CQ de WA2LQO

Seventy Three Years: 1944 -2017

The official independent voice of the Grumman Amateur Radio Club.

JULY 2017 VOLUME 90 NUMBER 7

THIS MONTH'S MEETING IS 5:30 PM ON WEDNESDAY JULY 19

ELLSWORTH ALLEN PARK IN FARMINGDALE

How Ham Radio prepared me to be an Engineer

by Bob Wexelbaum, W2ILP ***(Continued from June 2017)***

I will again continue telling about my experiences as a GI at the 181st Signal Depot in Young Dong Po, Korea. The details I remember are significant because they altered my own philosophy about life in general and I feel that I want to share them with you because of their humor as well as their sadness and because of the honorable American guys and South Koreans that I served with.

When I was at Fort Lewis, Washington, waiting to be shipped out to Korea, Sgt. Vernon Le Duc and I had visited the MARS station at nearby McChord AFB, where the operators there asked us to find out why there was so little traffic from the MARS station in Seoul, Korea. I discussed this matter with the hams of the 181st Signal Depot, and three of them agreed to visit the MARS station when we go to Seoul. They were Frank, Richard and Monte. The only time that we could all be at liberty to go was on a Sunday. We borrowed a jeep from the motor pool, and when we got to the 8th Army Headquarters we asked the gate sentry for the location of the MARS station. When we arrived, it was locked with no sign as to when it might be opened, and no way to find its operators. We did notice the HF antennas for 80-40-20-15 and 10 Meters. After waiting some time we decided to go to the base PX for lunch, where we had hamburgers similar to those sold in state-side Burger Kings. Then we decided to visit the Armed Forces Radio Station that served all UN forces within its coverage area. It was a 5KW AM station that we had been listening to for some time on the radios we were testing. Wherever there are troops there are such stations, along with the military newspaper "Stars and Stripes; all considered necessary to boost GI morale by providing education, information and entertainment.

Frank photographed me in front of the station sign. Radio Vagabond, as it was known, was supposed to be portable, but its antenna towers seemed permanent. We explained we were hams to an operator and his assistant, and we were let in. We entered the control room but were not allowed go past a glass window where there would normally be DJs and microphones. The operator was an Army officer whose First Class Radiotelephone License was posted on the wall, along with two other licenses for operators who worked during different time shifts. I believe that the station was usually scheduled to be on the air for 18 hours every day, and longer on weekends when many GIs had time to listen. When we entered it was transmitting audio from an Ampex model 200 tape recorder. The station was also equipped with large turntables that could provide audio from very large vinyl discs that ran for as long as 2 ½ hours at 33 1/3 rpm. Tapes and discs were received via the K-16 AFB daily, to provide news as soon as possible after it occurred. The troops especially wanted to hear timely broadcasts of sporting events (baseball, football, boxing, etc.) and usually heard them within a day. This was best accomplished by using magnetic tape recorders like the Ampex unit. It was manufactured in California, had three motors, and ran reel to reel tapes at 7 ½ or 15 inches per second (ips). The RD-74 tape recorders that I was familiar with had smaller reels and only one motor, running tapes at 3 ¾ or 7 ½ ips. The use of magnetic tape recorders was believed to be initiated by Bing Crosby, who insisted that he would not work for the NBC network unless he could edit his programs before broadcast. FCC licensed station operators were responsible for cutting out the audio immediately if someone uttered profanities or made obviously bigoted speeches … unfortunately after it

got out. Tape recording took that responsibility away and gave individual networks or individual stations a chance to edit everything. Different advertisements, propaganda and different cultural matters could be added or eliminated on tapes going to different areas. Bing could "stir up the Minute Maid" (orange juice) on the east coast while stirring up something else on the west coast.

Armed Forces Radio overseas broadcasts would be received by enemies as well as friends. We were able to hear North Korean propaganda broadcasts. Care had to be taken to normally be "politically correct" and comply with FCC and US government policy.

Every weekend the RCA rep went out in the forest to search for minerals. He said that he was an amateur geologist who was doing it as a hobby, just for fun. He took a Geiger counter and a mine detector with him, as well as picks and shovels for digging. He was accompanied by his Korean houseboy, who helped him dig and served as a translator to communicate with curious Korean citizens. Technically he had no right to prospect on Korean property…but it was just his hobby. He became friendly with Monte and they went together on a few trips to the hills of Suwon. Monte told me that the RCA man confided that he had only found tungsten carbide; nothing valuable. Monte was searching for relics. He had the houseboy ask an old farmer if he had anything that was very old to sell, and the farmer brought out an ancient portable crossbow that was in the shape of a lyre (an ancient harp-like musical instrument) that had been in his family for many generations. Monte gave the farmer two cartons of cigarettes for the crossbow. When Monte brought the old crossbow back to the Signal Depot he proudly showed it to all of the soldiers who happened to be around at the time. One soldier loudly yelled. "Leave it to a fag like Monte to give away cartons of good American cigarettes for a filthy twisted stick." I hadn't thought about it much…but Monte did have some feminine mannerisms …Was he a homosexual? As his closest friend would I be accused of also being a homo? I had thought that men had to be straight to enlist or be drafted into military service. (There was no "Don't ask...Don't tell" policy at that time.) I had to confront Monte and ask him if…he wasn't…exactly straight. I'll tell you his story next month. (to be continued)

PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

Field Day featured perfect weather and everything went as planned. The only glitch occurred when we were putting up the 40 Meter antenna and Bill N2SFT's nice fishing-rod based-line-thrower lost several weights in the underbrush. We then gave up on getting the antenna high up in the trees, settling instead on a lower, more accessible, branch.

Preliminary contest results from Ray W2DKR show a total of 393 contacts with only one lonely CW QSO, That costs points, but we have always focused more on the emergency prep and fun aspects than the contest part (… and 2 out of 3 ain't bad). I think this a one-time anomaly, and expect more CW next year. By band: we logged 93 contacts on 75 Meters, 132 on 40M, 102 on 20M, 43 on 15M and 23 on 10M.

I always keep an eye on the HF rigs out there, but usually I just shrug my shoulders and say, "Not my style." Every once in a while, though, I see one that catches my interest. Back when I was a new ham, a lot of my teenage aching passion was directed at the latest radio equipment, but spending a lot on just a hobby was out of the question. I've never really outgrown that phase, and even today I have simple desires: a basic 100 W transceiver primarily for CW, although with SSB capability for use at Field Day. I have no use for anything more, focusing instead on low cost. Every so often a rig brings back that teenage excitement; over the decades I've bought one or two. Recently I've noticed the Icom IC-718 and the Alnico SR-8T sell for around $600, although neither has the one feature that I am prepared to pay extra for – a CW filter. (Icom has the option but the price is a cold shower.)

My inherited TS-830S (without CW filter) is getting old and I've been window shopping. I have now fallen passionately in love (don't tell my XYL; she may misunderstand). Yaesu recently introduced the FT-891 (see QST June 2017) with state-of-the-art drift-free local oscillators and all kinds of filtering…and it is only $630!

As my regular readers know I am nominally retired, but I enjoy working (they let me play with such nice toys) and I want to keep doing it. The extra money is really nice too…nice enough to, say, spend some of it on just a hobby. Ed WB2EAV

GRUMMAN AMATEUR RADIO CLUB
MINUTES OF EXECUTIVE BOARD/GENERAL MEETING 6/21/2017
By Karen, W2ABK

The meeting was called to order by Gordon at 5:30 PM.

TREASURER'S REPORT – Ed, WB2EAV

Finances continue to be in good shape.

REPEATER REPORT – Gordon, KB2UB

Repeaters are working.

NET REPORT – Karen, W2ABK

Thursday night net at 8:15 PM on 146.745 MHz had 1 check ins.
Thursday night net at 8:30 PM on 145.330 MHz had 3 check ins.
Sunday morning net at 7:30 AM on 7.289 MHz had 1 check in.

VE REPORT – Ed, WB2EAV

Two applicants applied for the Technician Class exam and passed.
Three VEs were present: Ed, WB2EAV, Bill, WB2QGZ and Ken KC2YRJ

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.

NEW BUSINESS

Ed, WB2EAV renewed the club's liability insurance for Field Day.

PROGRAM

We discussed preparation for Field Day and agreed to meet on Saturday June 24 at 10AM to put up the antennas.

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 need to delete, update or edit your roster information.

MEETINGS

Board and General Meetings are now combined. Unless otherwise notified they start at 5:30 PM at the Ellsworth Allen Park in Farmingdale.

PUZZLE

*This **month's puzzle is:-***

Before there was phase locked loop frequency control which mode was troubled by the "capture effect"?

A. CW
B. AM
C. FM
D. SSB

Last month's puzzle was:-

Who was the first man to use cathode ray tubes (CRTs) to view transients and waveforms and to experiment with the use of CRTs for radar displays, microscopes and television?

A. Nicola Tesla
B. William Crookes
C. Philo Farnsworth
D. Denis Gabor

Answer: The correct answer is D.

Numbers? Constants? Atoms? Waves? Quantum?

(Continued from June 2017)

In the 1920s and 1930s very little was understood about the properties of the element radium. Unfortunately opportunists wanted to cash in on a breakthrough of science that promised to make man-made radium available in quantity, as opposed to natural radium which is rarely found by geologists. Doctors prescribed radium to treat cancer (which they still do today) but they also tried to treat gout, arthritis, dermatitis, tuberculosis and other conditions with levels of radium which would prove to be very toxic. During WW I, intravenous shots of radium were given to soldiers who had suffered severe blood loss, and radium was used externally to stimulate nerves, loosen joints and relax scar tissue. Manufacturers began making radium toothpaste and face powder for sparkling smiles and glowing complexions. A Dr. Alfred Curie (who was no relative of the Curie Physicists) sold a beauty product that was supposed to contain thorium as well as radium. The most publicized radium poisoning took place in the 1920s in Orange, NJ where the US Radium Corporation hired young girls to paint watch and instrument dials with glow-in-the-dark radium paint. To keep their paint brushes sharp the girls were told to twirl the brush tips between their lips and thus swallowed paint in the process. The paint contained one part radium to 30,000 parts of zinc sulfide and was used to paint 250 dials per day. Today, even that amount of zinc is considered a health hazard, let alone the radium.

Pierre Curie did not die from handling radium. He died during a rainstorm when he absent-mindedly walked out into a Paris street and had his skull crushed by the wheels of a horse-drawn wagon. Marie Curie died many years later due to radium exposure that was more controlled than what was being sold to the uninformed public. In 1932 an American golfer named Eban Byers drank several bottles per day of a patented energy drink called Radiothor that was prescribed by his doctor for five years after he injured his arm. It was a mixture of distilled water, radium and mesothorium. Radium replaces calcium in human bones, and before Byers died at age 51, his jaw disintegrated, his teeth fell out and his weight dropped to 100 pounds. His gruesome death was well publicized. Even so, Irene Curie did not initially take the precautions in handling radium as seriously as Lise Meitner and Otto Hahn did when they worked with radium at the Kaiser Wilhelm Institute after WWI. Radium reminds me of the subject of non-ionizing radio frequencies, and to whether RF can cure or cause cancer. Experts admit more research may still be needed and manufacturers of cell phones warn users to avoid using them close to their head so as to prevent them being sued if brain cancers can be proven to be caused by frequent use, especially by young children.

The subject of atomic structure began to gradually get clarified. It started with what was called the Bohr configuration and it eventually confirmed the periodic table of the elements that was started in 1869 by the Russian chemist Dmitri Mendeleev. Hydrogen is the simplest and lightest element and it is given number 1 on the chart. The heaviest found in nature is Uranium, number 92. Elements higher than uranium are called "transuranic" elements and the chart now goes up to much heavier elements such as Ununoctium element number 118, but some of the heaviest elements only exist theoretically, having never been produced in a lab. Transuranic research to confirm atomic structure was initially conducted by Irene Curie in France, Lise Meitner and Otto Hahn in Germany, Ernest Rutherford in Great Britain and Enrico Fermi in Italy, but nobody in the USA until work began at The Brookhaven National Labs here on Long Island. In 1934 Fermi's group thought that they had created element 93 by getting uranium atoms to absorb more neutrons than they could radiate. Fermi wound up by splitting the uranium atoms into atoms of lower numbers. When Irene Curie and Paul Savitch, a Yugoslavian physicist, tried this they produced an element that resembled barium. Barium is a much lighter element with atomic number 56. As their lab work progressed their work with heavy elements became more difficult and the results became stranger. This led to the recognition of subatomic particles and the fact that such particles might be the same particles that de Broglie believed to be a source of energy that traveled upon radio and light waves.

Irene Curie and Frederick broke up (not their marriage but their lab work) when Frederick got a job offer from the College de France where he participated in designing an early particle accelerator, known as a cyclotron, and Irene became a professor at the University of Paris continuing the work her mother started at the Radium Institute.

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GARC VE EXAMS We normally proctor exams for all classes of ham licenses on the second Tuesday of each month, at Bethpage Community Park, starting at 5:30 PM. Sessions will be cancelled if no one applies, so be sure to register with Ed Gellender wb2eav@yahoo.com All new applicants should get a FRN from the FCC, or they will have to write their Social Security number on the application form. Applicants for an upgrade must bring a copy of their present license for us to send in. All applicants need a picture ID such as a driver's license, and the fee is $14. 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 have decided not to brag or complain about anything this month. It has been hectic for me in many ways and I don't want to blame anyone for my own personal problems or brag about my own limited achievements, which I am sure are not unique. Therefore let me keep this editorial short and avoid seeming to be opinionated politically about anything that is happening today medically, naturally, robotically, locally, nationally or globally by artificial or natural intelligence or lack of ethical intelligence. Anything I say may be held against me if I don't keep my big mouth shut.

I managed to get my 40 Meter antenna up and working at a VSWR lower than 2:1. If I can awake at the proper time for the Sunday morning net I'll try to sign in.

73 de w2ilp (I Like Peace)

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Do Not Delay

Numbers? Constants? Waves? Quantum?
(continued from page 4)

The competition between research teams became more heated when each wanted to prove that their own conclusions were made first rather than to confirm the conclusions of the others by admitting to get the same results. This is a type of nationalism when each nation wants to prove its scientists are the world's best. The trouble became worse when Adolph Hitler was sworn in as chancellor of Germany on January 30, 1933. Hitler's NAZI party believed that so-called Aryans (Germans and blondes of European and Western Asian heritage) were part of a superior master race. They blamed non-Arian people, as they defined them - especially Jews - for Germany's economic problems. Hitler issued a law called "Law for the Restoration of the Professional Civil Service" which banned Jews from working on state sponsored research as well as from working in universities. Some thought that the law would not be enforced but it became evident that it had to be when a German Jew named Fritz Haber resigned from being the director of the Kaiser Wilhelm Institute of Physical Chemistry and a loyal NAZI who had less experience took his job. Meitner and her coworkers discussed Haber's resignation while Max Planck, felt conflicted about how to handle the situation. Planck said "…but what should I do? It is the law". Meitner urged Planck as president of the Kaiser Wilhelm Society to intervene on Haber's behalf and try to help him get his job back. Planck wrote in an article called "My meeting with Hitler" He wrote "Hitler answered me literally: 'I have nothing against Jews. But the Jews are all Communists, and these are my enemies. My life is against them.' " Planck told Hitler that many old German families of German heritage were actually Jewish. Hitler screamed: "That is not right. A Jew is a Jew. All Jews hang together. Where one Jew is there are others of his species." Planck excused himself from the meeting. There was nothing more he could say to the irrational dictator. Plank never tried to negotiate with Hitler again. He remained silent during the remainder of his life. There were no reports about him until his obituary was printed when he died months after the end of WWII. Meitner thought that her job would be protected because she was a protestant with Jewish ancestry, and an Austrian citizen, but in September 1933 she received notice from the Prussian Minister of Education that referred to a questionnaire that she had filled out. It said that her professorship at the University of Berlin was to be revoked immediately due to a paragraph of the professional civil service law.

(to be continued)