

# *CQ de WA2LQO*

Seventy Four Years: 1944 -2018

*The official independent voice of the Grumman Amateur Radio Club.*

**JUNE 2018      VOLUME 91    NUMBER 6**

**FIELD DAY – 2PM Saturday June 23 to 2PM Sunday June 24...  
(plus setup before and takedown after)**

**MEETING - 5:30 PM JUNE 27**

**BOTH AT HAYPATH ROAD PARK IN OLD BETHPAGE**

---

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

## **FIELD DAY:**

This year the meeting is actually after Field Day, but I'm trying to get this out a little earlier than usual, so that everyone gets the newsletter before Field Day.

The end of June features the high point of the ham radio calendar for the year – Field Day. The fourth weekend in June – this year it is June 23<sup>th</sup> and 24<sup>th</sup> - is that time again and we are planning to participate, just like we have in the past few years at Haypath Park in Old Bethpage. Take NY 135 to exit 9 and head east. The road immediately turns north, becomes Plainview Road, and goes 0.4 miles to Haypath Road. Turn right onto Haypath and proceed 0.8 miles to the park on the right (just before Old Bethpage Road). If you insist on loading an address into your GPS, there is no street address for the park, but if you use 243 Haypath Road, Old Bethpage, NY 11804 it will put you in sight of the park entrance

## **MEMBER SUPPORT:**

In last month's newsletter, I put in a request for something from the membership to put into the newsletter. I soon received two responses.

The first response came from Ed K2MFY, who has submitted a number of articles recently. He said he has some excerpts from the club newsletters in the 1970s and 1980s that were placed in a club publication. He included three pages from a 1979 issue that he thought I might be able to use.

At just about the same time I got a second email from another reader with an old article about the Low Frequency transmitters that the Navy used to use to communicate with

submerged nuclear submarines. Very nice, but the source was quite interesting.

Several years ago, the Northrop Grumman facility at Palmdale, CA had their own radio club, and we exchanged newsletters. For some reason I never really understood, the club folded, despite the fact that the Northrop Grumman facilities on the west coast were – and continue - doing well. Several of the members asked me to add them to my email distribution list for this newsletter, and to this day I continue to send them the newsletters. Apparently, some of the west coast guys then forward the newsletter to other friends who I am unaware of. I find it fascinating that there is such interest in what I do. It is almost like I have a few secret admirers (although I cannot quite figure out why)

Well, one of those secret admirers, K7JAJ, send me the Low Frequency Transmitter article. I am quite impressed with his devotion to the cause, and I would like to publicly thank Jim, K7JAJ profusely for his offer of help.

### **A TRIP TO THE WASHINGTON DC AREA:**

The last weekend the XYL and I went to Washington DC to see our son who is living in Pentagon City .... A nice urban section of Arlington, VA that has sprouted right across the highway from the pentagon.

The XYL said that we have never actually been to the Georgetown section of the capitol district, and it is supposed to be very nice. Our son has been there a few times and concurred. We decided to explore the neighborhood a bit on Saturday. A little research on the internet showed a nice historical house / museum / garden in Georgetown and we decided to visit. It was quite nice. It goes back to George Washington. Martha Washington married George as a widow, bringing in a few children. By the time Martha died, she had an adult granddaughter , who married soon thereafter. The young lady used her inheritance from her grandmother to buy a nice house with her new husband, and it stayed in the family over a few centuries up to the 1970s, when it became a museum.

We took a little tour of the house, which was just about what you would expect for a large house dating back to the 1700s and was linked to George Washington. Much of the furniture and decorations are original and quite impressive. The one piece of furniture that really impressed me, however, was quite plebian and ordinary. It was a little footstool with a fascinating history.

When George Washington was commanding officer of the Colonial Army in the Revolutionary War, he ordered a set of footstools to be used as portable seats by his staff to sit on during meetings out in the field. One of those is in the house. What made it stand out to me is that if it went through the entire Revolutionary War, probably all of the founding fathers of the country sat on it at one time or

another.

Another interesting aspect of the house, and a little closer to the hearts of my readership, is that the last owner of the house, Armistad Peter III, was a ham. He served in the army as a radio operator in both World Wars 1 and 2 and was an active experimenter during the 1930s. They had a nice setup of some equipment he built, likely in the thirties. Unfortunately the exhibit was roped off and I couldn't really get up close and personal with the gear, or figure out what callsign he used.

After the tour, we went over to a nice Riverwalk along the Potomac River and had a nice stroll and lunch.

We left Monday morning when my son went to work. We realized that we were going to drive pretty much right past where he works, so rather than him doing his usual commute on the DC Metro subway, we drove him to work and dropped him off. We all realized it was just like old times, when we sometimes dropped him off at school.

**Ed WB2EAV**

## **GRUMMAN AMATEUR RADIO CLUB**

### **TREASURER'S REPORT – Ed, WB2EAV**

Ed reports that finances continue to be in good shape.

### **REPEATER REPORT – Gordon, KB2UB**

Gordon reports 146.745 Repeater is intermittent.

### **NET REPORT – Karen, W2ABK**

Thursday night net at 8:15 PM on 146.745 MHz had 0 check ins.

Thursday night net at 8:30 PM on 145.330 MHz had 3 check ins

### **VE REPORT – Ed, WB2EAV**

There were three applicants; one for General and two for Technician. All passed.

VEs were: WB2EAV, WB2IKT, WB2QGZ

**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.**

## PROGRAM:

### 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. Effective January 2018, unless otherwise notified, meetings start at **5:30 PM** on the **FOURTH Wednesday** of the month, at HAYPATH ROAD Town Park in OLD BETHPAGE. **[This month's meeting is Wednesday May 23]**

### GARC Officers:

President: Ed Gellender, WB2EAV 516-507-8969	<a href="mailto:wb2eav@yahoo.com">wb2eav@yahoo.com</a>
Vice President: Gordon Sammis, KB2UB Retiree 631-666-7463	<a href="mailto:sammigo@verizon.net">sammigo@verizon.net</a>
Secretary: Karen Cefalo, W2ABK 631-754-0974	<a href="mailto:w2abk@aol.com">w2abk@aol.com</a>
Treasurer: Ed Gellender, WB2EAV (see above)	
WA2LQO Trustee: Ray Schubnel, W2DKM Retiree	<a href="mailto:schubnel@optonline.net">schubnel@optonline.net</a>
Board Member: Jack Cottrell, WA2PYK Retiree 516-249-0979	<a href="mailto:jjcottrell2@verizon.net">jjcottrell2@verizon.net</a>
Board Member: Dave Ledo, AB2EF	<a href="mailto:ab2efdl@gmail.com">ab2efdl@gmail.com</a>
Board Member: Jack Hayne, WB2BED	<a href="mailto:wb2bed@arrl.net">wb2bed@arrl.net</a>
Board Member: George Sullivan, WB2IKT	

**Newsletter** CQ de WA2LQO is published monthly by the GARC for its members and friends.

**GARC WEBMASTER** Pat Masterson, KE2LJ Retiree 813-938-4614  
[Pat-Masterson@tampabay.rr.com](mailto: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, BUT sessions may be cancelled if no applicants make appointments. The fee is \$14. All applicants must pre-register with Ed Gellender [wb2eav@yahoo.com](mailto:wb2eav@yahoo.com) All new applicants should be aware that they must write their Social Security number on the application form if they have not gotten an FRN number. Applicants for an upgrade must leave with the examiner a copy of their current license. All applicants must show a photo ID such as a driver's license. Study material may be obtained from ARRL-VEC at <http://www.arrl.org>, or W5YI-VEC at <http://www.W5YI.org>. All VECs use and update the same Q&A pools.

# **1 MEGAWATT AT 14 KC: Reaching submarines underwater – PART 1**

Submitted by Jim K7JAJ

The giant Jim Creek Naval Radio Station transmitter was located in the Cascade Mountains near Seattle. A \$14 million wonder that took six years to complete, it changed the face of the surrounding wilderness. There, in an area still inhabited by cougar, deer, and bear, engineers cleared 2000 acres of heavily wooded slopes, built 12 miles of access roads, and erected permanent housing for 48 Navy men and their families, which was in use until the mid-seventies when the site was given over to complete remote operation. Eventually the housing and recreation areas were turned over to a Community Recreation Area, including cabins and an RV park.

Installation of the transmitting equipment and the antenna system was completed in the summer of 1953. The low frequency and high power level require a huge antenna network, which, in effect, formed a "roof" over Jim Creek Valley. Six 200 foot towers were erected along a ridge on top of 3,200-foot Wheeler Mountain, and another six on the other side of the valley, along the ridge on top of 3,000-foot Blue Mountain. Six spans of antenna, from 5640 to 8800 feet long, were strung between them across the valley.

From the midpoint of each catenary, or span, another cable led straight down to the towers of the busing system. The 145-foot bus towers located along the mountainside tied the giant transmitter to its antenna. Other towers on the valley floor supported the down-leads and counterweights that kept the down-leads in tension. There are a total of 23 auxiliary towers in addition to the 12 main antenna towers.

The megawatt transmitter is situated on the second floor of the transmitter building, while the supporting power transformers, switchgear, pumps, distilled-water tanks, heat exchangers, shops, and telephone-cable terminals are located directly below on the ground floor. At the rear of the transmitter and machinery spaces are the loading inductors and variometers used to tune the antenna, housed in two copper-lined helix enclosures, each 75 feet square and 60 feet high.

The intense electromagnetic field around the transmitter necessitated an elaborate grounding system for the entire structure, including a ground screen around the building. More than 200 miles of copper wires, cables, and screens were buried in an intricate pattern across the valley floor to provide efficient grounding. Both hillsides along Jim Creek were strung with a mesh "screen" made of copper cable. Brush growing through the screen had to be periodically trimmed to mitigate changes in the ground system under the antenna.

The Jim Creek station was assigned the callsign NLK, but the station always identified as NPG/NLK because the remote keying location at Skaggs Island was assigned NPG. Skaggs Island was closed in 1993 and transmitter control was shifted to Whidbey Island.

<Coming up next month: Transmitter details and operation>

Page 5

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

FIRST CLASS MAIL  
*Do Not Delay*