 = 2$

The beamwidth = $203 / (\text{the square root of } 10)^2$ which becomes $203 / 10 = 20.3$ degrees which is answer B

This month's question is :-

What determines the velocity factor in a transmission line?

- A. The termination impedance
- B. The line length
- C. Dielectrics in the line
- D. The center conductor line length

GARC Officers

President: Ed Gellender, WB2EAV 516-507-8969 wb2eav@yahoo.com
Vice President: Gordon Sammis, KB2UB Retiree 631-666-7463 sammigo@verizon.net
Secretary: Karen Cefalo, W2ABK 631-754-0974 w2abk@aol.com
Treasurer: Ed Gellender, WB2EAV (see above)
WA2LQO Trustee: Ray Schubnel, W2DKM Retiree schubnel@optonline.net
2 Yr. Board Member: Jack Cottrell, WA2PYK Retiree 516-249-0979 jccottrell2@verizon.net
1 Yr. Board Member: Dave Ledo, AB2EF ab2efdl@gmail.com
1 Yr. Board Member: Jack Hayne, WB2BED wb2bed@arrl.net
1 Yr. Board Member: George Sullivan, WB2IKT

Newsletter

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GARC Webmaster

Pat Masterson, KE2LJ Retiree 813-938-4614 Pat-Masterson@tampabay.rr.com

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 not applicants make appointments. The fee is \$14. All applicants must pre-register with Ed Gellender wb2eav@yahoo.com. All new applicants should be aware that they must use 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 know that it is improper for me to voice political opinions here but today's news has brought me to the point of noticing something that is connected to ham radio and Huntington L.I. Today I read in Newsday that Rep. Steve Israel (D-Huntington) is resigning "to write a book". Steve has recently been thanked by hams for sponsoring a bill to support their right to operate their radios and erect their antennas in communities where they had been prevented from doing so, "if at all possible." Steve has visited the Great South Bay Radio Club many times and has told hams that his father was a licensed ham. Steve has visited American Legion Posts and has helped veterans and their families get benefits that they couldn't have gotten without his help. Where Steve lost many of us is when he was only one of the two Democrats who voted with the Republicans against President Obama and Secretary Kerry's plan to negotiate with Iran rather than to support the bombing of Iran, as Netanyahu of Israel had wanted. Steve thought that that is what Americans of Jewish heritage wanted but he was wrong. 68 % of American Jews voted for Obama and some even believe that it is time for the US to stop sending over 2 billion dollars per year to aid the theocratic nation of Israel while Israel continues to build settlements in the West Bank (occupied territory) against World Court and U.N. decisions. All American Jews are not Zionists. Some are Secular Humanists. Steve should have known that. He had even spoken at a Long Island Secular Humanist (LISH) meeting that I had attended. All lives count...at least for DXCC.

VY 73 AR K,

Bob w2ilp (I Like Peace)...Let us not back up those who would drop the first bomb...I think...

Grumman Amateur Radio Club
215 Birchwood Park Drive
Jericho, NY 11753

FIRST CLASS MAIL

Do Not Delay

South Koreans remember their basic electronics teachers

(continued from page 4)

Before continuing to write about South Korea I must present the following facts, which I gathered from *The Concise Columbia Encyclopedia*.

SOUTH KOREA or Republic of Korea... Syngman Rhee was elected the first president in 1948, and forced to resign in 1960 by popular uprising against his authoritarian rule. A military junta under Gen. Park Chung Hee seized power in 1961 and by 1975 assumed near dictatorial power. In 1979 President Park was assassinated and Lt. Gen Chun Doo Hwan took over. Chun was elected president and reelected in 1981 to a full 7 year term. A new constitution was approved in 1980.

When I was helping to translate manuals I worked with a very friendly Korean officer, who had also volunteered to teach interested GIs the Korean language and its phonetic alphabet. He told me that the US had approved of Rhee because he was surely an anti-communist, even though he was hated by most Koreans. Rhee had married a Dutch woman and told the Koreans that he believed that Europeans were superior to Koreans. The officer said that this was a big mistake - Koreans are a proud people and will not support a leader who believes that they are inferior. Rhee and Park prevented Koreans from studying science abroad, but allowed foreign study of liberal arts and theology. Rhee had also prevented Koreans from mining mineral resources on land that he claimed was set aside for national cemeteries. The truth is that Rhee and Park did not want any leader or any industry to have more economic power than they did, which held back the development of companies like Samsung. Samsung had actually manufactured a single black and white TV set model before the Korean War, but could not really begin to grow to the gigantic size it is now until the democratic constitution of 1980 was approved.