## Sixty Nine Years: 1944 -2013

The official voice of the Grumman Amateur Radio Club

January 2013 VOLUME 86 NUMBER 1

## How I Became a Ham By Bob Wexelbaum, W2ILP

Explaining how I became a ham will take longer than it does for most hams, especially since I had multiple "Elmers" and my most significant Elmer was never actually a ham himself.

I built my first crystal radio receiver at the age of six, and put up a long wire antenna on the roof of my apartment building in The Bronx. I went on to build several vacuum tube receivers by the time I was eight years old, including a regenerative receiver that could tune multiple HF ham bands by plugging in appropriate tuning coils. By reading books and magazines that I borrowed from the public library, I taught myself to read schematic and pictorial wiring diagrams. I salvaged some parts from discarded radios and I bought the parts that I could not find for my projects from the Lafayette Radio stores on Fordham Road in The Bronx and Sixth Avenue in Manhattan. My mother had to accompany me on these trips because she did not allow me to travel alone. The sales guys had fun laughing at my parts orders. I could not pronounce words such as "Electrolytic" properly, since I had only read them and never heard them spoken at that time. I did not know how to convert mmf (later to become pf) to uF by using powers of ten. With the help of the sales clerks, I managed to get what I needed. I listened to my homebrewed radios and became an avid SWL. I heard many local hams and surprisingly some DX stations as well. I was unable to copy Morse Code at that time, although I could recognize it. I did however hear hams that were using AM phone on 75, 20, 11 and 10 Meters. My object in life was to become a licensed ham. I knew that I would have to learn Morse Code and radio theory to pass the licensing exam.

In those days there were three classes of ham licenses: A, B, and C. The Class C license was called the Conditional Class and was only available to applicants who lived more than 125 miles from an FCC Field Office; Since there was an FCC office in NYC, the Class C was not available to me. The class B license was good for CW on all of the ham bands, plus phone privileges on 10 and 11 Meters. To get the Class B license you needed to pass a 13 word per minute Morse code receiving and sending test and a written theory test. If you failed the Morse test you were not permitted to take the theory test. To earn a Class A license you had to hold a Class B license for at least one year and pass a test which included technical material on the subject of amplitude modulation. I set my goal at becoming a Class A ham. I knew then that I would need help; just reading books would not be enough.

Now I have to tell you about my public schools, teachers and especially a classmate who most influenced me. He was Stanley Milgram, who eventually became a world famous sociologist. He was in my class from grades 5 - 8 in PS 77 and grades 9 - 11 in James Monroe High School. We were together in what were called "talent classes" or "honor classes" when we attended high school. In those days they separated the most intelligent kids from the average kids in order to offer them more challenging school work. The talent kids were not always the ones who got the best academic grades; They were chosen because they had shown some special talent for art, music, literature, history or science...or at least enough interest to ask the teachers questions that the teachers couldn't answer without help. The talent kids often realized that they were smarter than their teachers, although the teachers that were selected to teach them were the best that the large school had to offer. Somehow we kids knew which of us was the smartest, and I knew that Milgram was a lot smarter than I was. You can learn about Milgram from a book called "The Man Who Shocked the World". That book was written after Milgram died at the age of 51 in 1984, mostly by Joel Milgram, his younger brother. I will tell you

a lot more about Milgram next month, but my main purpose now is to explain how I became a Ham because of his assistance. Without him I would never have gotten started.

Stanley visited me and was impressed by my radio receivers. He was interested in radio, although not enough to motivate him to become a ham himself. His main hobby was photography. He was getting RFI from a ham in the apartment building next to his. He went up to his roof and saw an antenna that looked about twice the size of a TV antenna. It was a 10 Meter beam. (Neither of us had TV sets at that time.) He traced the coax cable that fed the beam antenna to an apartment where he now knew a ham resided. Now you have to understand that I was a very shy kid. I would never go alone to visit a strange adult...but this did not bother fearless Stan. He asked me to join him and meet up with this Ham. We both waited at the door in the hallway of the Ham's apartment. Finally at about 5:30 PM a short middle-aged man came home from work. We learned that his name was Murray Halfon, his call sign was W2NSH, and he held a Class B license. (to be continued)

## PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

Let me go off my usual topics to something I think you will find interesting. In mid-October I had the opportunity to tour the Indian Point nuclear plant on the Hudson River, about 60 miles from New York City. It was organized by the Engineering Alumni Association of my college, so the guide knew what to expect from us, and he responded accordingly.

The world's first nuclear plant, Indian Point No.1, has been shut down for some time now. The 1970s vintage Indian Point No.2 and No.3 are considered to be of modern design and continue to output a combined 2.1 Gigawatts (2,100,000 Kilowatts); something like 15 % of all the electrical energy used in New York State. A large meter in each control room reads 0 - 1500 Megawatts. Now, that's a meter.

We peppered our guide with questions about the downside of nuclear power and he provided through and coherent answers every time; then he showed us how the facility does exactly what he said.

One thing that really impressed me is that the reactors are the pressurized water type, which has a fascinating characteristic – The nuclear core requires the presence of water to fission. If any sort of catastrophic failure causes the reactor cooling water to drain out, the nuclear reaction stops. Thermal inertia would damage the core, but there would be no need for the seawater flooding that we saw last year at Fukishima Daichi and no hydrogen explosions.

We saw the spent fuel pool for No. 3, and its 37 year supply of nuclear waste which occupies a space forty by forty by twelve feet, covered by 28 feet of water. (The pool is a cube 40 feet on each side). The older waste has cooled down enough that it will soon be removed and placed in ground-mounted containers. (Plant No. 2 has some of these containers outside and we were told that they always feel a bit warm and stay snow-free.) We also heard that the laws may soon change to allow nuclear fuel reprocessing, as has been done in France for decades, to reduce the amount of nuclear waste by 80%. By the way, our dosimeters all continued to read zero, so I do not glow in the dark.

The cooling water inlets are continuously swept, and over 95% of the fish sucked in are dumped back into the Hudson River, dazed but OK. The occasional ones that don't make it tend to be quite small and provide a treat for the seagulls. The water returns to the river less than 2 degrees warmer than when it came in.

Wondering about Stuxnet\*? Control rooms have purposely been kept all analog, with no automated remote control whatsoever.

Both plants have Control Room trainers; each is identical to the corresponding Control Room; an innovation that came out of the Three Mile Island incident, where no one had seen a specific problem before and didn't know what to do about it. Now no one gets near the control room without first experiencing multiple simulated nightmares in the trainer.....and they have to keep coming back for more scheduled abuse.

Let me know if you want to hear more.

Ed. WB2EAV

\*Editor's note: I too wondered about Stuxnet...because I didn't know what it was. According to Wikipedia: Stuxnet is a highly sophisticated digital computer worm. Page 2

# GRUMMAN AMATEUR RADIO CLUB MINUTES OF GENERAL MEETING 12/19/2012 By Karen, W2ABK

This meeting was the annual holiday party.

The meeting was called to order by Ed at 6:00 PM.

## TREASURER'S REPORT - Ed, WB2EAV

Finances continue to be in good shape.

## REPEATER REPORT - Gordon, KB2UB

The repeaters seem to be working.

## NET REPORT - Karen, W2ABK

Thursday night net at 8:15 PM on 146.745 MHz had no check-ins.

Thursday night net at 8;30 PM on 145.330 MHz had no check-ins.

Sunday morning net at 7:30 AM on 7.289 MHz had no check-ins.

### VE REPORT - Bob, W2ILP

No applicants applied therefore the December VE Session was cancelled.

#### **OLD BUSINESS**

Our annual dues are due.

#### **NEW BUSINESS**

Jack has reserved Haypath Park for Field Day 2013.

#### **PROGRAM**

Our meeting was our annual holiday party at Kwong Ming Restaurant in Wantagh. About 14 people attended, plus a special guest, Mike Lisenco, N2YBB, our newly elected Hudson Division Manager. The food was great and everyone had a good time.

### 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 third 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.

#### 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

Last July I switched ISP from Verizon to Cablevision (Optimum). My XYL and I sat down with the Optimum salesman and agreed to accept a special offer that gave us TV, Internet and Telephone plus HBO and Starz, at a good competitive price. Since the XYL and I have our birthdays in July, she asked the salesman if Optimum could throw in a birthday gift with the deal. He said that as a matter of fact he could get us a free Kindle Fire. I had expected to get a Kindle Fire when the Cablevision service was installed, but was told that we needed to wait 30 days. A month passed and no Kindle Fire; I called Cablevision to complain. They gave me a UPS tracking number. UPS said try FedEx it was not their number. FedEx said that they could not recognize the number. We kept calling Cablevision and getting bogus tracking numbers. Finally a supervisor told us that he would investigate. He called us back to tell us that the order for the Kindle was sent to a Redemption Center in early October. We received the Kindle in late October just in time for Halloween, 4 months after it was ordered.

The Kindle came without a charger, but had a cable that enabled it to be slowly charged from a USB port. After all of this waiting I was very anxious to see what the Kindle Fire could do. We have only one TV set, which is in the den. I hoped to use the Kindle in our bedroom, especially now that I am ill and spend lots of time in bed. I was disappointed to find that in order to read most books I would have to buy them from Amazon, and that Amazon.com and my credit card info had been preprogrammed into the Kindle, along with only Amazon apps. Amazon wanted me to sign up for their premium service which would cost about \$90 a year and eliminate some undesired ads. I refused and tried to get free books elsewhere.

I was able to get free books on my PC by using the following website, but I am presently unable to access the website on the Kindle. Let it be the website of this month. It is: <a href="www.guttenberg.org">www.guttenberg.org</a>

The Kindle Fire does have a good display and good audio. I was able to get good videos from Optimum by Googling up "HBO GO." It is easier to get free videos than free books now. I am working to get instructions about how to "hack" away from Amazon. It is supposed to be found at <a href="http://market.android.com">http://market.android.com</a>. I'll let you know if it works for me next month. The touch screen keyboard on the Kindle display only stays there when it wants to, and my shaky fingers often hit the wrong keys, bringing up an ad that wipes out everything I try to send.

### **PUZZLE**

This month I will again ask a question from the Amateur Extra Exam:-

How many watts are consumed in a circuit having a power factor of 0.6 if the input is 200V AC at 5 Amperes?

- A. 200 Watts
- B. 1000 Watts
- C. 1600 Watts
- D. 600 Watts

Last month I asked this question from the Amateur Extra Class Exam.

What is a depletion mode FET?

- A. An FET that exhibits a current flow between source and drain when no gate voltage is applied.
- B. An FET that has no current flow between source and drain when no gate voltage is applied.
- C. An FET without a channel so no current flows with zero gate voltage,
- D. Am FET without a channel so maximum gate current flows. The correct answer is A.

# CQ de WA2LQO GARC 2013 Officers

# January 2013

# Volume 86, Number 1

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 Cafalo, 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

Yr. Board Member: Dave Ledo, AB2EF
 Yr. Board Member: Jack Hayne, WB2BED
 Yr. Board Member: George Sullivan, WB2IKT

## **Newsletter**

CQ de WA2LQO is published monthly by the Grumman Amateur Radio Club for its members and friends.

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 5:00 PM. The exams are given at Briarcliffe College, 1055 Stewart Avenue, Bethpage, NY in room: Long Beach #5. Ham Exams are: Element 2 – Technician, Element 3 - General, Element 4 – Amateur Extra Class. All applicants must pre-register by contacting Ed Gellender WB2EAV. Time and location of exams are subject to change. If there are no applicants VE sessions will be cancelled. The fee for 2013 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.

There will be no VE session in January in order to give Ed a chance to get organized. As of this writing exams will be given at the same location (Briarcliffe College) but will start at 5:30 PM rather than 5:00 PM. Applicants should register with Ed to confirm the schedule in any case..

### **Editorial**

Before I took on this job, the editor of this newsletter was Dave Anderson (sk). After Dave published some poems I wrote in the newsletter, he asked me to write about how I became a ham. I promised that I would do so, but I never did. The reason why I never did was that I was cautioned not to talk about myself. Unfortunately I found it impossible to explain how I became a ham without being subjective. Now I think that some of you readers are getting tired of me writing about communications theory and the modes that hams can use. For some readers the theory might be too technical; for others it might be repetition of stuff they already know. What I wrote contained some typographical errors that became obvious to me only after the newsletters were distributed and I was unable to correct them. The best thing to do if you want to clear up any technical questions is to check with text books, the ARRL Manuals, ham websites or Wikipedia. As a result of my aging ego I now ask why should I continue with technical theories if you can get all the information elsewhere? Thus I am instead going to write about myself rather than continue to objectively write about communication theory. You don't know how I became a ham; I don't know if you are interested, but they say that it is best to write about stuff that one knows about, especially if it is not fiction. Thus I will be writing about my own experiences starting this month. You won't find this elsewhere. See page 1.

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

FIRST CLASS MAIL
Do Not Delay

DON'T FORGET: Dues are now payable [\$20 except 25 family / 10 out-of-town-retiree] We no longer have a PO Box. Use above address.

I'm having some trouble with my PC. It slows me down when I write or edit this newsletter. The trouble occurs when the light on my optical mouse goes out and I become unable to use the mouse for pointing and scrolling. If I wait long enough the light comes on for no particular reason and normal operation returns. I have tried various methods to troubleshoot the problem but nothing helps as of now. The waiting time seems to be getting longer. Perhaps the computer is doing something else during that time. It has a mind of its own...even though I have disabled scheduled security scans. If anyone knows how to repair this problem, I would appreciate your advice. TNX 73, Bob W2ILP page 6