



CAARA Newsletter



CAPE ANN AMATEUR RADIO ASSOCIATION

APRIL 2015 EDITION

President's Desk

by *Hank-W4RIG*



We are in the process of reworking the kitchen at 6 Stanwood - and expect to put in a new ceiling and seal things up so we don't get dirt or other leakage from above. Roger KB1YTJ gets a major hero's medal for tearing the old ceiling out. And Ross W1RAB our thanks for sealing the holes so the varmints don't get back into the building.

Please don't expect to make any coffee out there until it has been fully restored to proper order and we post the signs requested by the Health Department.

Gardi Winchester KA1BTK needs some volunteers to help with communications for the YuKan Run half marathon on Sunday April 12 starting at O'Maley Middle School at 8:00 AM for their 5K and 9:00 AM for their Half Marathon up the west side of Cape Ann to Rockport and back.

Remember the Member's meeting is on Wednesday April 8 with the Public Service & EmComm meeting at 7:00 PM and regular business and program at 7:30 PM.. Stan W4HIX will again be working the Boston Marathon on April 20. The snow is melting slowly, but we can get back into the trailer again even if it might take a few more weeks for the parking spaces next to the trailer to be back in service. I'll close with special thanks to Jon K1TP for his work on negotiations with the new tower owners and another fine newsletter.

Information Desk

by *Dean-KB1PGH*



Well my combination January/February edition of CQ Magazine arrived on March 1st so they are still playing catch-up over there. Who knows how many subscribers they have lost in the past year but they are still trying! I saw a good article released by the ARRL and written by Joe Speroni which updates the totals of amateur radio licenses in the United States as of the end of 2014 so I'll pass those figures along to you. As of January 1st 2015 there were a total of 726,275 total amateur radio licenses and that trend continued upwards to over 727,000 as of the end of March 2015. As of the end of 2014 there were 136,405 amateur extra licenses, 169,524 general licenses and 357,236 Technician class licenses which they account for almost half of the total amount of licenses. There are 11,501 club licenses like CAARA's own W1GLO callsign. There were 7216 ARRL VE sessions held in all of 2014. The state of California has the most licenses with 102,806 and North Dakota has the least with 1477. There has been a 8.1% total increase in the number of ham licenses in the past decade. In the year 2000 there were 682,240 amateur radio licenses issued and that number dropped to 655,842 licenses in 2007 when the code requirement was dropped. Since then that number has grown to over 727,000 in early 2015 so that's an increase of roughly 70,000 new hams in only 8 years! As always though my own viewpoint stands that it's really not how many licenses are issued but are those licenses being used! I often wonder the real percentage of those licenses belong to "ACTIVE" hams and how many actually get on the air on a regular basis? I would also like to see the breakdown of age within the licenses to see the total percentage of youth compared to the "Old man" crowd.

Moving on, by the time you read this hopefully some of the snow will have melted by then. As you know the first of spring is the perfect time to check all of

(cont. p 3)



PAGE 14- NEW 440 DIGITAL REPEATER



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.

All material published in the CAARA Newsletter may be reproduced for noncommercial use provided such use credits both the CAARA and the author of the article. Copyrighted material will not be accepted without accompanying written permission to publish.

The opinions expressed in the CAARA Newsletter are solely those of the editor or other contributors and do not necessarily reflect the opinions of either the Board of Directors or membership of CAARA.

Jon Cunningham- K1TP Editor
Dean Burgess- KB1PGH Reporter

Board of Directors- 2013-14

President: Hank McCarl W4RIG
Vice Pres: Jake Hurd K1LDL
Treasurer: Stan Stone W4HIX
Clerk: Bill Poulin WZ1L

Directors:
Gardi Winchester KB1BTK
Tony Marks N1JEI
Pete Chadbourne -K1LJO
Larry Beaulieu AJ1Z
Paul Anderson KA1GIJ
Roger Smith KB1YTJ

Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Crown-Castle 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 Crown-Castle and has a very good 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.

New! The club is open every Tuesday from 4-8PM for CAARA members to stop by and socialize, as well as use the extensive collection of ham radio gear.

Information Desk

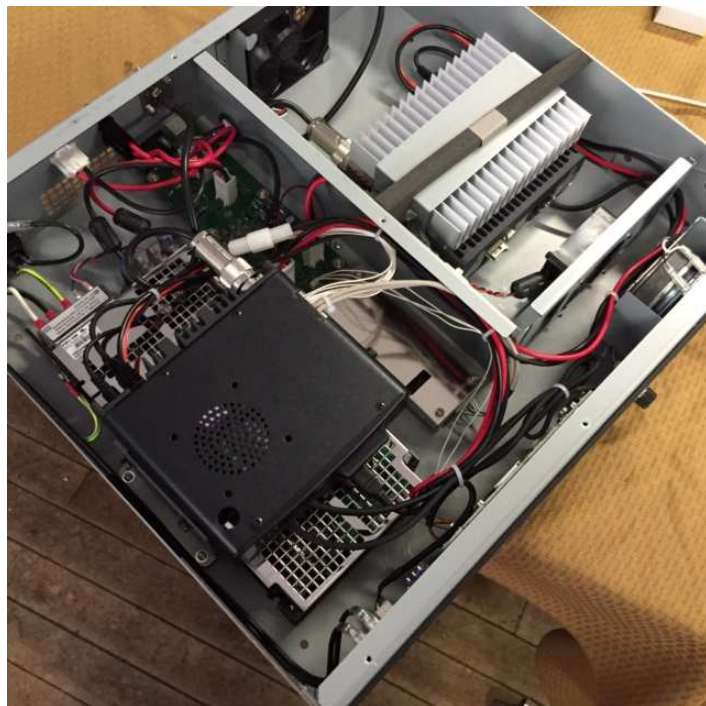
by Dean-KB1PGH



your outdoor antennas and cabling. Please take the time to check all of your connections. Make sure there is no water or general moisture getting in and replace any coax seal if necessary. It may even be time to replace old R-8 or RG-8 cable that may be sun damaged. Take a moment to check the SWR on the cable as well. For those with generators take the time to drain the old gas out and change the oil and check the spark plug. After that please run it to see if everything runs smooth. Its better to do it now until its too late. If you have any deep cycle marine batteries for portable use please take the time to check the fluid electrolyte levels so the fluid level does not go below the plate level. Take that advice from someone who knows. Check the battery fluid to see if its nice and clear as well instead of foggy and cloudy. So a little spring preventative maintenance goes along way. For this months "Emergency Preparedness" tip take the time to create to create a emergency kit for your car. You don't need much. Get a small backpack and throw some of these items in: First aid kit, bottled water, energy bars, multi-tool kit, a mag lite flashlight, toilet paper...you get the point. You can also add a fire extinguisher and at least an HT if you don't have a mobile rig. So that's it for April and we'll see you next month!

Editor Roundup

by Jon-K1TP



A few pictures of the inside of the new Yaesu Fusion repeater. I had to pull off a few covers to install the voice board. If we wish, we can record a human voice for tail messages for the ID or special events we want to advertise. The repeater was put on 440MHz to see how things work. Please give it a try if you have a UHF radio.

It could be used on two meters as well as crossband if we wanted to. I have it running 50 watts on the top antenna on the tower and the two meter repeater running 75 watts on the slightly lower antenna.



WHAT'S GOING ON AT THE CAARA EMCOM CENTER?

A big thanks to Gardi Winchester-KB1BTK for his initiative to open the CAARA Club on Tuesday's from 4pm until closing.

It has blossomed into what Gardi had in mind, full utilization of the club's varied resources.

Members come to use the radio collection to make contacts, practice morse code, wire up circuits, have dinner and chat with other members, work on clubhouse projects, etc.



The last Tuesday evening was an operating and experimenting night. Bill- W1OKD was busy working the Yaesu 1000 station on 20 meters and Bob- WA1UCG was learning how to use the donated Flex SDR radio on 40 meters. The Flex Radio is in the process of being setup so members can use this station remotely from their computer. A training session will be required before passwords will be given out.

Picture below of Hank and Stan presenting Meredith Fine a plaque for her excellent legal services used to purchase the building from the City.





Matt (picture on the left) came down from Ipswich to do a little project and practice some morse code at the club facility.

Picture on bottom left of Hank-W4RIX Club President with long time member and mentor, Bob-WV1A catching up at the club.

Later in this issue I have posted pictures of the kitchen repair work which involved taking down damaged ceiling. We will be putting up a new sheetrock ceiling soon and breakfast's will be served again with the blessing of the City Health Department.

CW is being spoken on Tuesday meetings at the clubhouse for anyone wishing to participate. Everyone is welcome whether you do not know the Morse Code or can snap out 25 WPM.



This Spring we need to have an outside cleanup event on a nice warm and sunny Sunday morning during coffee hour. All we need to do is rake around the building and trim a few bushes and get it all in bags so we can get it to the dump. Many hands would make the job easy!

We also need to get up an antenna for 75 meters, most likely a long wire of some configuration. The small lot leaves us with few options but I know we can do it.



Field Day meeting will be coming up soon, although it is hard to think about a summer event with all this snow still around us in piles.

Hope to see you at the club soon and until then, enjoy your membership at CAARA- the most radioactive club on the North Shore. *k1tp*

Aging Disgracefully by Curtis- AA3JE

I continue to be amazed by the number and variety of products being sold to preserve youth. They appear, unwanted, in my inbox, physical or electronic, like silent pitchmen at the carnival. Describing the horrors of “low T” whatever that is, or telling my that my “youthful vigor” can be restored.

I have no desire whatsoever to be restored to my youth. As I remember it, I was a plump, socially awkward, easily embarrassed kid who could be maneuvered into all kinds of (for me) disastrous situations by my slick talking classmates. My adult life was not so hot either, working two jobs, supporting a family and paying huge taxes so someone else could get a free ride.

Besides, with age come some huge plusses, and I intend to enjoy them fully. Like at the drive through.

“May I take your order, sir?”

“Speak up! This box mumbles so badly, it’s a wonder that anyone gets an order filled.”

“Er, Sir? Your order?”

“Medium hot coffee with cream and the geriatric discount.”

“Sir? Could you repeat that?”

“MEDIUM HOT COFFEE WITH CREAM AND THE OLD FART DISCOUNT.”

“You want the Senior discount?”

“If that’s the 10% you take off for my not having died yet, YES!”

“Certainly sir.”



Now do not get me wrong. I don’t behave offensively ALL the time, just when I need a little morale boost. Having been the one stiffed by this state for sixty-five years I am finally happy I got my ticket punched. Suddenly, like magic, I go from the poor brainless gomer who had to pay for everybody else’s free ride, to one of the protected and privileged classes. Last year if you punched me in the snoot it was another Rockport squabble. Today? You have committed a felony! Wonderful!

So here’s the tip. Enjoy it. Have fun with it. Since everyone assumes that you have been suddenly struck incompetent, go with it. Work it. Practice a vacant stare, a stooping posture, and develop an outrageous alter ego on social media. My personal favorite is “FRIENDS OF THE MUSKRAT, a nonprofit dedicated to the life, times, and habitat preservation of our furry friends.” (Be careful with this one, it is a little over-used in Rockport.)

The look on the face of the clerk as you make him explain, AGAIN, how the digital recorder works is deeply rewarding. Same with health care representatives. LOTS of fun.

I have also developed variable gain hearing. When someone is calling me, I suddenly have the choice of hearing or not, as I please.

"DEAR? DEAR! ARE YOU THERE?"

(Well yes, but I'll never admit it.)

"DEAR, CAN YOU GET ME SOME COFFEE, A BAGEL, TOASTED, CRÈME CHEESE ON ONE SIDE, RASPBERRY JELLY ON THE OTHER. TOASTED HARD AND CRISP?"

(Well I could. But I won't. He, he, he.....)

Use it with town officials, or anyone else who wants you to do something.

"It is a really simple form, sir....."

"LIFE IS TOO COMPLEX. I REMEMBER BACK IN THE FIFTIES THAT WE RAN THIS COUNTRY WITH A LOT LESS PAPER. THIS IS AN INVASION OF PRIVACY, YOU KNOW I DON'T HAVE TO GIVE YOU ANYTHING. IDENTITY THEVES ARE ALL OVER THE PLACE....."

If you don't over-act, they will fill out the damn form for you.

So there you have it. True your classmates are starting to drop dead, but I am deeply gratified when the slick arrogant jerks I never liked to begin with drop off the planet. I've wanted them dead for fifty years.

So watch out, that shuffling old guy yelling at the clerk in the line in front of you and hitting the counter his cane may just be having the time of his life. I know I am.

ATTENTION MEMBERS:

The first of this season's Yukon Run road-race series is coming up on April 12th.

<http://www.yukanrun.com/Fools-Dual.html>

Please let me know if you can staff a communications check-point for the event by April 5th so I can plan staffing positions for the event. This event starts at the O'Maley School and runs up beyond Halibut Point in Rockport. The southern portion of the course is well within HT range to the 13 repeater. The Annisquam / Bay View / Plum Cove / Lanesville / Rockport areas may require a bit more "horse-power". Given the response we may be able to have an after-event "de-briefing" get-together.



I will put together a list of public service events within CAARA members AOC for the season so you can plan further in advance for events. If there is enough enthusiasm for the local events, perhaps we can expand to assist other area Amateur Radio organizations to staff their events.

Thank you!

Semper Paratus! & 73's

Gardner H. Winchester II, KA1BTK

You can get your
FCC Technician Amateur Radio License
in One Day with
TECH-IN-A-DAY

Note: Morse code is no longer needed for any amateur radio license.

How?

If you can spare one Saturday, chances are very good you can get your FCC amateur radio Technician license. Don't worry if you're not technically inclined, this method depends much more on short-term memory than technical knowledge or background. By spending six hours studying the questions and answers from the FCC exam question pool, you'll remember enough to pass the exam given at the end of the class. The test is 35 multiple-choice questions and you need 26 correct to pass. This method has worked with teenagers to senior citizens.

Why?

With a Technician license, you can use VHF and UHF amateur radio bands, meaning when the phones go dead and your cell phone doesn't get reception, you will be able to get a message out with a simple hand-held radio. For emergency workers, adding Amateur Radio capability adds to your communications abilities. And, it is great fun with interesting people to meet.

Help!

So after I get my license, what next? The Cape Ann Amateur Radio Association is ready and willing to teach you the practical matters on getting "on the air". We can answer your questions on how to operate, what radio to buy, etc. We get together every Sunday morning for coffee and donuts—come join us sometime. We also have members' meetings once a month with interesting presentations.

Schedule

Date: **Saturday, April 11th, 2015**

Time: 8:30 AM to 5:00 PM (includes exam)

Place: Lanesville Community Center

8 Vulcan St

Gloucester (Lanesville), MA

Contact

Stan Stone, W4HIX

978 283-2015 e-mail: techinaday@caara.net

You must pre-register for this course.

Cost & Requirements

Fee: \$5 (includes materials & snacks)

Test Cost: \$15 (required by FCC)

Bring photo ID & Social Security Number

PRODUCT REVIEW BY DEAN BURGESS- KBI PGH



I attended the CAARA Christmas Party last December and I won the Wouxun KG-UV3D in the fundraising raffle. I have seen and heard about these HT's from China but haven't had the chance to operate one so here was my chance. Both Wouxun and Baofeng HT's have been making inroads in the overall amateur radio HT market here in America. The irony is I also won a Baofeng HT in another CAARA raffle a couple years ago and have used it many times. The Baofeng is a great HT on the real cheap and I have enjoyed using it. So back to the Wouxun HT, after I won the HT many club members asked me about the

overall performance and quality as they have also considered buying one so here's a quick review of the Wouxun KG-UV3D. I'll get right to the point. I would say that you can't beat the build quality and performance of this HT for the price point of it of \$99.99. This HT is a higher build quality of the Baofeng line but then again the Baofeng HT's run about \$40.00. I would rate the build quality right up against the low end Yaesu HT's that I have owned



like the FT 60 dual band HT. On the performance side I have had great success there as well. I was able to hit the CAARA W1GLO repeater with no problem from the inside of a car up in Rowley and I could also hear the Gloucester PD clear as day as well with the 500 mw audio. Then again I do have the High gain WX GAT-RU dual band antenna on the Wouxun which helps. As you can see in the first photo how long the antenna is as compared to my ham radio cat! As for the details of this HT it is a true dual band 2 meter/440 HT with dual receive. It puts out 5 watts on 2 meters and 4 watts on UHF. It has 128 channels on each band. It has a 1700 MaH lithium ion battery which can last up to 15 hrs on receive. It comes with a desktop 3 HR rapid charger for the battery. This HT has wideband receive so you can hear public service comms but it doesn't receive the aircraft

band. This HT also has an FM receiver in it which was kinda cool to listen to. Plus this HT has a bright LED flashlight which is another cool feature and which I actually used a couple of times. This HT has all the usual memory features as a scanner as well as a backlit display and keyboard. It even has a low voltage prompt which tells you when your battery is about to die. I wish my \$350.00 Yaesu GX 8R had that feature! When it comes to programming this HT please do yourself a favor and get the USB cable and software. It's easier to program than the Baofeng line via the keypad but still is tedious. I got the RT Systems Radio programming software and cable for \$49.00 and programming and download was a snap! The Wouxun KG-UV3D comes with a complete line of accessories as well. I would recommend this radio over the Yaesu FT 60 in its price class. So don't be afraid to take a chance on the Wouxun line of HT's. You can get them at www.powerwerx.com.



A look at the Wouxun KG-UV3D HT

‘CREATIVE FUND RAISING’

by David Linsky KA1LKX

Back on CAARA election night of Sept. 1989, the new president, (Of CAARA, not the U.S.), proposed to the members in attendance his ideas for the upcoming year.

During the meeting, he hoisted a full trash bag high into the air and abruptly dropped it down on to the president’s, (Of CAARA, not the U.S.), desk.

At this point, CAARA’S newly elected president of about 7 minutes announced to all in attendance.

The Readers Digest version of what he said went something like this; “What’s in this bag will raise significant funds for CAARA. I’m calling it **‘Painless Fundraising’**. It is painless because it will raise lots of money for CAARA, and **it won’t hurt a bit**”. This bag is full of returnable soda and, **‘other beverage’**, containers.

This effort did indeed flourish for several years and raised significant funds for CAARA.

A 220 mobile radio was purchased with some of the proceeds. Also paid for were major repairs and outfitting for Amateur Radio communications purposes of the former City of Gloucester Civil Defense Step Van. CAARA utilized this communications van at various Field Days, Labor Day around Cape Ann road races, etc. for many years.



Long time CAARA members Chuck Downey N1OCT, Bob Quinn WV1A, Ralph Karcher W1RK and others **volunteered countless hours** to outfit the van & prepare it for the many community events at which it provided Amateur Radio communications.

But this successful fundraiser was becoming a victim of its own success. As this fund raiser grew, **a serious problem developed.** And the more containers that were turned in, the greater the problem became.

First, it needs to be emphasized that much appreciation was regularly conveyed to the numerous CAARA members who saved and brought in their containers.

Without all of those good CAARA members saving and donating their empties to CAARA, there would have been no funds raised at all! So **it cannot be expressed enough how important their efforts were.**

Can you guess what the problem was? I’ll give you a hint. The task of carefully packing up all of the containers and turning them in was becoming ever more time consuming. And all of that fell upon just one person, (who never complained, ok, maybe he complained a little). And over time, after turning in many thousands of containers, he basically ran out of gas, and the fundraiser did as well.

Now here's the good news! But this good news comes with a challenge, which is the need of **a commitment from a few CAARA members.**

Then this fundraiser **can be resurrected**, and **it can be even more successful than it was way back when!**

All that is needed is for **a few CAARA members to commit to assist** in **redeeming some** of the containers.

A CAARA member has agreed to store the containers at his location, and for a **very nominal fee**. That fee being several instructional lessons to teach this anonymous CAARA member rope splicing, (eye splicing, end splicing, etc.). HI

Spring and summer will be here soon. Countless family picnics and gatherings will be taking place. These events will generate **very large quantities** of returnables.

With the assistance of a few CAARA members to help redeem the empties, **no one person will have to spend a lot of their time on this!** It will truly be **"Painless Fundraising"!**

But this **NEEDS TO BE A TEAM EFFORT!** One of the first things that will be needed is a colorful poster describing the fundraiser to be displayed in the Clubhouse, (with permission of course). **Can someone please create this?**

Please talk to a club Officer or Director if you would like help with this **past proven fundraiser**. Who said **"Many hands make light work"?** Let's make these words a reality for CAARA!



A LITTLE CLUB HISTORY:

1994 CAARA van and mobile operations center (Rick-WZ1B in picture). We used it for Field Day and the inside had operating stations. I wish we still had it!

Ralph- W1RK replacing a window casing in 1994. We had to replace all the windows on the second floor.



Digital Photography by Gardi Winchester- KB1BTK

Photography has been around for about 200 years and as a hobby for about 100 years. Digital photography; the recording of light images on a digitizing device, had been with us for only about 25 years.

Digital photography is the next step in image recording. In most digital cameras light is recorded on an imaging sensor; some form of a CMOS (Complementary Metal-Oxide Semiconductor); NMOS (N-type Metal-Oxide Semiconductor) or CCD (Charged Coupled Device) that takes the place of traditional film. Let's keep in mind that the actual process of getting the light to the recording media, digitally or otherwise, has not changed much. The basic compromises of, shutter speed / aperture f-stop / ASA(ISO) and how they work for, and against, the photographer are still very much in play, on most cameras.

To answer the question: are digital images as good as film images? In a word: no. Each generation of digital camera produces better and better quality images but they still have not achieved the sharpness and fine detail of the silver image. Deep Blue may have beat Garry Kasparov in a Chess match but the computer has not yet bested Ansel Adams. Stay tuned.

I'm not referring to the "camera" imbedded in cell-phones and many other electronic devices today. In my opinion, most of these are just glorified "pin-hole" type imaging devices with poor quality and limited, if any tools to allow artistic license. They're convenient for "selfies" and "I-was-there" shots but not so good for pleasing images of the photographic arts.

The world's most amazing and dynamic imaging devices sit right in your own head! Most people have two of them! Keep that in mind the next time you go camera shopping and as you're looking at the prices ask yourself how much you would have to spend should you need to replace them. Keep them protected! But the eyes see the world differently than a camera lens. So how do you capture an image that looks like what your eyes saw? You don't. Instead you use the tools on your camera: depth-of-field, motion, light alterations, composition, etc, to alter a scene and produce an image that is equally as pleasing to the eye. I'm not going to discuss the art of photography here but will give you an old photo-journalist's axiom: "f8 and be there".

So why is digital imaging taking over the world of photography by storm? Mostly for the simplicity of it all. The benefits of digital imaging out-weigh its faults. There is way less work and production expense involved. Film and processing cost a lot of dough. Let's explore some of the differences:

With film, you decided on a specific choice of almost infinitely varying types for the events you expect to record with-in the next 12-24-36-or more shots, and load up, often carrying several other rolls of the same or differing types of film, planning in advance for the altering light conditions you're expecting throughout your shooting day. Selecting and understanding the properties of one generic of film over-all is a standard practice, but often a compromise that costs the difference between a great shot and a ho-hum image. With digital, you can alter the properties of the recording media for each image and situation, such as its sensitivity to differing amounts and temperatures of light. This may seem like another step in the process but most digital cameras can be set up to automatically self adjust any number of their parameters based on personal preferences, giving your personalization to a middle ground of conditions. Altering these settings for shooting outside of the box is relatively simple and can also often be preset.

Keep in mind too that digital cameras do not record color. What they do is to assign an algorithm to the image and take a "guess" at what the color temperature and frequency of the light should be. This often results in some interesting color saturations on an image. The algorithms can be altered by adjusting the white balance of the recording media, but it's another area where digital imagery is not a perfect trade-off. Likewise, film is limited in

its ability to record the true colors of a scene by the limitations of the chemical composition used in the emulsion of each layer.

It can take days to have a roll of film developed out and test prints made to see if the image was as you had hoped. If it was not, you have to start over again, and if that was a sporting event, or, God forbid, a wedding, graduation or some other one-time event, you are basically screwed. Photography is truly an art and film photographers practice and study their equipment ad-nauseam and over-shoot events to make sure embarrassing happenings are kept at a minimum, and they are mostly well-paid for their work! Most digital cameras have a small LCD screen that instantly show a “proof” image after each shot. While not an 8 x 10, it at least can give a better idea about your composition and quality of an image, and at a minimum, that the image was actually recorded.

In photography in general maybe 1 out of 10 shots are worth looking at, which means that at best, 3 or maybe 4 images on a film roll of 36 are worth working into prints, the rest are a waste. The better one becomes at the art, the more critical the eye, so the ratio never really changes. With digital’s somewhat instant gratification and the delete button, the photographer is less likely to carry dull and menial images through to production. But with a 10,000 shot SD card, does it really matter?

An issue that shows up on many DSLRs is that when changing lenses, dust can enter the camera body and often ends up coming to rest on the image sensor. This can create spots on images, especially noticeable on images with plain back-grounds taken with smaller apertures. To test your sensor, set your camera into Aperture Priority mode and set the aperture to its smallest setting, f16 or f22 (Remember, it’s a fraction. The larger number, the smaller the aperture). Set the Focal Length to its widest setting (if you have a zoom lens). Lock focus and exposure (usually by half-pressing and holding the shutter release button) on a distant object or scene then point at a blank area like the sky and take the shot. Bring up the image on a computer and you should be able to see any dust as blotches or spots. In multiple images the spots will be in the same positions. Try blowing the dust off the sensor with a blower bulb but NEVER touch the sensor. In worst cases, the camera may need to be sent out for professional cleaning. Many processes have been tried to eliminate dust from a sensor but none are infallible.

Post production of digital images is totally different. With color film, the standards are called C-41 and E-6. The film is processed at specific settings of chemical, light and temperature. For print film the process creates a “negative” of the image on the film and another negative, the print, is made from that. Many parameters can be changed during the print making process. With E-6 slide film processing, you’re only developing a “positive” and there is no other processing of your image. You only have one chance to get it right so shooting slides requires a camera and a light meter that have very accurate exposure settings! With digital images you bring them up in a photo editing suite and “shop” (after the standard Adobe Photoshop software) them until you’re seeing the result you had in mind. While that sounds easier, keep in mind that a photographer may spend days with an image in post production before he, or she gets “the money shot”.

I remember one shot, I worked at for weeks. I was trying to shoot the contours and shadows of a granite quarry wall. I tried different lighting, contrasting, bracketing and every other variable I could think of, but still my prints always looked flat, dull and uninteresting. Then I shot it in E-6 slide film. The exact opposite was true! The pictures had pop! I could not produce an image without depth and feeling! I never went back to print film after that! The same holds true for me with digital images. The illumination of an image on a monitor tends to make the colors and contrasts jump out.

The old manual Nikon F body was the standard tool of photojournalists in the Vietnam era and even today the heavy-duty “Hockey Puck” is prized for its versatility and quality by film shooters. Digital cameras are not as durable as that. I have seen film cameras come back from a salt-water dunking but once a digital camera gets wet it’s all done. I lost a brand-new Nikon D7000 with all of its peripherals when the tripod it was on was accidentally kicked by a crewman aboard the Schooner Adventure during a shoot. Desi Smith, a photographer with the Gloucester

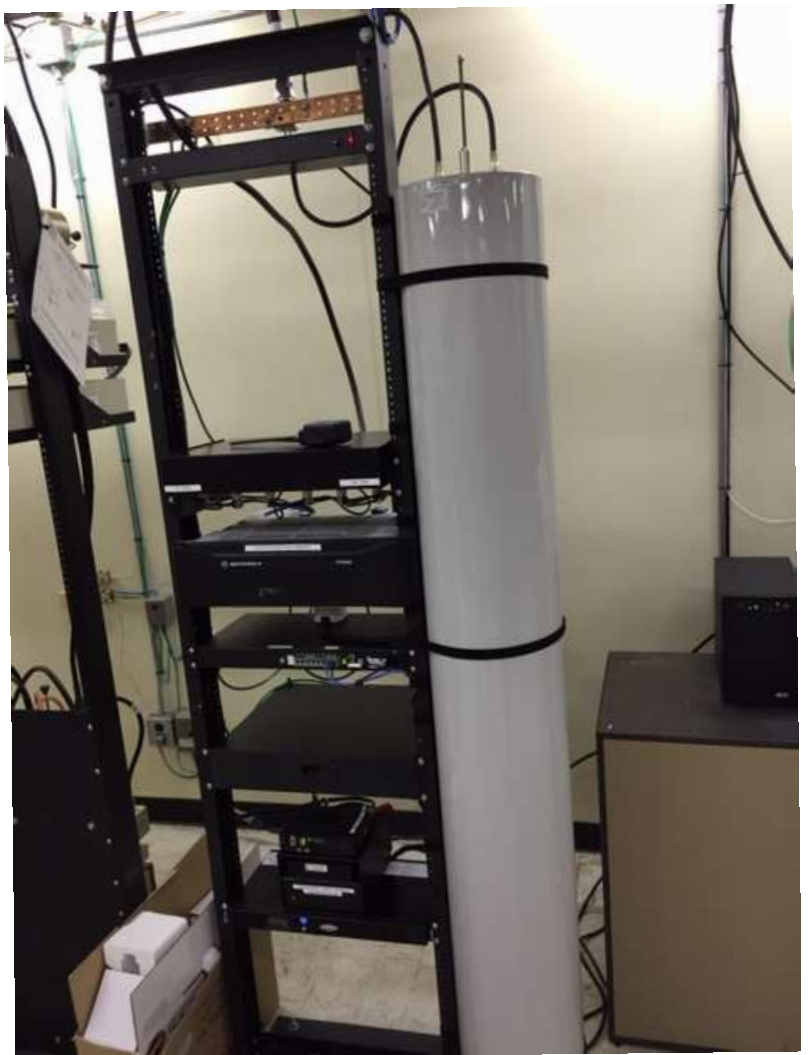
It's not about the camera; it's all about the split-second in time recorded through the lens. It's hard enough being at the right place at the right time, but it's a sin to be there without a camera!



NEW YAESU DIGITAL FUSION REPEATER INSTALLED AT THE CROWN- CASTLE TOWER SITE IN GLOUCESTER

Model WP-678-R2 Serial 19548
Tx Freq. 443.700 Rx Freq. 448.700
WACOM PRODUCTS Inc.
WACO, TEXAS

**THE NEW YAESU FUSION REPEATER WHICH CAN
OPERATE ON 2 OR 440 BANDS, IN DIGITAL OR ANALOG
MODES**



I thought you might enjoy a photo tour of the 2 meter and 440 MHz repeater site. On the left is a battery backup stack and above is a 6 meter repeater and duplexer. *Photo's by Gardi- KB1BTK*



Ross sent me a few pictures of a homebrew 8877 amplifier he purchased while in California. The history of the HF amplifier is very interesting as it was designed and built by George Badger, who engineered the famous 8877 tube.

The amplifier design is the basis for the Ameritron AL-1500 legal limit+ amplifier still in production today. I used to own one myself and it was a brute but it had one major weakness- the power supply. I remember replacing the diodes and capacitors twice!

Ross's amplifier has a rugged stand alone power supply which weighs well over 100 pounds that makes it bullet proof.





George M.W. Badger

1925 – 2009

Born George Milton Welles Badger on February 22, 1925, he grew up in Berkeley, California where he attended University High School before being drafted into the Army in 1943. George was in Patton's 3rd army at the Battle of the Bulge, and then served as Technical Sergeant in with the 89th Infantry Signal Corps in Europe. After the war, George returned to California and attended UC Berkeley, graduating in 1951 with a degree in Electrical Engineering. He was a member of the Zeta Psi fraternity, Colonel in the ROTC and President of the Amateur Radio Club.

Badger was recruited out of college to work with Professor E.O. Lawrence on developing a color tele-vision tube. His career path led to transmission tube and circuit design, where he held seven patents as well as an Emmy Award for the invention of a special vacuum tube used for UHF television broadcast.


Badger's lifetime passion was Amateur Radio, included building equipment, antennas and working DX. Originally licensed as W6RXW at the age of 14 in 1939, his call was W6TC. He was an ARRL member for 69 continuous years, was elected as a Fellow in the Radio Club of America, and held DXCC Honor Roll #1, 5BDXCC and 5BWAZ.

MARCH MEETING AT THE CAARA CLUB



At the March Monthly meeting, Tom Walsh, our new Eastern Massachusetts Section Manager talked about the ARRL Public Service Honor Roll.

Each month in QST's Field Organization Reports column, the Public Service Honor Roll (PSHR) recognizes the efforts of Amateur Radio operators who are active in many aspects of public service. This includes net operations, traffic handling, emergency operations and public service communication support. There are chances that you're already involved with some aspect of Amateur Radio that would apply to the Public Service Honor Roll (PSHR).



• CITN	7:30 PM	147.375
• CM2MN	9 PM	146.97
• EM2MN	8 PM	145.23
• HHTN	10 PM M-F	MMRA
• MARI	7 PM	3565
• MARIPN	Inactive* Let's fix this	3918

Take a look at these categories and descriptions to see where your Amateur Radio activities fit in. At the end of each calendar month, just add up your qualifying points. If it reaches the 70-point level (or more), you've qualified for the Public Service Honor Roll! Report the good news with your call sign and monthly PSHR point total to your ARRL Section Manager or Section Traffic Manager.



The ARRL section leaders, in turn, would forward the report onto ARRL Headquarters so that Headquarters staff may prepare these for listing in the Field Organization Reports segment of *QST*.



YOU CAN SEE WHERE THE CRITTERS ATE SOME OF THE VERTICAL SUPPORT BOARDS

KITCHEN REPAIRS AT CAARA

We discovered rodent droppings in the kitchen area and it was determined it was coming from the ceiling area at the edge of the back wall. Ross, W1RAB, partially took down two ceiling panels and discovered the damage. To make a long story short, the entire ceiling needed to come

down and be replaced. the findings were reported to the Club House Committee, Roger Smith.

Roger came in and took down the ceiling and cleaned up all the debris. I made that sound simple. It was a monumental, messy, and potentially dangerous job breathing the dust and rodent debris but Roger got thru it. Congrats on a job well done from all the members.

The kitchen is now out of order and can not be used until we put up a new ceiling and cleanup and sanitize everything in the kitchen. Because we are a non-profit group does not exclude us from pulling building permits, etc. before starting the replacement phase of this project.

The building permit needs to be filled out with a \$100 dollar check enclosed and describe the nature of the job with a sketch or two explaining the work. Electrical wires were found chewed so they must be replaced and the Electrical Inspector has to approve the job done by a licensed electrician. I hope work is completed by the next issue.





Ross- W1RAB finishing up the repairs to keep the rodents out of the kitchen area of the first floor.

Ross took it upon himself to repair the open rafter tails which allowed the squirrel and racoon infestation in the kitchen area of the club.

Ross cut a piece of wood to fit which will block the open space between the rafter tail ends and then painted and caulked the joints. No more rodents!

Jon- K1TP mixed up some concrete in the fall and filled in open areas in the foundation under the kitchen to solve that issue.

Ross scoped the job out, purchased the materials, and lugged his tools over to the club....not to mention wading thru the mud, ice, and snow to complete this job. Many thanks for your volunteer work.

We have plenty of small projects that need to get done and would love a few volunteers to take on a project. If you don't mind painting, we have two bathrooms that need their walls painted. We have lots of sorting projects to organize the thousands of small components into containers, etc. for future member use. We need new patch cords for the antenna panel on the second floor. We need someone to organize the new tech repair area for members on the second floor. We need spring landscaping outside. When was the last time you volunteered to help out at the club?