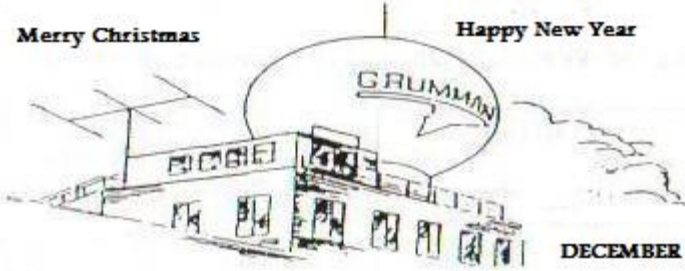


Merry Christmas

Happy New Year



**CQ**  
de WA2LQO

DECEMBER 2009

VOL 82, No.12

## A 2009 Holiday Party will be our December GARC Meeting

*[See President's Note for details]*

\*\*\*\*\*

## Who Invented Radio? (continued from November CQ de WA2LQO)

By Bob Wexelbaum, W2ILP

The development of Radio technology continues, and there are many engineers and technicians who have made our present radio equipment possible. I cannot begin to research all those who have made contributions to radio technology and so I must cut short this series of articles and just remind you of a few notable players. Edwin Armstrong invented the Superhet and FM, but he himself did not invent and patent many of the circuits that now make FM high fidelity systems practical. David Sarnoff the CEO of RCA had at first denied that FM could be as good as AM for radio broadcasting. However RCA secretly researched FM, without actually broadcasting. They probably used dummy loads! Armstrong had actually constructed an FM broadcasting station on 42 MHz, W2XMN, in Alpine, NJ. Armstrong's first experimental FM receivers used simple slope detectors, which did not take full advantage of the noise immunity possibilities that Foster and Seely had designed into their 1936 limiter-discriminator circuits. They worked at RCA, which also patented the ratio detector circuit, which is cheaper to produce, since it does not require a saturated limiter IF stage. Early FM automobile radios were unreliable because unstable local oscillators made it difficult to capture and receiving weak and varying FM. Armstrong lost many of his patent fights to RCA and in addition he lost the right to broadcast. The FCC moved the FM radio band from 40 to 50 MHz to where it is today: 88 to 108 MHz, making FM receivers obsolete at that time. In addition to these facts, Armstrong's wife had been a secretary to Sarnoff, and there were questions about her divided loyalties between RCA and her husband, although after his death she did pursue and win some of his lawsuits. Armstrong ended his life by falling or jumping to his death from a 13th floor apartment. There were rumors of suicide notes as well as rumors that he had been pushed by an assassin who then forged a note, and some who said that he had simply fallen by accident, since he enjoyed tower climbing as a hobby and was quite comfortable with heights. We may never know if there is any truth to such theories. Whenever famous people get reported about in the media there are bound to be rumors circulated. Rumors may turn out to be hoaxes, but they make the papers anyway. Recently it was reported that a small helium balloon that was meant to resemble a flying saucer had accidentally lifted a young boy into the atmosphere. Any suitably educated person who saw the balloon on TV knew that it was not large enough to lift a 35 pound kid (We didn't have to be "rocket scientists")...but there were rescue helicopters dispatched to try to save the little boy, who had been safely at home all the time. This was a HOAX. It happened in Colorado. By coincidence let me continue this series by telling you about another hoax that happened in Colorado. First I'll try to define a hoax. Up until this time I have not mentioned any radio inventors who have been responsible for hoaxes. For example, deForest did not present any hoax when he admitted that his early triodes did not work, or even that he did not know how triodes could work. Marconi had admitted to several failed attempts before he was able to prove that transatlantic radio communication was possible. First experiments often do not work, and proving what does not work and admitting that it does not work adds useful information to studies. This

was not the case for the Colorado Springs, Colorado experiments of Nicola Tesla, which were as much of a hoax as P.T. Barnum's famed 'egress' (which wasn't a wild animal but an exit door). Tesla had claimed that he had received a radio message from the planet Mars and had also been able to modulate natural energy in order to transmit electrical energy wirelessly by radio. We know exactly what primitive equipment Tesla brought with him to Colorado in 1899, including balloons to raise wire antennas. We know more about the limitations and the capabilities of radio than were known in 1899, but that is no excuse for the belief, commonly held, that Tesla invented radio. Tesla was experienced at both mechanical and electrical engineering but he failed both in theory and practice as a radio engineer. He brought with him knowledge of DC generators, AC alternators and motors. He had learned from the same European professors that had taught Pupin and Steinmetz. His early work is to be commended, but it was certainly not unique, except perhaps for the Tesla spark coil which can serve as a prop in Frankenstein movies. His wireless work was a failure and this was recognized by J. P. Morgan when Tesla was refused funding to complete a giant spark coil tower on Long Island. Tesla claimed that he could build a portable death ray gun that would be able to quickly kill more enemy soldiers than Maxim's machine guns could. Claiming that you can do something is not the same as doing it. In his sketch books, Tesla drew doodles of a parachute and a helicopter. So did Leonardo Da Vinci in 1488! Neither of them ever built working models! Late in his life Tesla moved from one NYC hotel to another, in order to avoid paying his bills. He was also unwelcome at hotels where he fed pigeons on windowsills, because their droppings were deemed to be a health hazard. He left behind a large trunk, which he claimed to be a model of his death ray gun. This purported claim led J. Edgar Hoover of the FBI to order the trunk opened after Tesla died. The trunk contained only bags of seeds for feeding pigeons...and that is the rest of the story!

**PRESIDENT'S NOTE by ED GELLENDER, WB2EAV**  
**December 2009**

We just celebrated Thanksgiving and I was very pleased to see that it was a beautiful day. I was able to go for a nice stroll outside after dinner to walk off some of that turkey I stuffed myself with.

We are planning on having our annual Christmas party as the December meeting. It will be, as usual, on the third Wednesday of the month - December 16<sup>th</sup> this year. Usual time too...5:30PM. We are planning on holding it at the same place as the last two years, Bertucci's on Route 110. As I recall, it is one traffic light north of the Northern State Parkway on the west side of the street, and across Rt. 110 from a large shopping center with a large Dick's Sporting Goods store. Bertucci's has a fixed price dinner for groups like us; an excellent assortment of salads, pizzas, pasta and meat dishes served family style so you can sample everything. Soft drinks are included. We get a private room (at least a quiet corner) by ourselves for an element of privacy. I assume we will do things the same way that we did last year when each attendee paid \$30 and the club picked up any remainder. If you can, please let us know if you are coming, so that we can work with the restaurant to best plan the sizes of the area they set up for us. You can e-mail me at [wb2eav@yahoo.com](mailto:wb2eav@yahoo.com) or call my work number 516-573-0013 and if I don't answer leave a message.

Let me take this opportunity to wish everyone a happy holiday season. Let us all get a little carried away with holiday cheer (no, not the liquid kind) and god tidings to all...and maybe not as much with shopping this year.

And finally, a heads up - Ham Radio University will be held on Sunday, January 10<sup>th</sup> at Briarcliffe College in Bethpage. (It starts at 9 AM and the entry fee is \$3). It is always a nice experience with all kinds of lectures and seminars. This year the keynote speaker is Steve Ford WB8IMY, the editor of QST magazine. Check out the full program at the aptly named [www.hamradiouniversity.org](http://www.hamradiouniversity.org).

GRUMMAN AMATEUR RADIO CLUB  
MINUTES OF GENERAL MEETING 11/18/09  
By Bob, W2ILP  
[Karen, W2ABK was not present]

**TREASURERS REPORT – Ed, WB2EAV**  
Finances continue to be in good shape.

**REPEATER REPORT - Gordon, KB2UB**  
(not present) Repeaters are working OK.

**VE REPORT – Bob, W2ILP**  
Due to a lack of applicants, there was no VE session in November.

**NET REPORT- Zack, WB2PUE**  
Thursday night nets continue to have the usual number of regulars sign ins. Splatter from an AM broadcasting station was heard on 7.255.

**OLD BUSINESS**

We are waiting to get confirmation for guest speakers for the future.

**NEW BUSINESS**

The scheduled GARC election was not held because of the lack of members at the November meeting. If anyone wants to run for office to replace any of the incumbents they may make their challenge known at a future meeting.

**PROGRAM**

There was no program presented at the November meeting. Attendance was at an all time low. Present were only 5 members: WB2EAV, W2DKM, WA2PYK, WB2BED and W2ILP.

**GARC NETS:**

**40 Meters: 7.255 MHz at 7:30 AM EST Sundays.**

**2 Meters (via repeaters): 146.745 MHz (-600 kHz) at 8:15 PM EST Thursdays.**

**145.330 MHz (-600 kHz) at 8:30 PM EST Thursdays**

**[Tone for both repeaters is 136.5 Hz]                      (ARES/RACES) Mondays**

**MEETINGS**

General Meetings of the GARC are held on the third Wednesday of each month, starting at 5:30 PM. The meetings are usually held at the Ellsworth Allen Park in Farmingdale. Driving directions and maps 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 eight days before the General Meeting.

**GARC WEB SITE**

The web site of the GARC 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

John Jeavons, KA2YIY (ka2yiy@arrl.net) suggested the following website. I tested it and it works! I'll let him describe it in his own words:-

For OMs and YLs who may be having a bit of trouble seeing the small print on their computers, or who would rather keep their eyes on a scope or spectrum analyzer than a computer screen full of text, there is a free screen reading program that will read text out loud to you in a clear computer voice at [www.satogo.com](http://www.satogo.com), short for System Access To GO. As long as your computer stays connected to the Internet, this site will read your screen out loud to you and allow you to hear your e-mails or word processing documents or the latest weather reports. Just navigate to [www.satogo.com](http://www.satogo.com) and follow the verbal directions, which tell you to hit enter or alt-r to continue.

A step-up subscription to the system Access Mobile network which will save your settings between executions and give you access to many hours of online audio content is available for a modest monthly or one-time fee, but is not required to run the system access software.

*I did not subscribe to Access Mobile. It may be worth getting if you intend to use Satogo regularly.*

*In a recent US Congressional hearing, presided over by Jay Rockefeller, there were warnings expressed, that should be headed by all of us Internet Nerds. Many reliable websites carry links from third parties that offer free products, gifts or software. Often there is fine print that you must read to accept the offer. Some might not think that accepting what is in the fine print may cause you to be charged on your credit card for something that you do not want or would never normally order. Sometimes your credit card numbers may be obtained from the well known source brand name that carried the link. Some banks and airline and entertainment ticketing agencies have been charged for being involved in such scams. Some cases are lost in the courts when lawyers say that the buyer should be aware. In my opinion, software downloading may especially be a problem. Most software acceptance requires that we promise not to sue the software maker if the software messes up our computer and we will not copy and sell or give the software to other users, who do not register with the software maker themselves. Beware! Some software may be "added to your cart" (charged on your credit card) even if you expected it to be free. Always read the fine print and see that it is legally fine for you. Don't press <enter> buttons, until you are aware of where you may be entering. Don't fill out forms with your bank check or credit card numbers, unless you know that you are dealing with a reliable firm. -w2ilp--*

**PUZZLE Here is an easy cryptogram: BDO USQW HYTK HSHBOOI GTAIBYSOW BTTU**

**KLBD LIQ WGSOIGO BOWBW. BDO A. W. L. GLKO HTAYBOOIBD, MODSIQ WZTJOISL,**

**NDSGD DLW TIZC MOOI L GTAIBYC WSIGO ZLWB BAOWQLC. -MSZZ KLDOY--**

**Solution to the November Cryptogram: AN OBJECT IN POSSESSION SELDOM RETAINS THE SAME CHARM THAT IT HAD IN PURSUIT. -PLINY THE YOUNGER—**

CQ de WA2LQO

December 2009

Volume 82, Number 12

**EDITOR**

Bob Wexelbaum W2ILP

(631) 499-2214

w2ilp@optonline.net

**CONTRIBUTING WRITERS**

All the members of GARC (we hope!)

CQ de WA2LQO is published monthly by the Grumman Amateur Radio Club for its members and friends. Send articles and amateur equipment advertisements to: W2ILP. Articles may be sent by e-mail or postal mail. They can be in MS Word format or simply in plain text. Articles will only be edited when permission is granted by the author.

**ELECTRONIC SUBMISSIONS**

For insertion to the WA2LQO website, information may be sent to Pat Masterson.

Pat Masterson's e-mail address: Pat-Masterson@tampabay.rr.com  
Ed Gellender's e-mail address:

Edward.Gellender@ngc.com or wb2eav@yahoo.com

## EDITORIAL

Our FD score was published in the December edition of QST. They usually publish the FD scores in November editions. If you get QST you can compare our scores with the others in our category.

The year 2010 is fast approaching and GARC survives! We have continued to run FD, our 2 Meter and 40 Meter nets, our VE program, the Apollo 11 event, a picnic, and now we are planning for another holiday party at Bertucci's.

Again there will be a Ham Radio University (HRU-2010) NYC-LI ARRL event held at Briarcliffe College in Bethpage on January 10. I plan to again present a forum there if my health holds out. See president's message for details. Most local hams know about the HRUs.

Dues for 2010 are coming due and the usual announcement will be included in the January newsletter.

On behalf of the GARC and myself I want to wish all a Merry Christmas and Happy New Year...To the HF DXers: Best of DX...To the 2 Meter FM folks: Full Quieting...To the radio builders: No more solder burns...and to the folks who no longer operate or build: Fond ham memories of when you did. 73, Bob W2ILP (I Like Peace)

## GARC VE EXAMS

We are continuing to proctor exams for all classes of ham licenses on the second Tuesday of each month, starting at 5:00 PM.

The present exams are:-

*The Element 1 CW exam is no longer required.*

Element 2: Technician

Element 3: General

Element 4: Amateur Extra Class

The fee for 2009 is \$14.00 for all exams taken in one sitting. The ARRL-VEC now charges \$15 but W5YI-VEC has decided not to change the required fee.

Applicants for upgrades should bring their present license and a photocopy of it and know their FRN number.

New, first time applicants should be aware that their Social Security number will be required on their application form, unless they register with the FCC for an FRN.

All applicants should bring picture ID such as driver's licenses.

Until further notice exams will be given at:-  
Briarcliffe College  
1055 Stewart Avenue  
Room: Long Beach #5  
Bethpage, NY  
Briarcliffe, Bethpage is located in a building that was formerly part of the Grumman complex.

All applicants should contact W2ILP to register, so as to confirm location. If no applicants apply, the exam session will be cancelled.

For any information e-mail w2ilp@optonline.net or phone- (631) 499-2214

Study material is available at the web sites of the ARRL

<http://www.arrl.org>

or W5YI

<http://www.w5yi.org>

All VECs use the same Q & A pools.

Since the beginning of the VE program the GARC has provided opportunities to take the ham exams monthly, during all 12 months of every year.

Bob Wexelbaum, W2ILP and the GARC VE team.

### GRUMMAN AMATEUR RADIO CLUB OFFICERS FOR 2008

President	Ed Gellender	WA2EAV	X08-14	516-575-0013
Vice President	Gordon Sammis	KB2UB	Retiree	631-666-7463
Secretary	Karen Cefalo	W2ABK		631-754-0974
Treasurer	Ed Gellender	WB2EAV	X08-14	516-575-0013
2Yr Board Member	Zack Zilavy	WB2PUE	Retiree	631-667-4628
2Yr Board Member	Dave Ledo	AB2EF		
2Yr Board Member	Bob Christen	W2FPF		
1 Yr Board Member	Bob Wexelbaum	W2ILP	Retiree	631-499-2214
1 Yr Board Member	Jack Cottrell	WA2PYK	Retiree	516-249-0979
Trustee WA2LQO	Ray Schubnel	W2DKM	Retiree	

### STANDING COMMITTEE CHAIRMEN

Contact VE:	Bob Wexelbaum	W2ILP	Retiree	631-499-2214
Webmaster	Pat Masterson	KE2LJ	Retiree	813-938-4614

**GRUMMAN AMATEUR RADIO CLUB**  
**Sixty Five Years 1944 -2009**  
**P.O. Box 0644**  
**Bethpage, NY 11714-0644**

FIRST CLASS

DO NOT DELAY

If you are familiar with government publications you might be familiar with pages that say, "THIS PAGE IS INTENTIONALLY BLANK." Some of such pages may also have been CLASSIFIED, if not DECLASSIFIED. I often wondered why they couldn't have saved paper by intentionally eliminating the blank pages without having to print such disclaimers. Perhaps they get paid by the page or they had to print on as many pages as an estimating proposal called for. I dunno for sure. Anyway because of conditions beyond my humble capabilities and the fact that most relative GARC news has been included elsewhere in this newsletter...

THIS SPACE IS  
UNINTENTIONALLY  
BLANK....INTENTIONALLY.

--w2ilp--