

# CQ de WA2LQO

Seventy Years: 1944 -2014

*The official voice of the Grumman Amateur Radio Club*

**July 2014 VOLUME 87 NUMBER 7**

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**HOW I BECAME A HAM (continued from June 2014)**

**By Bob Wexelbaum, W2ILP**

*Synopsis: I will continue to discuss inputs from my friends and my teachers during my high school years. Not all were hams, but all were my Elmers.*

My friend, Albert Miller W2ESU, having earned a ham license on July of 1948, immediately returned from the Catskill Mountains and expected to build a HF AM/CW transmitter and get it on the air in a few weeks' time (with some technical help from me). This was not to happen. There were too many components remaining to be obtained and too much effort required to assemble and test the entire transmitter. From mid-July until August the large transformers and the tube sockets were mounted on the chassis. There were two steel chassis for power supplies, and two large aluminum ones: One for the RF buffer, doublers, and final RF amplifier, and another for the speech amplifier and modulator. Al had no metal working tools for the job, so he borrowed an electric drill from a neighbor and drilled rows of small holes in order to make larger holes for the transformers and tube sockets. It was a crash program, which required the use of a manual can opener and a hammer to connect many drilled holes. This was the same can opener that Al used to open cans of beans and other vegetables which were his main summer food source, having spent his food money on transformers. Empty cans of various sizes were saved for possible use as tube shields. It was decided after some consideration that he would use war surplus 1625 power pentode tubes that were the same as 807s, because they cost only 25 cents, while 807s couldn't be bought for less than \$2.50. The difference was that 1625s had 12.6 volt heaters, rather than the 6.3 Volt 807 heaters. Al used 12 Volt doorbell transformers that he got for \$1 each at a local hardware store. The final RF Amplifier was to be made with two 1625s in parallel, giving up on initial hopes of using 812 triodes, which might have been more difficult to neutralize anyway.

As the work progressed during all the hours of day and night that Al could remain awake, he was visited by many young hams and ham wannabes. This disturbed Al's father so much that he left the apartment and went to live with Al's aunt. However he planned to return permanently when Al's mother and siblings returned from the mountains. Once that happened, night shift work and curious kibitzing would be prohibited.

At the end of August the transmitter was only half completed and Al had run out of money. The rig looked rather sloppy because the four chassis of different sizes seemed to be randomly held together with angle irons. Al didn't care how it looked; only if it would work. The biggest shock came when Al's mother returned from the mountains and was greeted by a sink full of 6 weeks of dirty dishes, bags full of garbage, dirty laundry, floors full of metal filings, an ugly half built transmitter, and a now-broken can opener! Al had to stop and spend a week cleaning up the mess, while explaining to his mother that this sort of wildly primitive activity (like Field Day) was a necessary part of "Ham Radio," endorsed by the U.S. Government, and a common initiation drill for most new hams. It was especially hard to convince her that all those transformers would not blow out all the fuses in their apartment building. [Al was lucky in that there were three 15 amp AC power lines in the 5 room apartment]

Al's father took it all in rather passively. He himself had to learn US history to pass a test to become a U.S. citizen, which gave him rights and obligations that he never had in Europe. He was always prepared for the worst, with a legally registered pistol, to be ready for anything that might arrive in a bundle of bananas, or even if the British Redcoats or other green-horn foreigners ever returned...Surely Al's ham ticket had certified Al to

be permitted to do anything that might make him well prepared for any radio SOS that might be received in this new American and worldwide diverse "hobby"...and even for avoiding his angry mother's rolling pin..... which now became, at least traditionally, a greater menace than H. P. Maxim's legendary Wouff Hound!

September arrived and that meant a return to high school. Mr. Pedro, the lab manager, was glad to hear that Al had passed the ham test. He gave Al some vacuum tubes, including 1625's, metal 6L6's, and 6SN7GTs that would be needed for the transmitter project. He also supplied some of the needed small capacitors and resistors. We didn't know how the school got that stuff. It might have been war surplus that was donated free for school labs. Al had managed to get lots of enamel coated magnet wire of various gauges, which would be used to make RF inductors. He had so much that he gave me some for my own experimental construction of absorption wave meters and regenerative receivers.

When Al completed one of the high voltage power supplies, he tested it with a power resistor load. One of the dry electrolytic capacitors immediately exploded like a firecracker! I told Al that the electrolytic capacitors were being used too close to their specified working voltage ratings and would have to be replaced with high voltage pyranol (oil) capacitors.

A variable capacitor was needed to resonate the final RF amplifier. The proper one cost over \$12, so Al planned to instead adapt a large receiving capacitor by removing alternate plates of both the rotor and stator. I warned him that the RF insulation of such a modified receiver capacitor would be insufficient. Next month I'll tell you how all was finally solved with the help of Lew Pascal. W2LTQ. (to be continued)

#### **PRESIDENT'S NOTE by ED GELLENDER, WB2EAV**

I am writing this shortly after Field Day 2014 ended, and while I do not yet have any official results, I am pleased to report that the crew did quite well. More importantly, everyone had a really good time. Bill, N2SFT and his antenna launcher-slingshot were in fabulous form, and we got all three antennas way up in the trees quickly with little stress. Everything set up nicely and Murphy's Law was strangely absent. Even the weather cooperated with nice sunshine and a cooling breeze. To complete the experience, Jack WB2PYK kept us as well provisioned as we have come to expect.

The Hauppauge 145.33 repeater has been having some difficulty. The repeater can only be maintained by Bill, N2NFI and he reports that the original antenna is not working. He temporarily patched something together with some old unused antennas (?) to keep the repeater on the air. However, while I can bring up the antenna and hear the squelch tail from my house on the fringe of its coverage area, I hear from other members that when you try to talk no audio gets through. [*See minutes of General Meeting where I report of normal audio during some scheduled WAG nets. Perhaps the audio problem has been repaired and the intermittent antenna problem is all that remains. – w2ilp*] Bill reports that to do a permanent fix it would involve bringing in qualified riggers and buying a new antenna...at a cost in excess of the club's treasury. Considering that the club members just about never use the repeater anymore (it seems to be used by a couple of Suffolk County groups) the board felt that there is no reason to bankrupt the club, but we would gladly join a consortium to pool resources. The latest I hear is that there is no interest in anyone else kicking anything in. If that continues the Hauppauge repeater is at great risk. It is a shame considering that this is happening at the same time as we watch Bethpage being dismantled (as I mentioned last month).

The August meeting is always our club picnic, but with the dismantling of Northrop Grumman's Bethpage site (and certainly my presence there) we recognize that the club can continue, but we do not see it doing so for very long. Since it appears that the Hauppauge repeater antenna situation is not going to be permanently repaired we do have some club treasury to spend down. As a result we are going to change to having club picnics instead at a restaurant. While there will be some per-person charge, the club will pick up most of the tab. Right now the leading contender is La Casa at Crab Meadow Beach Park in Northport. Final details and directions in next month's newsletter

– Ed, WB2EAV

**GRUMMAN AMATEUR RADIO CLUB  
MINUTES OF GENERAL MEETING 6/18/2014  
By Karen, W2ABK**

The meeting was opened by Gordon, KB2UB at 5:30 PM

**TREASURER'S REPORT – Ed, WB2EAV**

Finances continue to be in good shape.

**REPEATER REPORT – Gordon, KB2UB**

The 145.330 repeater was reported to be inoperative. *The repeater seemed to be working fairly well, although somewhat intermittent, when it was tried on June 19th and June 26<sup>th</sup>. It seems to work best when there is no strong wind and when those who sign in have good signal strength. See also president's message.*

**NET REPORT – Karen, W2ABK**

Thursday night net at 8:15 PM on 146.745 MHz had 2 check-ins.

**VE REPORT – Ed, WB2EAV**

Four applicants applied for the Technician exam, three passed and one failed. All who passed tried upgrading to General and failed.

Three VEs were present: Ed, WB2EAV, Bill, WB2QGS, and Karen, W2ABK.

**OLD BUSINESS**

We are planning to visit a restaurant in place of our outdoor August Picnic.

**NEW BUSINESS**

We will be meeting at 9:00 AM at Haypath Park for Field Day.

**PROGRAM**

Gordon, KB2UB explained about the Coast Guard Security for the Jones Beach Celebration on Memorial Day.

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

GARC 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 a week before the General Meeting at the Bethpage Skating Rink. *Meetings may be cancelled or relocated. Check the website.*

**WEB SITE**

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

The internet link for this month is: - ?

To tell the truth I have again been unable to find a specific website that is worthy of your time this month, although I know that there probably are many such sites, because there have been many new technical developments that should be of interest to hams. I have been spending more time lately reading books and magazines than searching the Internet. Most websites are really commercial advertisements. There are some, however, that are very educational. Perhaps you internerds can suggest some sites that should be highlighted here. I'd be glad to write about them here in the coming months, crediting them to anyone who suggests them.

There is a new Ham Technician exam (Element 2) question pool which must be used starting this month. I believe that you can download the entire Q & A by going to [www.arrl.org](http://www.arrl.org). If you know anyone who wants to become a ham it might be useful for getting them started.

### PUZZLE

*This month's question is:-*

Nikola Tesla was unable to finish his project (including the tower at Wardenclyffe, Long Island). Tesla was bankrupted and J.P. Morgan had refused to lend any more money to continue the project. The question is: What would have happened if Tesla was permitted to complete his project?

*Last month's question was:-*

Innovative engineers have been taking the lenses off of their multi-megapixel digital cameras and adding new attachments. What have they been able to accomplish?

*Answer:*

There have been many successful experiments where digital cameras have been used to analyze blood or water or to scan for toxic chemical elements. These have been accomplished by removing the lens of an ordinary digital camera and replacing it with a small assembly that contains LEDs. The LEDs, are controlled to produce appropriate light frequencies, and programmed to scan, beaming through the sample being tested, while the camera pixels sense the parameters of the sample. It was reported that vital blood tests could be conducted using an assembly of parts that would cost only about \$10. If this is so we could test our own blood at home, eliminating trips to our doctors. The results of the blood tests could be forwarded to our doctors via cell phone monitors where additional analysis might be developed and print-outs made.

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### GARC 2013 Officers

President: Ed Gellender, WB2EAV M/S:X08-14 516-575-0013 edward.gellender@ngc.com  
or wb2eav@yahoo.com

Vice President: Gordon Sammis, KB2UB Retiree 631-666-7463

Secretary: Karen Cefalo, W2ABK 631-754-0974

Treasurer: Ed Gellender, WB2EAV (see above)

WA2LQO Trustee: Ray Schubnel, W2DKM Retiree

2 Yr. Board Member: Jack Cottrell, WA2PYK Retiree 516-249-0979

1 Yr. Board Member: Dave Ledo, AB2EF

1 Yr. Board Member: Jack Hayne, WB2BED

1 Yr. Board Member: George Sullivan, WB2IKT

### Newsletter

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Editor: W2ILP 631-499-2214 W2ILP.RADIO@gmail.com

Contributing writers: All GARC members (we hope). To submit articles or ham equipment advertisements contact the editor. Articles will only be edited when permission is granted by the author.

### 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: 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 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. (Note that a new Technician question pool goes into effect this month)

### Editorial

I was in error last month, when I reported that my wife's heart monitoring system, Cardionet MCOT, communicated via WiFi routers. Actually the monitor works exactly like a cell phone that is programmed to relay cardiograms from three sensors taped to her body. WAS programmed... That is... because on Monday she received a message that her remote heart monitoring was over, and we had to pack up the equipment and return it via UPS.

We visited Field Day on Saturday. My wife seems to be entirely recovered, and the weather was perfect for FD. I didn't do any operating, or logging. Two stations were on the air at the time: Ray W2DKM, assisted by Karen W2ABK, and Bill N2SFT with his XYL Carol logging. I was glad to meet with all the club members who were there, because I haven't been able to get to any recent club or board meetings due to my health issues.

Ed, WB2EAV is scheduled to lecture about IFF systems at an IEEE meeting on July 2nd. I would have liked to attend that meeting but I had promised my wife and two sons that we would be going to a restaurant for dinner to celebrate not only my wife's birthday, but also a belated Mother's Day as well as my wife's recovery. *(Bob, you missed a nice talk. Attracted a nice crowd, and everyone enjoyed both the material and my irreverent style ..... No one dozes off when I do a talk, no matter how technical – Ed WB2EAV)*

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FIRST CLASS MAIL

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**Monkey See... Monkey Don't Do?**

My son, Mark, bought me a book for a Father's Day gift; He knows which subjects interest me. The book is "The Social Conquest of Earth" by Edward O. Wilson. This was a NY Times best seller and the author is a Pulitzer Prize winner. I have read more than one book about the biological and social evolution of plants, ants, termites, birds, bees, reptiles and mammals (including man and other primates) There was little that I had not seen in other books on these subjects. Wilson wrote about intelligence testing that compared 2.5 year old human children with young chimpanzees. Wilson reported that the kids and chimps were about equal in solving spatial and physical problems, but the kids excelled in social tests...but did they? I read elsewhere that a test was conducted using transparent plastic boxes. The boxes had holes which led to empty spaces, but one hole led to a space that contained candy. The experimenter poked around into each of the empty holes before he retrieved the candy from the hole that obviously contained the candy. The human babies copied the experimenter, poking all the holes in a similar sequence that he had poked before finally retrieving the candy. The chimps took a more practical approach, going directly to the candy hole and getting it. What can we learn from this? There are cases when adult bonobos perform a dance in the expectation that it will cause rain to stop...only because this ritual had coincidentally done so in the past. Humans of all cultures do things because of superstitions that they know aren't technically logical. What does that tell us?

Now we are back to Ham Radio...and Field Day, where we display our human social skills along with debatably obsolete technical ones...Monkey QSO? It was a comedian named Lew Lahr who said "Peoples is the craziest monkeys!"

73, Bob, W2ILP (Intelligent Logical Primates?)

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