



# CAARA Newsletter



AN ARRL AFFILIATED CLUB

NOVEMBER ISSUE- 2011



## President's Corner

by Stan-W4HIX

October has been a busy month. CAARA conducted a silent auction netting over \$1100, provided communication services for the first YuKanRun marathon, ran a Tech-in-a-Day class (15 new Techs!), participated in the SSB Worldwide contest and served the monthly CAARA Scholarship breakfast. Quite a bit of activity.

CAARA's lease on 6 Stanwood Street is up again with the city. We've had some conversations with the city about the building and there is some desire to sell, but I think we've convinced them to leave well enough alone. We have a couple of sub-committee meetings to get through and then back to the City Council. We have a good reputation with the city so I'm not anticipating any problems. We may have some discussions over the next three years, but that gives us plenty of time.

We need volunteers for upcoming hamfests to sell some gear. We have to keep pushing gear out of the club, because there is more gear coming in. We look like the swap-shop at the Rockport dump—not the professional presentation we should be making. We need to continue to inventory, determine disposition and move gear.

I'd like some feedback on acquiring a trailer for the club. I'm thinking that a trailer would help solve a couple of problems, such as storage of Field Day gear (tents, etc.) and provide better transportation for deployment (particularly for Field Day). We need to do some planning and see if we can find funding. I'll be out for a couple of weeks in November, so carry on!

### CAARA CLUB CLERK NEWS

by Dean-KB1PGH

Hello to all CAARA Members,

Well another year has flown by and the time has come to ask our members to start paying their annual

membership dues for 2012. In the past year CAARA and its members have accomplished many things. We are a very active club and there's always something going on. As we ask our membership for dues please remember that your annual dues plus donations are critical to even the basic functions of CAARA. Your dues help us pay for all the bills associated with a clubhouse which is very rare for an amateur radio club.

All of your donations help pay for our events such as the Thachers Island Dxpedition and Field day. Your donations also play a critical part in CAARA's ongoing education of amateur radio operators such as Morse Code Class and Tech in a day. Your dues

and donations also pay for buying new equipment for the club which helps us educate hams and prepare for emergency communications. Your club dues also help benefit you as we have an excellent monthly newsletter plus you get access to a wealthful of knowledge through other members and our monthly membership meetings.

This year for the first time ever, Invoices for your 2012 CAARA dues will be sent exclusively via email, and may be paid online. One less check to write!

CAARA has listened to its members and we have set up an easy to use online dues payment system using the popular Paypal system interface and if you don't have a Paypal account you can use your credit card.

The time and cost savings to CAARA will be substantial, and the system is fast and easy to use. In order for the system to work (and to make sure your membership is renewed), please make sure CAARA has your current e-mail address. Here's the link to the CAARA Paypal Dues and Donations: [http://caara.net/main/?page\\_id=500](http://caara.net/main/?page_id=500)

Of course you can still pay your dues by check by mailing them to: CAARA Clubhouse, 6 Stanwood Street, Gloucester, MA 01930  
C/O 2012 CAARA DUES



**CAARA Newsletter**  
**Cape Ann Amateur Radio Association**  
*6 Stanwood Street*  
*Gloucester, MA 01930*

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at k1tp@arrl.net. If possible, material should be in Word format. Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Jon Cunningham-Editor  
K1TP

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## Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Cingular tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations. CAARA also operates the W1GLO repeater on 224.900. The former W1RK 443.700 repeater with antennas located in Magnolia is now located at the CAARA clubhouse and has a very limited range.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with rotating beam and vertical antenna along with a 2 meter packet station and 2 meter voice and 220 MHz transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. There is no pre-registration necessary. Contact the head of our VE team Bob Quinn if you have any questions about monthly testing.

Monthly member meetings are held on the first wednesday of each month at 7:30 PM except for July and August.

Each Sunday evening at 9:00pm, the club operates a 2 meter net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.

## Giz Explains: What's So Smart About the iPhone 4S's Antenna?

With the iPhone 4S, Apple says it will deliver an iPhone that works anywhere in the world, and with fantastic reception.

How did they do it? One word: antennas.

Apple's marketing guru Phil Schiller said the iPhone 4S "intelligently switches between two antennas to receive and send." Brilliant! But vague. How exactly does a smart antenna act?

When you have a small, thin device that needs to receive and send multiple types of signals without interfering with one another, you need to get creative. As we learned from the iPhone 4 "antennagate," even the best engineers and designers can't always come up with perfect antenna scheme.

But antenna gurus have plenty of tricks up their sleeves, it's just a matter of finding the best recipe—and sometimes inventing a spanking new technology. "What [Apple] seemed to allude to was a switching or selective processing technique: taking the better signal between two antennas and using it," said Aaron Vronko, co-founder of Rapid Repair, in Portage, Michigan.

That's one step in the right direction, but there are many other antenna hurdles to clear. On a cell phone, antennas have to be placed close together simply because cell phones are little. And antennas close together tend to interfere with each other. One way phone makers can address that is by placing antennas at opposite ends of the phone, a technique called spatial diversity.

In the AT&T version of the iPhone 4, however, both cell antennas were at the bottom. So if you happened to grab the phone too close to both of them simultaneously, you would experience signal attenuation. Antennagate!

But Verizon requires that the antennas on their phones be separated at the top and bottom of the device. That way, if you're holding the phone at the bottom, you likely have a free antenna at the top.

Still, since a cell phone is so small, simply separating the antennas won't prevent all interference. You need a space between them of at least one full wavelength. At the lowest wavelength, about 900 MHz, that would be 13 inches. Not even Gordon Gekko's phone was quite that big (his DynaTAC was 9.8 inches). So engineers use other "antenna diversity" approaches, like polarity—placing the antennas at varying angles, or

pattern diversity—using antennas with different radiation patterns.

Going back to the improved Verizon iPhone 4 for a second, it did have better reception, but the service provider's antenna requirement only applied to received calls. Outgoing calls could go out on the same antenna.

For the iPhone 4S, Apple probably implemented spatial diversity for both incoming and outgoing calls, according to Spencer Webb, CEO of AntennaSys, an antenna design and integration consulting firm. It's yet another improvement, but it's not enough to get a hardened antenna expert excited.

"I do not think any special magic is going into this design whatsoever," Webb said.

What Webb finds a bit more interesting is imagining how Apple and other cell phone makers pass the FCC requirements for radiofrequency emissions. All of this antenna switching uses a lot of energy, and all handheld devices have to stay below a specific (and quite conservative, according to Webb) level for transmitting heat to human flesh—and don't forget they have to cram the GPS and Wi-Fi antennas in there too. So to create a device that won't heat up your head (and to prevent excessive battery drain), Webb thinks Apple may have come up with a fancy algorithm for distributing antenna signals—which might be Apple's secret.

Another bonus facilitated by the iPhone 4S antenna design is no more choosing between AT&T GSM phones for traveling abroad and Verizon CDMA versions for better reception but no service outside of the United States. Vronko guesses that Apple created a true world phone with an entirely new processor. And he can't wait to rip one apart on October 14 to try to find out for sure.

"The biggest limitation in the past was the cost and availability of the baseband processor, which processes specific radio signals," Vronko said. "Its job is to send and receive radio transmission going to cell towers."

But you needed a discreet chip for CDMA and GSM, and two chips in one phone would be bulky and expensive. Vronko says Apple probably called on a company like Broadcom or Marvell to build a new processor. "That has been done before, but it's not done that often," Vronko said. "There are not that many true world phones because they're expensive."

If reception with the iPhone 4S works as great at Schiller claims, I might be convinced to upgrade from

my iPhone 4 AT&T model. But who are we kidding? The iPhone 4S could require you to carry your own bunny ears around to make the thing work and people would still line up to drop their \$500.

## **CAARA Club membership benefits.**

I recently had a new CAARA member ask me, "So what do I get for my \$30.00?". I have to admit this was a good question. So what do CAARA club members get for \$30.00 a year? Of course the quick answer is that your money goes to support the club but in todays age sometimes thats not good enough, plus with the current economy new hams sometimes expect something in return for their hard earned money that they just shelled out. So since it is CAARA membership dues paying season I thought I would try to make a list of what members receive for just over \$2.50 a month.

#1 CAARA club monthly membership meetings where we have guest speakers and we cover just about every topic of amateur radio.

#2 The ability to have access to a clubhouse on wednesday meetings, on sunday mornings and other club events such as contesting. Having access to any clubhouse is very rare for any amateur radio club.

#3 The club has tens of thousands of dollars worth of amateur radio equipment. This equipment is available for member use during club sponsored events during ARRL Field day and yearly contesting. The club also has some ham gear that is lent out to member use.

#4 CAARAMAIL, While this email system might not sound exciting but think for a minute. Members have instant access to every other member and their knowledge if anyone has a amateur radio related question or has equipment to sell or buy.

#5 Your dues help support other members in putting together one of the best amateur radio club monthly newsletters around, plus one of the better amateur radio club websites as well.

#6 Your dues help support the club in running monthly FCC Amateur radio License Test sessions, Spring and Fall Tech in a day courses and Morse Code classes.

#7 Your dues help with club social activities such as cookouts, the monthly Scholarship Benefit Breakfasts, and Christmas parties.

#8 Member have access to their own section of the clubs website with archived newsletters and other important club information.

#9 Your dues give you guilt free access to using the

clubs repeater, plus it does take money to maintain it.  
# 10 If your into public service communications and Emergency Communications CAARA has monthly meetings on those subjects plus we are very active year round in those two forms of public service.

# 11 First dibs on used amateur radio equipment for sale that the club receives.

# 12 The club goes on numerous events throughout the year such as Thachers Island, Boxboro, Nearfest plus portable ops.

# 13 The club website at [www.caara.net](http://www.caara.net) is chock full of amateur radio related information. Plus you get access to the clubs Facebook page, Twitter Page, plus there are a dozens of links to other amateur radio websites. Plus you get access to past newsletters.

#14 CAARA is an affiliated ARRL Special Service club which means that we are one of the most active clubs around which means that members have many sources available to them and many year round events to be an active amateur radio operator.

# 15 CAARA has its own two local ARRL EMA Sectional Officers. Club member Hank McCarl W4RIG, which is a local government liaison and Dean Burgess KB1PGH, which is a local Public Information Officer. CAARA is closely tied into the EMA ARRL Section which means easier access to the Amateur Radio Relay League for club members.

# 16 CAARA has monthly FCC Amateur radio License ARRL Volunterr Examiner Exam Session every month so its members have easier access to advance or need help in upgrading their licenses.

#17 CAARA has been around since 1977 so we have close ties to the City of Gloucester and we have a deep history of involvement of amateur radio in the community

# 18 You get access to the clubs Echolink link node, the clubs APRS Node and you can access the repeater online.

#18 All of the dues and donations combined financially support all these activities, the clubhouse and the promotion of the amateur radio hobby. All of which are fully tax deductible as CAARA is a 501 (C) 3 Non profit charitable organization. That also means that there are a couple dozen people working behind the scenes, everyday, donating hundreds of hours of their time every year serving the membership at no cost.

# 19 Not a bad return on just \$2.50 a month!

by Dean- KB1PGH

## November 2011

+ Ukrainian DX Contest	1200Z, Nov 5 to 1200Z, Nov 6
+ ARRL Sweepstakes Contest, CW	2100Z, Nov 5 to 0300Z, Nov 7
+ High Speed Club CW Contest	0900Z-1700Z, Nov 6
+ DARC 10-Meter Digital Contest	1100Z-1700Z, Nov 6
+ CWops Mini-CWT Test	1300Z-1400Z, Nov 9 and 1900Z-2000Z, Nov 9 and 0300Z-0400Z, Nov 10
+ RSGB 80m Club Sprint, SSB	2000Z-2130Z, Nov 9
+ WAE DX Contest, RTTY	0000Z, Nov 12 to 2359Z, Nov 13
+ 10-10 Int. Fall Contest, Digital	0001Z, Nov 12 to 2359Z, Nov 13
+ JIDX Phone Contest	0700Z, Nov 12 to 1300Z, Nov 13
+ OK/OM DX Contest, CW	1200Z, Nov 12 to 1200Z, Nov 13
+ CWops Mini-CWT Test	1300Z-1400Z, Nov 12 and 1900Z-2000Z, Nov 12 and 0300Z-0400Z, Nov 13
+ Kentucky QSO Party	1400Z, Nov 12 to 0200Z, Nov 13
+ CQ-WE Contest	1900Z, Nov 12 to 0500Z, Nov 14
+ SKCC Weekend Sprint	0000Z-2400Z, Nov 13
+ NAQCC-EU Monthly Sprint	1800Z-2000Z, Nov 14
+ NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Nov 17
+ YO International PSK31 Contest	1600Z-2200Z, Nov 18
+ ARRL EME Contest	0000Z, Nov 19 to 2359Z, Nov 20
+ SARL Field Day Contest	1000Z, Nov 19 to 1000Z, Nov 20
+ LZ DX Contest	1200Z, Nov 19 to 1200Z, Nov 20
+ All Austrian 160-Meter Contest	1600Z, Nov 19 to 0700Z, Nov 20
+ Feld Hell Sprint	1600Z-1800Z, Nov 19
+ ARRL Sweepstakes Contest, SSB	2100Z, Nov 19 to 0300Z, Nov 21
+ RSGB 2nd 1.8 MHz Contest, CW	2100Z, Nov 19 to 0100Z, Nov 20
+ EPC PSK63 QSO Party	0000Z-2400Z, Nov 20
+ Run for the Bacon QRP Contest	0200Z-0400Z, Nov 21
+ SKCC Sprint	0000Z-0200Z, Nov 23
+ CWops Mini-CWT Test	1300Z-1400Z, Nov 23 and 1900Z-2000Z, Nov 23 and 0300Z-0400Z, Nov 24
+ RSGB 80m Club Sprint, CW	2000Z-2130Z, Nov 24
+ CQ Worldwide DX Contest, CW	0000Z, Nov 26 to 2400Z, Nov 27
+ SARL Digital Contest	1300Z-1600Z, Nov 27

# Contests and Club Activities

## CAARA November Schedule of Events

Wednesday November 2nd, Monthly Members meeting 7:30 PM

Saturday Nov 5th and Sunday Nov 6th ARRL Nov CW Sweeps

Wednesday November 9th, Monthly Emcomm meeting 7:00 PM

Wednesday November 9th, Monthly Board Meeting 7:30 PM

Sunday November 13th Monthly VE Test Session 10 AM

Saturday Nov 19th and Sunday Nov 20th ARRL Nov SSB Sweeps

Sunday Nov 27th CAARA Scholarship Benefit Breakfast 8:30 AM

Every Sunday at 9 AM- Clubhouse Open House and Coffee

Every Sunday at 9 PM- CAARANET on 145.130 MHZ n pl tone

## FCC LICENSEES BY LICENSE CLASS

Year	Ending Month	Extra	Advanced	General	Tech*	Novice	Total
2011	Sep	125,661	58,224	159,861	341,658	14,817	700,221
2010	Dec	122,951	59,387	155,781	342,191	15,731	696,041
2009	Dec	119,403	60,795	150,970	334,245	17,084	682,497
2008	Dec	115,625	62,104	144,832	322,660	18,343	663,564
2007	Dec	112,022	65,368	142,680	315,314	20,458	655,842
2006	Dec	108,223	69,915	131,224	323,073	23,633	656,068
2005	Dec	107,440	74,221	135,067	319,125	26,747	662,600
2004	Dec	106,090	77,948	138,292	319,742	29,765	671,837
2003	Dec	104,894	82,034	141,498	322,821	32,812	684,059
2002	Dec	103,257	84,326	139,848	321,805	36,072	685,308
2001	Dec	97,977	86,545	138,625	319,735	40,155	683,037
2000	Dec	93,807	88,783	134,144	319,874	45,632	682,240
1999	Dec	75,392	103,471	110,386	335,768	52,375	677,392



It didn't start out very good on Thursday morning, the lot was empty and the weather miserable.

### **NEARFEST OCTOBER 2011**

*BY JON- KITP*

You just never know what kind of weather will show up for this event, held twice a year. Many hams arrive Thursday night and camp out at the Fairgrounds for \$20.00 which includes water and electricity. Hams from Canada and dozens of states attend this hamfest previously called "Hosstraders".

I arrived Friday morning in the rain and caught up with a group of friends from the New England area, many that camp out Thursday and Friday night.

I actually arrived with nothing to sell and left without buying one item, a ham first for me! The weather improved to sunny on Saturday and the attendance soared. I understand several members of the CAARA club attended on Saturday.

If you have never gone to this hamfest, you should consider making a trip up to this popular spring and fall event; it's pretty hard to leave without buying something from the hundreds of vendors.



Quite a mobile antenna setup.

## CAARA HOLDS SILENT AUCTION FUNDRAISER!!

On Sunday October 16th at 10 AM the Cape Ann Amateur Radio Association held an amateur radio equipment silent auction for its members. The auction was held at the CAARA clubhouse and was well attended. The silent auction was held as a club fundraiser and the equipment was from past CAARA member silent keys estates. The amateur radio equipment donations from silent key estates are a critical part of our fundraising to the club. The CAARA Board of Directors deeply thanks those members who donate their amateur radio equipment to CAARA as part of their legacy and estate. The Board of Directors realizes the importance of these donations and the funds raised by them are a critical part of the financial health of the club and those funds are carefully used to continue promoting the amateur radio hobby. We must recognize past CAARA club member Briggs Longbothum AB2NJ (SK) and his personal amateur radio equipment donation to the club that made this auction possible.

All the gear for sale was laid out on the first floor of the club with bid sheets beside each piece of equipment to make your best offer.

Below: Curtis-AA3JE and Stan-W4HIX check the merchandise and consider making a bid.





## **Dit- a diddle dot dit.**

A friend forwarded this interesting story. Source unknown. de Tom N4KG

Back when the telegraph was the fastest method of long-distance communication, a young man applied for a job as a Morse Code operator. Answering an ad in the newspaper, he went to the office address that was listed. When he arrived, he entered a large, busy office filled with noise and clatter, including the sound of the telegraph in the background. A sign on the receptionist's counter instructed job applicants to fill out a form and wait until they were summoned to enter the inner office.

The young man filled out his form and sat down with the seven other applicants in the waiting area. After a few minutes, the young man stood up, crossed the room to the door of the inner office, and walked right in. Naturally the other applicants perked up, wondering what was going on. They muttered among themselves that they hadn't heard any summons yet.

They assumed that the young man who went into the office made a mistake and would be disqualified. Within a few minutes, however, the employer escorted the young man out of the office and said to the other applicants, "Gentlemen, thank you very much for coming, but the job has just been filled." The other applicants began grumbling to each other, and one spoke up saying, "Wait a minute, I don't understand. He was the last to come in, and we never even got a chance to be interviewed. Yet he got the job. That's not fair!"

The employer said, "I'm sorry, but the last several minutes while you've been sitting here, the telegraph has been ticking out the following message in Morse Code: 'If you understand this message, then come right in. The job is yours.'" None of you heard it or understood it. This young man did. The job is his.

## **Hello to all CAARA members,**

The next monthly club members meeting will be Wednesday November 2nd. For this meeting we will show a few DVD videos. First we have "The ARRL Goes to Washington". This video will show the ARRL's involvement in preserving amateur radio for the future. Then we will have a ARRL DVD on Foxhunting and all the tips and tricks on radio direction finding. Then we will show a DVD of the

story of the Queen Mary and W6RO. This video will tell the story of about station W6RO and its impact on the amateur radio service through its operation aboard the Queen Mary. Hope to see you there.

73's

Dean Burgess KB1PGH

CAARA Clerk



## **CAARA CW Class in Jan 2012 !!**

CAARA member Rick Maybury- WZ1B is going to instruct another CW class for all those who are interested. The CW class will begin on or around the 2nd week of January 2012. This CW class is for hams of all CW experience from those who have never done morse code to those more experienced amateur radio operators who want to brush up on their morse code skills. The classes will run about a month of Saturdays into February and will start in the mornings at the CAARA Clubhouse, 6 Stanwood Street in Gloucester, MA. To sign up for the class please email Rick- WZ1B at [rmaybury@ppg-i.com](mailto:rmaybury@ppg-i.com).

## **LOADS OF INTRUDERS ON 10 METERS**

Meantime, pirate operations are showing up on 10 meters seemingly en masse. Following the improvement in propagation on 10 meters in recent weeks, it appears that there are many illegal users of this band. Most seem to be using low power FM channelized radios to operate taxi services. Signals mainly seem to come from the western part of Russia. Information regarding these intrusions is being gathered by RSGB Intruder Watch program. It will be used to support a complaint to the Russian authorities in an attempt to clear this nuisance from what should be an exclusive amateur band. But all of the intruders may not be Russians. Others are obvious unlicensed operators using A-M and SSB here in North America. These are likely illegal 11 meter export type CB sets sold by unscrupulous dealers here in the United States and elsewhere that only require a tweak or a cut wire to put them onto the 10 meter band. If you hear these operators and have a way to record them, do so and then send the audio file or cassette tape to the FCC Enforcement people with a cover letter stating what you heard and when you heard it. Be as specific as you can. The more information that you can provide to the regulatory agency, the better.



October 19, 2011

Cape Ann Amateur Radio Association  
Rick Maybury, WZ1B  
6 Stanwood Street  
Gloucester MAQ 01930

Dear Mr. Maybury,

On behalf of the ARRL Foundation I am pleased to advise you that the Foundation Board of Directors has approved a grant of \$200 from the ARRL Foundation CW Operators Fund. The grant is provided for the purchase of a MFJ-4628 Multi-Mode Code reader.

As outlined in your grant application, this grant will provide funding for equipment to be used in learning and practice of Morse code in your Saturday morning classes. The classes include the history of Morse code, reading, transmitting, contesting and emergency services.

Congratulations! The Foundation Board will be eager to hear from you about the impact of this grant.

73,

A handwritten signature in cursive script that reads "Mary Hobart".

Mary Hobart, K1MMH  
Secretary

Cc: Don Greenbaum, N1DG, CW Operators Club

Note: The ARRL Foundation is an IRS-designated 501(c)(3) organization.

**We won a grant! Congrats Rick-WZ1B....**

## Voices in the Pig Room by Curtis- AA3JE

Everyone has a ghost story, and in New England they are as common as the anecdotes about what Uncle Fred did at the Christmas Party. This is due, in part, to the age of the buildings we inhabit. Our house on Summit Avenue was built in 1876, and five generations have lived and died in the house, providing a goodly host of departed spirits for those so inclined. They are a well-behaved bunch, for the most part, opening doors and flickering lights, though Grampie Harrison makes himself known with a unique combination of the smell of ivory soap and diesel fuel. We did have one incident involving a friend of the family who was picking up the mail that drove him out the front door at a dead run that he refuses to discuss, but the family spooks are mostly a well-behaved group.

Except for the pig room.

Grampie Samuelson, two generations before Grampie Harrison, kept pigs. He fed them off the apple tree and with family garbage, and each year he tearfully slaughtered them under the porch. At the time this was a ramshackle affair with a tin roof loosely attached to the main house which sheltered the root bin and garden tools. Grampie Sam was a man of few words but deep feelings, and when he had to do the slaughtering he became morose, weeping at mealtimes, and generally letting everyone know he was not looking forward to the upcoming events. The pigs were stunned, hoisted and bled using a big iron hook at one end of the porch, and the ground there was not the usual grey of granite sand, but had a deep red color that was very disturbing.

He passed on, the orchard and farmland on each side was developed, and in time the roof of the porch was boarded over and two “sun rooms” built along the main house to shelter two maiden aunts who lived their final years providing unsolicited detailed instructions to the rest of the family on just what they were doing wrong (a family trait, I regret to say). Despite this strong provocation, they eventually died of natural causes (the medical care at the local hospital), and the next generation used the porches as bedrooms. Storage was at a premium (six people in a 4 bedroom house), and they put sides on the space under the porch to use it for storage, but it still retained the

deeply stained red corner where nobody wanted to put anything.

I married the 6<sup>th</sup> generation daughter of the house, and we eventually bought it, and I started to fix the “few little problems” the generations had left us. The basic structure was surprisingly sound, given the family tendency to stick windows in every wall with blithe disregard for structural integrity, and the house was livable after removing the 3 layers of shingles from the roof, installing a support beam in lieu of the 17 sticks propping up the floor, and replacing the 1920’s wiring that allowed no more than 15 amps to be used at one time regardless of the reason. My wife was adamant, however, and would not let me do anything with the Pig Room.

I had removed several generations of rusted agricultural and other implements from it, and had found Uncle George’s stash of 1940s pornography from behind the old root chest, but every time I talked about pouring a floor and using the space, my wife balked. Finally I could take no more, and pressed her for a reason.

“They used to kill the pigs in that room, before it was a room, and it’s haunted. By Pigs.”

Now I enjoy a good ghost story as much as the next man, but we had at least six quarts of personal belongings crammed into this 3 pint-sized house, and we needed the room. When we had a minor domestic disaster involving the heating system (see “The Old Chimney and the Big Soot Cloud), I had the mason pour a floor when he put in the new chimney. We now had a clean room, new studs, new insulation, new ceilings and no nasty red stain. My wife would still not go down there.

“Wife!” I said. “What is the problem?”

“I don’t like it down there. I can still hear the pigs.”

Now I know (after 25 years of marriage) when I am beaten. There was no way I could defeat a herd of supernatural pigs if I tried. We compromised. I would store MY stuff in the pig room. This was more of a trial than you know, since the only access most of the time was from the outside, and trudging through the

snow to find volume 3 of the STAR WARS trilogy in a box in the pig room qualifies you as a dedicated fan.

I was down there one day when I heard something. It was not voices exactly, but it was a definite noise. Very faint, distorted, but a real sound. I looked outside. It was winter, and no one was in the street, no one was in the yard, and in fact, no one was around other than the darn trains idling and puffing toxic smoke at the railroad station down the hill. I went back into the main basement. Nothing. I went into the Pig Room. Strange, ethereal sounds. No doubt about it, real sounds. Not exactly pig sounds, but not human either.

Now those of you who are married know the quandary I faced. If I told my wife, even once, that she was right about something, I would hear about it for the next 20 years. I thought about it. A lot. I checked it again and again. Most of the time nothing, but on occasion, most often in the morning and early evening, strange voices from the ether.

Today this would be a gold mine. I would call "Ghost Hunters", star on a cable show, make up weird stories about half nude apparitions (which half is never specified), and generally have a blast. This was a few years ago, however, and telling anyone you heard the plaintive calls of dead pigs would get you a trip to the rubber room. So I ignored the whole matter. Most days. Most summer days. There were those gray days of winter when the world seems dead when I was sorting through my stuff, and listening to the susurrations of the void when I decided something must be done. I idly researched animal exorcisms, but the local clergy were mostly Unitarians and did not do such things (the Roman Catholics were all tied up in court over something to do with priestly behavior, but no one would ever tell me what).

Frankly, I had other things to worry about. I am an amateur radio operator and I was having terrible trouble with my radio. It had worked fine at my last house, but in the house in Rockport it was nearly deaf. I had trouble communicating with Gloucester, much less Timbuktu. I finally decided that it must be some form of radio interference, and bought the "Little Giant" interference tracer from the ham radio catalog. This was not much help. It either showed nothing, or the needle on the meter (supposed to find interfering

signals by pointing the thing at likely sources) was jumping around wildly.

The windows were "hot". The floor was "hot". In fact, the entire side of the house was "hot", but not always. It came and went. It was maddening. I moved my antenna away from the house, and that helped, but not as much as I thought it should. I was frustrated, and I went for a walk, taking the meter with me. I was astounded to find out that as I walked down the hill, the storm windows on some of the houses registered as a source of interference. I went back, and connected up the spectrum analyzer (a fabulous instrument I had bought last year when searching for the source of the interference), and waited.

There it was! A huge spike in the 150 MHz band. Huge! These things are normally measured in microvolts, but this sucker was in volts. I had never seen anything this bad since I had lived right next to WTOP in Maryland ("500,000 watts of power, all news, all the time, right over your telephone lines"). I looked around. Nothing there but the trains. TRAINS. ELECTRIC TRAINS. Perhaps it was the trains. This led me to the train yard. No trains were due, but the ones in the yard were idling. But not generating the signal. I was about to give up when the 5:10 rolled in. Bingo! Huge spike, off the scale. I waited to ask the conductor.

"Is there a radio on the train?" I asked.

"Sure, sir. We call ahead to make sure the line is clear every time we come on this line."

"Call how?"

He looked at me funny. This was normal. He indicated his radio.

"With this radio."

"That looks like a pretty small radio, sir."

He laughed. "Oh we have a 5000 watt repeater in that building over there. It's plenty powerful. Reaches all the way into Boston."

He indicated a building about 200 feet from my house.

I went back home. I thought a bit. I went under the porch and attached a voltmeter to the tin roof of the old porch. It registered nothing, then suddenly jumped to about 4 volts. I was looking at it when I heard the “pigs”. The 5 kilowatt transmitter was sending signals so strong that they were being rectified by the rusty joints in old roof and creating an audible sound.

I grounded the roof along it’s perimeter, No more interference, no more pig voices.

Grampie Sam? He’s still with us from time to time, but I like the smell of diesel fuel.

### CAARA HOLDS TECH IN A DAY COURSE !!

The Cape Ann Amateur Radio Association sponsored another “Tech in a Day” course on Saturday, October 29th at the Lanesville Community Center on 8 Vulcan Street in Gloucester, MA This is the fourth time that CAARA Club President Stan Stone W4HIX has taught this course in the past two years.

The “Tech in a Day” course is an all day event starting at 8 AM and ending at 4 PM with the administration of the FCC Technician Class Amateur Radio License by the CAARA ARRL VE’s. We had 16 students for this course and 14 passed their Technician class exams which is consistant with past success rates.

Stan would like to thank all of the VE’s who came down and assisted with the exams and CAARA congratulates the 14 students who passed their exams into the amateur radio hobby.

*courtesy of Dean- KB1PGH*



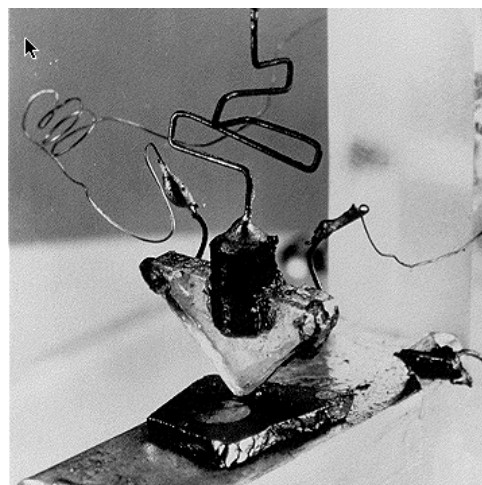
All students are given a demonstration of communicating on 20 Meters HF with a Buddipole and an Icom 7000 in front of the Lanesville Community Center by Dean Burgess- KB1PGH



CAARA ARRL VE Bill Poulin- WZ1L oversees two students taking their exams



Stan W4HIX lectures the students on how to study to pass the exam



Can you guess what this prototype is?

The is the first transistor!

## **FEMA, FCC TO CONDUCT FIRST NATIONWIDE TEST OF EMERGENCY ALERT SYSTEM**

### ***MEMA to Coordinate Commonwealth's EAS Test Effort***

The United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) and the Federal Communications Commission (FCC) have announced the first-ever national test of the Emergency Alert System (EAS) will take place on Wednesday November 9<sup>th</sup> at 2:00 p.m. EST.

The EAS is a national alert and warning system established to enable the President of the United States to address the American public during emergencies. The National Weather Service, governors, and state and local officials also utilize parts of the system to issue more localized emergency alerts.

The purpose of the test is to determine the reliability of the system and its effectiveness in notifying the public of emergencies and potential dangers nationally and regionally. Similar to the frequently conducted statewide EAS tests, the nationwide test will involve broadcast radio and television services, cable television, satellite radio and television services and wireline video service providers across all states and the territories of Puerto Rico, U.S. Virgin Islands and American Samoa.

On November 9<sup>th</sup>, the public will hear a message indicating, "This is a test." The audio message will be the same for all EAS participants, however, due to the limitations in the EAS the video test message scroll may not be the same or indicate that "This is a test." The text at the top of the screen may indicate that an "Emergency Alert Notification has been issued." This notification is used to disseminate a national alert and in this case, the test. In addition, the background image that appears on video screens during an alert may indicate that "This is a test," but in some instances there might not be an image at all. The test is expected to last approximately three (3) minutes.

FEMA and the FCC are reaching out to organizations representing people with hearing disabilities to better prepare that community for this national test. In addition, both FEMA and the FCC are working with EAS participants to explore solutions to address this limitation.

Through the Massachusetts Emergency Management Agency (MEMA), the Commonwealth has the capability of alerting the public through the EAS system. MEMA serves as the state coordinating agency for disseminating local, regional and state initiated emergency alerts via the EAS. MEMA, in consultation with the Governor's Office, used the EAS to provide emergency messages to the public as recently as June 1, 2011 when tornadoes hit areas of the state, and as Tropical Storm Irene impacted the state in late August.

MEMA will coordinate with our state public safety partners on November 9<sup>th</sup> to also test our redundant systems for pushing emergency messages to local and state public officials, including police, fire, emergency management and public health. MEMA coordinates a system that includes VHF, UHF and 800 MHz radio communications that link all municipalities; text, email and cellular phone alerting systems for public safety, public health and municipal officials; dedicated direct phone lines with regional fire control centers; and links to law enforcement through the Criminal Justice information System (CJIS).

This event should also serve as a reminder for all citizens to make an emergency preparedness kit for their family and business, develop a strong emergency plan and become better informed about the natural and technological threats to their community.

The Massachusetts Emergency Management Agency (MEMA) is the state agency responsible for coordinating federal, state, local, voluntary and private resources during emergencies and disasters in the Commonwealth of Massachusetts. MEMA provides leadership to: develop plans for effective response to all hazards, disasters or threats; train emergency personnel to protect the public; provide information to the citizenry; and assist individuals, families, businesses and communities to mitigate against, prepare for, and respond to and recover from emergencies, both natural and man made. For additional information about MEMA and Flooding Issues, go to [www.mass.gov/mema](http://www.mass.gov/mema). Also, follow MEMA updates on *Facebook* and *Twitter*.

## **Construction of Radio Equipment in a Japanese POW Camp**

**By Lieutenant Colonel R. G. Wells.....courtesy of Jake-KILDL**

Transcript of a recording by Lieutenant Colonel R G Wells, on the construction of radio equipment whilst in a Japanese Prisoner of War camp after the fall of Singapore.

It was about the beginning of 1942 when I was a prisoner of war of the Japanese, when I was ordered to go on a working party which eventually finished up in the Sankakan in British North Borneo. Two thousand odd of us were in this work party and it wasn't long before we noticed the absence of information as to the international situation, what was happening in the outside world, and the whole camp had a real craving to get news by whatever means. Escape parties were being organised, but none of these were very successful. The next thing people turned to was a means of getting some radio news, and this is where the building of a radio set became an urgent requirement.

The main thing, of course, was that we didn't have any components and although we had some contacts outside which later on were helpful in the building of this receiver, it limited our requirement to a regenerative receiver as from a super heterodyne receiver and the decision to do that was borne out by the results.

The high frequency spectrum during that time of the war was fairly quiet in that part of the world and the BBC, we hoped, would be able to be received. This was aided by the fact that the Japanese in their wisdom called a friend of mine out one evening to repair their radio set and he took the opportunity, of course, to switch over to the short wave bands, with headphones while doing that, and picked up the BBC successfully.

That day was memorable because it was the day that the BBC broadcast the death of the Duke of Kent in an aircraft crash. That was the only news we had of the outside world for something like six months.

The plan was made to begin building the radio, so until we could build components, there was nothing much we could do. A look at the circuit diagram of a regenerative receiver indicates a number of capacitors - about two or three are required - low capacitors to make the oscillating part of the system work, and in fact from memory we needed in the grid circuit at least one ".01 microfarad" capacitor and there was no chance we could get this anywhere, or any other components.

So we hit upon the idea of taking some tin foil or aluminum foil from the lining of the tea chest from which the Japanese supplied with the rice rations, then by the well known equations for calculating capacity and the relationship of the surface area and spacing of the plates, we built a capacitor or, at least, I built a capacitor which according to calculations should have been about ".01 microfarad."

If I could put an aside here, I built a replica of this capacitor some years ago, and it went out to Simpson barracks where we had some friends in the testing laboratory, and with great excitement the Warrant Officer concerned said, "We will see how good your calculations were"; so he put it on his equipment which was accurate to many decimal points and read on his display unit, ".009 microfarad", so we thought we were pretty good.

I said "Touché" to him because he didn't think we could do it. I made two or three of these, and I still had one of them that would work if I built the receiver again, which I have been thinking about doing, except there is always something else, like a lot of other projects which one has as one gets older.

The resistors were another problem. We found out that we could use the impurities in some of the tree wood and the bark, particularly cinnamon bark which was available by getting through the wire only about 2 feet and we could normally pinch that while the Japanese sentry was moving around.

We used a piece of string with the material rubbed on it from the burning of the cinnamon bark with some impurities in it (we didn't have a chemical analysis); we weren't very fussed because most grid-leak resistors

were about a megohm or thereabouts and we had no means or any way we could measure a megohm, so it was largely a trial and error thing to see if it would work. We made a number of these bits of string and tied them round different things to dry them out to get the thing going. Eventually about an inch, three quarters of an inch to an inch, was about the right order of things to get about a megohm resistance. They were the two main things.

Now the things we couldn't provide, couldn't do. We had to make coils; they were largely trial and error, one could calculate the inductance of these if one had access to some means of measuring the wire gauge and the space between them. So that was largely a trial and error business.

The two biggest components, or two biggest requirements, were we needed some headphones and we needed a valve, and I thought that the rest could be made locally with a bit of luck. On the question of the headpiece an outside contact smuggled in one headphone, which was better than no headphone, and a valve - no valve holder but one can't have everything in this life.

The other trouble was the power supply. The Japanese main around the camp which provided the power was 110 volts roughly according to the power station meter which we couldn't help but see, because we delivered the wood there while the power station was running; I switched over when no one was looking and the frequency was about 60 Hz, not 50 Hz as we thought, not that this worried us anyway but to know that it was manageable.

So two problems remained for the power supply. The first one was the A-battery or low voltage supply necessary for the filament of the valve. We started with a couple of dry cells, but these didn't last very long and we had to make something then. Through being friendly with the pharmacist with the party, we got some potassium bichromate and made up a bichromate cell, which is probably well known in the text books but not of very practical use. It's fairly hungry for zinc and it needs some sulfuric acid which one can't throw around or hide easily, but it served for some time and was quite successful but, in the end, had the operation lasted very long, we would have been in trouble for that. Two of these cells provided about 3 volts to 4 volts, and 6 volts was a bit too much because each cell was running at a bit over 2 volts, about 2.2 volts.

The biggest problem was a rectifier to rectify the AC into DC without dropping it to a low voltage, because remember in those days we needed high voltages for the B supply, or anode supply, but in these days we bring everything down to small DC voltages; we needed to get them up as high as we could. That was a partial failure in that using aluminum foil again and oxidising one piece of it, or length of it folded over, with some weak acid and then using the two electrodes, one of clear aluminum and one of a zinc salt and aluminum, we could make a rectifier.

We wouldn't be so audacious as to call it a rectifier now, because it had a reverse voltage of something like 30 or 40 volts, which wasn't exactly ideal, but for DC we had no option. The result was that I made a bridge rectifier but the only problem was that after 15 minutes the electrolyte began to boil, so it was really passing current in both directions but a little bit more one way than the other. So a single cell, an extra rectifier cell, was the only way I could close this down a bit, and some smoothing.

This we achieved with part of a fish plate from the railway line which was being used at the aerodrome to move the dirt from one place to another by man-power, about six men on these, and the odd fish plate used to disappear anyway for various reasons.

I dropped one off at the power station and asked the Chinese under my breath if he could cut it into three little sections which he did, he didn't want to know why.

Then again using some palm oil and some bee wire which was in fairly plentiful supply, which we stole - it was a bit risky because the Japanese were cultivating a couple of beehives outside the wire and of course this wire



used to disappear for various things unrelated to radio - and we put the palm oil along the wire stretched out and rubbed this palm oil on it, thickening it with a little bit of flour and then heating it; the flour bound the palm oil together and formed a fairly good insulation over the wire.

Good, but lucky, and with a lot of traveling.

I should come back to the capacitors on that, because we had to insulate the layers of those which we did by putting a layer of newspaper (a few people had newspaper and various things, for other reasons than newspaper of course, but then we had no other toilet requisites in the party) and by soaking this in some coconut oil we could insulate each layer after we wound it, and with a piece of this bee wire - we had something like fifty feet of it - wound round this part of the fish plate, we made a fairly good choke coil. And then a bigger capacitor, which was no trouble, having had success with the small one, to just wrap as much tin foil as we could round another sheet of newspaper which finished up about 18 inches long by about three quarters of an inch in diameter. We didn't even try to measure the capacitance of it, because we couldn't do anything about it anyway, except put more wire on. And that in effect was a fairly good rectifier, a very dangerous one because we had the 110 all right but we had a bit over that by the time we had rectified it, and we don't know because we had no means of measuring it.

Finally, the valve; we joined the valve by winding the clean little bee wire around it and then plugging it with any insulating material we could get to make it stick, - no valve holder, of course. So eventually we produced a receiver of sorts, except it wouldn't oscillate. We tried building more, another choke coil, and this went on for ages; there was no possibility we could get this valve to oscillate. I think it's recommended according to a friend of mine who had an amateur license, he thought that about 120 volts was the best we could get and there was no way we could get that by trying to smooth this any more. So the only avenue open was to bribe one Chinese working at the power station who was very much our way, and of course in those days was a nationalist Chinese.

The capital of China in those days was Chungking, and I told him we could get him some overseas news from Chungking if he would slowly wind his field coil power up on the generator every night starting at about 9 o'clock bit by bit, and get it up to about 130 on his meter. He understood, and after that I said half an hour to drop it again, very quietly and slowly because it may affect the lights "....and you no speak about that because you get chopped, you know, and we will give you Chungking news...."

This was duly done and for about six months we had reliable communication. The first trial on air had too much hum, and we had to modify a few things two or three times in attempts to get it right, and in the end we had a workable situation which was worth exploring.

Capacitors right, choke coils right, one head phone, we had some old rag so we tied it round the head and tied it on, or string, or whatever we could get. With the hope of recording something we took some paper, which wasn't in plentiful supply, but the odd piece of paper we could get. Running notches down the left hand side, about a quarter to a half inch apart down the paper, and bending it over so that these little pieces stuck up in the air, and in the pitch darkness one could then put the headphones over one's head with eyes looking out for possible interruption by the Japanese - we had some lookouts, or cockatoos as the Australians called them, around the place to warn us at the oncoming of the Japanese - and with great trepidation we heard Big Ben chiming one night. Of course only one of us heard it but we were so full of enthusiasm.

It was the BBC all right; it was quite a clear signal but it was somebody talking about growing hops in Kent. This broadcast went on for something like three quarters of an hour without any interruption, but ultimately the signal faded out and I was very annoyed. I was asked the next morning by my senior officer what was the news, and I said "we've got good news; I can't talk here, come this way." So he came along and said "what's this news

you're talking about." I said I didn't actually hear any news, and he became very annoyed with me and said what the hell did I mean, and I said "if the British primary producing experts are capable and able to spare the time to talk about growing hops in Kent, Britain must still be alive and floating with their thumbs up, and as far as I'm concerned that's the best news I could hear!"

That's the outline and maybe there are some questions I haven't covered properly.

BJ: The first question I would like to ask you is: What did you have in the way of tools, if any, and how did you connect the components of the wireless without, presumably, a soldering iron?

RGW: No soldering iron, no solder of course, and no other system really available but to twist and wrap with some coconut oil paper, or cardboard or something, and very gently lift it. It was on a platen of wood we obtained somewhere; it was about a foot by a foot or something, so we just mounted the components on that. A meat skewer on the capacitor - oh, we had a capacitor too, a capacitor, a valve and a headphone, which were external to camp components we had. We didn't have any tools at all, except someone obtained the use of a sledge hammer - for what purpose I don't know because one of those would not be needed to escape; other than cutting up the soft iron of the fish plate which was about the only reason we needed anything, the rest were just twisted wires. We just wanted to get one usable because we didn't know whether it might be blown up or captured; we weren't worried, the main thing was initially a short term aim (as well as a long term aim) that it might last. Fortunately, it lasted for over a year - sixteen months until the arrests took place, but that's another story.

BJ: Can I just ask you - the components for the low voltage battery cells that you produced, where did you get all the components from?

RGW: Well, zinc wasn't hard, there was some sheet zinc lying on the aerodrome and we pinched quite a bit of that because that would be eaten away during the use of the cells for the low voltage. I don't know what would have happened if that ran out. I think someone produced two lantern cells which did for a while, but it was mainly on this home-made cell system, which wasn't efficient but nowhere near as inefficient as the rectifier was. We must have been consuming... Ah Ping said he had to turn up a lot of power to keep the lights what they wanted. We were dispersing such an amount of power in this four test tube rectifier for the high tension.

A variable capacitor was another component we had to bring in. We couldn't make a variable capacitor, it was impossible. We had to take two plates off the one we had to get a high enough frequency. Yes, I can't remember why we didn't go up a bit in inductance; it was largely a trial and error business really. Except that in a regenerative receiver you had some idea when you were near a station because the receiver was so sensitive as all regenerative receivers are.

It had a piece of meat skewer type wood which I had a hole drilled in by a pen-knife, and we glued this in with some of our glue or something, into the capacitor shaft so that we could tune it by holding a little stick across it, fixing it at about six inches because one couldn't get one's hands any closer to the set because it was in a state of very near oscillation where the maximum sensitivity is, just before it bursts into oscillation. With a fairly clear HF band, it wasn't long before we knew roughly, by putting a couple of marks on the stick, where it was. We knew that the Voice of America was due for a transmission and I don't think we ever knew the frequencies because the BBC didn't announce frequencies, they just came on the air and broadcast.

BJ: What did you use for an aerial?

RGW: A clothes line. All the huts had a clothes line of some sort so we just took a thin wire from that and wrapped it round the edge, knowing that a normal sentry wouldn't take any notice of it, and we just dragged that across the side of the hut and brought it in, and the people with our permission would put their loin cloths out

and hang them over this when they washed them so it looked as if it was being used. The toilet in the sleeping block was a hole in the ground and it was verboten to be used by anybody except to put our radio set in when it wasn't in use; everybody respected our wishes in that regard!

I think the best thrill was, well two or three thrills, which were momentous I suppose and of great excitement, almost excitement of crying with excitement, and the first was I think when we heard a full news bulletin of something like 400 aircraft over Dresden or somewhere, pounding the place to pieces; we were very pleased about all this. But from the land point of view, from the beginning of '42 I think, I can't remember, but sometime just before the Battle of Alamein, and we heard some of the troop movements in preparation for that. The bulletins in those days were fairly long and gave a lot of detail.

Unfortunately the first lot of rectifiers blew up about 2 days after this so we were out of business for something like 5 or 6 weeks. Of course, the rumours started to flood in as to what was happening, what wasn't happening, the war would be over in 5 minutes and all these mainly optimistic things; but there were a few super-pessimists who said we would never get off the island, and would die there, and that sort of thing. But the thrill, I think, was when reception was restored again and we had to do another little bit of fine tuning because everything you changed seemed to affect something else; the whole thing was very sensitive and wouldn't have stood up to present day quality assurance bump tests!

So back there on the first night we missed the BBC for some reason, and the next thing was the Voice of America which had a headline which ran something like this: "The war is over in North Africa, Rommel is knocked to pieces, he's out of the Middle East and the Middle East is finished, the future for this and that ....." That was the end of the American news in about three sentences! No other detail, so I said we would go back at about 12.30, and hope that Ah Ping hadn't pulled the voltage down too far, to see what we could hear.

Again, the BBC was a little low but it suddenly came quite bright and lifted in volume, and Big Ben chimed again and there was a voice in the wilderness calling. It was a lovely sensation to hear Big Ben playing in those days, and every time I hear it now I become excited. The announcement, initially in a most depressing vein, described all about the 8th Army's movements, and it was here that it did this, and this regiment drew up and did that, on and on this went for something like 15 to 20 minutes, and we tried not to follow it because we had our eyes on too many other things, look-outs and so on. But a lovely flow of English and if you had a tracing board you could have traced out exactly where everything was in situ, but of course that wasn't the aim of our exercise which was to get news. At the finish of the news the polite sentence said "It must be considered now that as all resistance in North Africa has been overcome the Allies victory must be "assured" or something like that. And that was all he said, but he took a few minutes to describe everything that happened, so you had a clear picture. But the Americans seemed to be creating for a public that just wanted the headlines, three headlines and that was all; no other interest in anything else. That was one of the happy moments of the system.

We had the problem, of course, of writing the news because naturally a lot of people wanted to know it and a lot of people could be told it without its origin. This is why we used the piece of paper we took with us (Gordon Waite and the other officer who used to share some of the work), and as soon as we heard about 30 bombers over Dresden or something, you just put 30 BD, or B for Berlin, and feel the paper down when you felt it coming to the end, and pick up the next little bit of bend and write along that in the pitch dark, hoping that you've got something in the morning. Surprising how legible it was, just triggered a couple of words like that. Unfortunately, I was in deep custodianship with the Kempitai when the Atom Bombs were dropped and I didn't hear that news on the BBC; it was relayed to me. We didn't keep these things, of course.

Getting off the technical side now, the radio set didn't betray itself. Some criticism could be levelled at us I suppose. We trusted too many people; we had no intelligence training then, of course, or anything like that and we were inclined to trust every Asian we met who smiled at us and who said he was one of us. Anyway, while

this was going on at the aerodrome and once the troops heard, we had to tell the troops the good news of course. We said we had heard from an unknown source that the war is getting better, or something like that - we had to give them a sanitised version. It was probably all they wanted but, naturally, two or three senior officers wanted to know as much as they could because they may be the ones who would have to take some decisions one day about it.

Unknown to us an Indian - I don't like saying this and I'm not being racist, it could have been any nationality - blackmailed a Chinese who was helping us on the aerodrome picking up bits of iron for us and various other things. He blackmailed him but the Chinese wouldn't talk, so the Kempitai arrested the Chinese and put him on a rack; he mentioned in the course of his cries for help - which was not a nice thing to think about but I don't blame him - he mentioned Captain Matthews and a couple of other people; I think I would have done the same thing at that stage.

The Japanese then decided to make a raid on the camp, which they did, and I was then charged and taken away by the Captain; he wanted the receiver and I gave it to him in the end after a lot of leading him round the camp with his soldiers. I could almost laugh at some of the things that happened. He must have told them he was looking for a radio set; a Jap soldier came running up to him with a piece of metal which looked like a piece of horse harness or something; the Captain almost kicked him and told him what to do.

So in the end I decided that I couldn't talk to anybody before the rest of the troops on this parade ground, and I felt so conspicuous. He walked back and said "Are you going to tell me because we want the wireless set?", so I said "Yes, I've just thought where it might be". So I went across and told him where the hole was, and they dug the hole up and, of course, there was the transmitter. He said "Ah, you've been sensible at last", so he took the transmitter and they took it away.

From that day on, I was worried about this because I knew the receiver was OK and the troops would be happy about that; they would still be able to get news. And then he took me up to the platform where he stood and addressed everyone. All he said in English was "You all look at this man, you will never see him again" and led me off. I had a sort of a dying wish, going in on the vehicle to Sandakan to be interrogated, that somehow or other this set could be preserved and, of course unknown to me, it was. They continued using it but not until after about a week or so - their nerves were a bit shaken. But they used it for some months afterwards until the big moves came and it was a successful source of morale lifter.

During the trial, that was when the shock came to me when this transmitter was brought out by the prosecution as evidence that we had been using a receiver, but the Court accepted it. It was never mentioned after that because had it been, I don't think either of us would have been alive, because we had planned to get some crystals from the Philippines and try and fit them in this set then we could call them on CW and give them some news about ourselves.

But we did get some news by other means, via an agent taking a sandalwood vessel across, that the British and Australian authorities knew where we were, and it was proved at the end of the war that they knew exactly where to come for us. They had guerrilla parties in behind the lines, but they couldn't contact us and they had to watch some of our people just die virtually, because they were there and there would have been trouble otherwise.

BJ: Could I just take you back and ask you to fill in a few details about the transmitter. You talked a lot about the construction of the receiver and I would be very interested to know where the transmitter fitted in to this; were you developing that alongside?"

RGW: "No, the receiver first; we had that, and then we started the transmitter as a rather low priority of course,

but one it would be nice to have. I had finished the two 6L6G's to make a push-pull amplifier that was the RF output to be, and the oscillator, and we had the capacitor but were missing a few more components and that was about where we were. In other words, in the course of events, had he been an expert with some sort of knowledge of electrical engineering, we would never have got away with two 6L6's sitting up on a block of wood with a few capacitors and things hanging on them, but obviously the Court Martial officers were normal, without disrespect to Infantry Officers, and they had no knowledge of telecommunications.

BJ: Again, the valves you used in the receiver were...?

RGW: Only one, that's all we had, which was brought in by Mr Mabey. He smuggled in a pipe to me, a smoking pipe, with some tobacco. Lovely gentleman. Unfortunately, I never had long with him, he died soon after being arrested. His widow lived at Hove with her sister; the two are deceased now.

### **Understanding Antennas For The Non-Technical Ham**

A Book By Jim Abercrombie, N4JA

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### **WD2XSH experimental stations to be active on November 3**

The ARRL reports that a number of the WD2XSH experimental stations will be on the air on Thursday, November 3 to mark the 105th anniversary of the Berlin International Radiotelegraphic Convention.

According to ARRL WD2XSH Coordinator, stations operating in the band from 495-510 kHz will call CQ on 500 kHz and then QSY to complete the QSO.

Stations operating in the band from 461-478 kHz will call CQ on 474.5 kHz and then QSY.

Other stations may operate beacons with special messages in the bands from 508-510 kHz and 476-478 kHz.

For a complete list of stations participating in the WD2XSH experiment, as well as information on how to send your reports, please see the WD2XSH website at <http://www.500kc.com/>

### **K4E - Special Event Station 500 years of Coat of Arms of Puerto Rico**

Puerto Rico's Coat of Arms was granted by the Spanish Crown in 1511, which makes it the oldest currently used in the Americas.

This coat of arms was officially recognized by King Fernando of Spain on November 5th 1511 and was officially granted to the government of Puerto Rico in November 11, 1511.

The Puerto Rico Amateur Radio League (PRARL) will be operating a special event station celebrating the 500th anniversary of our Coat of Arms. This special event station will be operated by several stations in Puerto Rico from November 5th to November 19th.

More information on [www.prarl.org](http://www.prarl.org)