CAARA Newsletter

AN ARRL AFFILIATED CLUB JUNE ISSUE- 2013

President's Desk

by Stan-W4HIX

May 2013

May has been quiet and busy at the same time. Public service events and a scholarship presentation to a couple of Gloucester High School seniors along with the regular meetings fill up the schedule.

We continue to prepare for Field Day. Stations are being assembled on the 2nd floor, along with the computer logging stations and network. It takes a lot of work to update all of the computers and make sure the interface is working with the radios. Work is going on to prepare band filters so that multi-ops are possible. Ultimately we'd like to get a triplexer in place for the tri-band beam at CAARA. This will give us the capability of multiple users operating simultaneously. I've been thinking about a remote interface for the rotor so it can be controller from upstairs or down. I'm considering either an Arduino or Beagleboard as a controller, three relays for the brake, CW, and CCW and an A/D for the direction, and the Ethernet interface for remote control. Now, to find someone to write a web based interface…

Speaking of the web, we have one of the USB dongle SDRs running the Virtual Radar application and serving webpages from CAARA. Want to check out what we're tracking? Try caara.dyndns.org:8160/virtualradar/ . With our new Internet service, we also have cable TV, which is now patched into the video projector. There will more to come.

I hope everyone is getting fired up for Field Day. We're going to have the regular stations, plus some software defined radio demonstrations. Should be great fun. Drop by on Sunday mornings to help get ready.

73 de Stan, W4HIX

Clerk's Corner

by Dean-KB1PGH

The first item of business for June is the most obvious.The annual ARRL Field Day event is coming up on the weekend of Saturday, June 22nd and Sunday, June 23rd. Here's an opportunity to learn about the history of Field Day. I highly recommend that you Google a December 1999 QST article by Rol Sanders- K3RA called, "A Mirror of Amateur Radio History". This article goes into great detail about how Field Day started in 1933 and how it evolved over the decades. Today over 30,000 amateur radio operators participate in this 24 hour Emergency Communications exercise/public relations event/time to have fun and play radio event. If your a newly licensed ham the CAARA Field Day team invites you and encourages you to attend field day for the first time. Field day is a lot of fun, plus you learn a great deal from helping us set up the antennas, radios and tents.We also encourage all other club members who have not attended field day in a while to make the effort to stop by and join the fun. So if you are interested in helping us out and attending field day this year, please contact the CAARA Club President and Field day Chair Stan Stone, W4HIX. You can also stop by during Sunday mornings in June at the clubhouse as we will be starting to get the field day gear ready.The monthly member's meeting on Wednesday, June 5th will be devoted to Field Day planning and organizing as well.

On another note the CAARA Scholarship Committee would like to report that we once again reached our financial goal of awarding 4- $ 250.00 Scholarships this year to deserving Cape Ann High School seniors who are pursuing higher education.Over the past three years CAARA members have raised $2,500.00 in

(continued page 3)

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- K1TP Editor
Dean Burgess- KB1PGH Cub Reporter

Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz (PL 107.2) with antennas located on the ATT 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 (no PL) located at the CAARA Clubhouse with a very limited range. The former W1RK 443.700 (no PL) repeater with antenna at the CAARA Clubhouse in Gloucester, Massachusetts has a 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 features multiple HF station's with rotatable 10-20 meter beam, G5RV wire antenna, and 2 HF vertical antenna's along with a 2 meter packet station and multiple 2/220/440 MHz transceivers. CAARA also has an impressive collection of older tube radios.

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.

CLERKS'S CORNER

Scholarship funds and have awarded 10 Scholarships in total.The Scholarship Committee would like to thank all those who attend the monthly breakfasts and who have graciously donated to this cause.We will have the names of those who received the Scholarships in next months newsletter.If you would like to donate to the CAARA Scholarship fund you may also do so online by going to the club website at www.caara.net and clicking on the Scholarship Donations link.You may donate by Paypal or your credit card and all donations are fully tax deductable as CAARA is a registered 501 (C) 3 non profit charitable organization.That's it for this month and we'll see you at Field Day!

Dean Burgess KB1PGH

CAARA Clerk

ISRAELI AMATEURS GET LIMITED 5 MHZ TEMPORARY ACCESSES

The Israel's radio regulator has decided to grant temporary permissions on an individual application basis for use of eight discrete frequencies between 5298.5 and 5.047 MHz. These channels are available to General and Extra Class license holders. The maximum power allowed is 100 Watts Peak Envelope Power measured at the Transmitter rather than Effective Radiated Power from the antenna. The Israel Amateur Radio Club is that nation's national amateur radio society. It says that it's main goal in obtaining this allocation is to experiment for local short range emergency communication readiness and that long distance activity is a side product. The validity of this temporary authority is from a given applications approval date until mid March 2014 but it appears this could be extended. Operation is on a secondary status and was coordinated with the Spectrum Committee representing primary and other relevant spectrum users. More information is on-line at tinyurl.com/ Israel-5-mhz. (IARC, RSGB)

HEARD ISLAND DXPEDITION RESCHEDULED Some breaking news in the world of DX. This

with word that a planned Cordell Expedition operation from Heard Island has been postponed until January of 2015. According to expedition organizer Robert Schmieder, KK6EK and co-planner Rich Holoch, KY6R, the primary reason for the delay was the cost of using the preferred vessel, the Marion Dufresne, to put the team on the island for the required time. In note to the Ohio Penn DX Newsletter and republished by the Southgate News, KK6EK and KY6R say that despite extensive negotiations and rescheduling of the cruise, it became clear that the cost of using this vessel will exceed $1 million. Therefore the total cost for the project would be about $1.5 million and that even increasing the team size to 50 to partially cover this cost was not enough. So the planners reluctantly concluded that sponsorship at this level would be impossible. KK6EK and KY6R say that they have therefore decided to delay the expedition to the early 2015 date to allow more time to restructure the project. It will also give them the ability to locate a more suitable vessel and bring the cost more in line with projected available resources. According to Club Log, Heard Island is Number 7 on its DXCC Most Wanted List. The operations website is at www.heardisland.org. A detailed account of the problems being incurred in planning this important expedition is on line at tinyurl.com/Heard-Rescheduled and we will have more DX related news near the end of this week's newscast. (OPDX, Southgate)

NASA ROVER EXPLORING GREENLAND ICE SHELF

A new NASA wheeled explorer has been released here on mother Earth. Named Grover which is an acronym for the Goddard Remotely Operated Vehicle for Exploration and Research the radio equipped rover will explore Greenland's ice sheets to better understand how they form, and how quickly they may be melting. Grover was developed by teams of students in the 2010 and 2011 summer engineering boot camps at Goddard Space Flight Center in Maryland, according to a release from NASA. The 6- foot-tall, 800-pound vehicle is equipped with ground- penetrating radar that will send pulses into the ice sheet, and measure the reflections to tell researchers about the characteristics of the snow and ice layers. While radio equipped, Grover is solar-powered and semi- autonomous. It began its first mission on Friday, May 3rd, and will continue through Saturday, June 8th. More about this Earth based NASA explorer is in line at tinyurl.com/meet-grover (NASA, Live Science)

Cords

by AA3JE- Dr. Curtis Wirght

It used to be so simple. The radio was a black box, with knobs on, which had a power cord, a place to screw in the antenna, and it MIGHT have two terminals to attach to the optional external speaker. Then we got fancy. We got computers, we got packet, we got signal links, sound cards, software defined radios, pan-adaptors, automatic antenna tuners, and (worst of all), tuning buttons on the microphone.

Now for some of you, this is not a problem. You were blessed by God with an orderly mind and neatness of spirit. When YOU get a new radio gadget, you get out the label maker, and neatly label all the junk that comes in the plastic bag as belonging to the "MIGHTY TUNE 2000", you save the box, and when you are not using a particular item you put it back in the box, in the neat space on the shelf, so you know where it is the next time. Yours is an easy life, full of sweetness. YOU know which cord goes in which radio for which function.

For the rest of us, we tear open the box, set up the darn thing, and shovel all those gadgets into the nearest drawer. This is only marginally effective, since it is already full, and after a few of these episodes, the drawer won't close. This would be OK, except for the problem that my ham shack is in the laundry room. This would be OK, since "SHE WHO MUST BE OBEYED" is strongly allergic to dirty laundry, (makes her feel guilty), but occasionally she stops by.

"THIS IS DISGUSTING!"

"No dear, this is "AWFUL", "DISGUSTING" is several stages on down."

"CAN"T YOU, WELL, NEATEN IT UP A LITTLE?"

Now my feeling is that the sight of any clear space on the bench is a sign of moral weakness, but I generally agree that the stuck open drawers with cables dangling out does tend to lower the tone. So I get some nice boxes, and start the clean up.

This is where the disaster happens. At these times, it seems to me that the logical thing to do is to bundle "Like with Like", so I soon have a banker's box, neatly labeled "CORDS", into which I have stuffed everything that is mostly rubber or plastic and more or less flexible (excluding Uncle Fred's toys, the less said about them the better). It goes on the shelf, and I demonstrate the smoothly opening and closing drawers to my spouse with a satisfied sigh.

Then, six months later, I swap out the rigs, and find that the cable to the digital modes external soundcard and T/R switch does NOT appear to match any open hole in the back or front of this radio. At his point I dimly remember seeing a cable that MIGHT be the right one, but can't remember where I put it.

I don't have to guess, it's in "THE BOX".

Now the BOX has been around a long time. As a result it has cables for:

1. An original IBM XT
2. A MAC PLUS
3. An original KANTRONICS packet modem
4. 20 Useful cables that were 50 cents each at the ham fest

And MUCH, MUCH more.

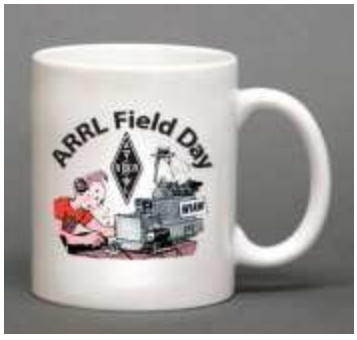
Two hours later I am sitting on the floor, having sorted the same cables all out again, and am too tired to even consider labeling them. I have finally found the cable into and out of this rig and the sound card, and the switching line, the stupid thing is working, and with a grunt I shove all this C*#P back in the box and put it back on the shelf.

All would be well, except that the VHF/UHF rig doesn't seem to work now. I look at it, and my skilled Extra Class brain immediately spots the problem. There is no microphone. I grabbed it for the 897 for a public safety event, and forgot I needed it for the base station at home.

So now I go to the box labeled "MICROPHONES".

I cannot explain why I have microphones for radios I no longer own, but I do. A number of them. All in the box, all with cord ends that seem to look a lot alike. I plug in

a few, and end up listening to the NOAA weather channels.
This sends me to the box labeled “MANUALS”. This is a mistake. I have cords for many old radios, but I have MANUALS extending back to the dawn of electronic time. After a fun filled hour sifting through unlabelled folders, I give up, and I go to the Internet. Well I TRY to go to the Internet. The computer does not seem to work since I plugged in the external sound card. It just kind of blinks and whirrs, sort of sadly. I borrow my wife’s IPAD, and get to the right site, and I find out I need a “FT-234” microphone.
Thirty microphones later, I find the FT-234, and that’s solved. My family is upstairs, watching a movie, and seems to be ignoring me. Fine, makes sense, I’d ignore anyone cursing like I was too. Only practical response. Buy a labeler. Yes I know the little tape things are expensive. Do it anyway. For the children. You don’t want them sent home from school for using words like that. Take it from me.



ARRL Field Day Goodies: The patch is just $3.00 and the mug and the baseball cap are about $10.00 each. Pretty reasonable and available directly onlime at the ARRL web site.

New To Field Day?

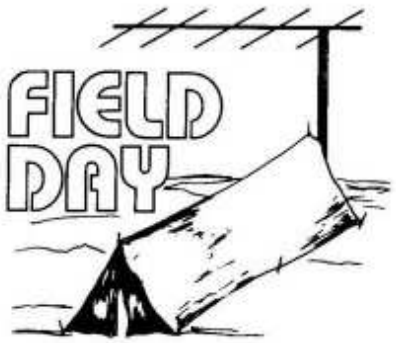
ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

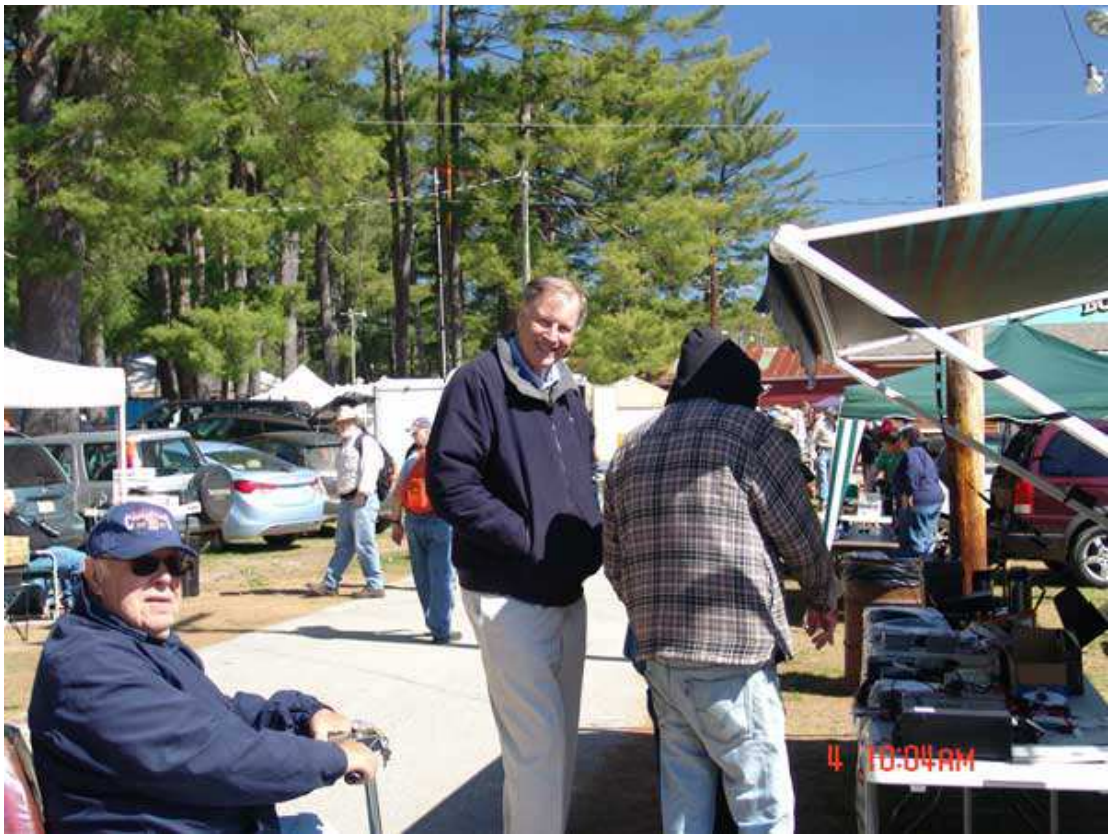
Objective-
To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions may be contacted for credit, but are not eligible to submit entries. Go to the ARRL website for full details of the rules.

This years Field Day will be held again behind Fuller School in the Athletic Field. Stan- W4HIX and the Field Day committee have spent countless hours preparing for this fun event with plenty of station setups,antennas and offering all modes of communications.

We hope you stop by and operate a rig and mode of your choice, enjoy an eyeball QSO with the club hams, and enjoy the great food. We will be showing a movie Friday night with popcorn, and tonic provided for all to enjoy.

We would appreciate any help Friday and Saturday for the initial setup of tents and antennas. Contact Stan or any member of the BOD for details. This is a great experience for our newer hams to see how things are put together for emergency radio communications and well as setting up your first staion. We have hams with 50 years of experience that would love to help you!





I attended Nearfest in May, the weather was perfect on Saturday and I enjoyed the day. Several CAARA members went to the event and picked up oddsd and ends. If you have never gone, it really is worth the short drive up to stock on smalls stuff like connectors, parts, cable, and wire. *Jon- k1tp*

HAMVENTION 2013: KIDS AND D-STAR MIX AT HAMVENTION 2013

Kids and D-Star were to be part of Hamvention 2013's activities. This as the Texas Interconnect Team announces that for the Hamvention weekend, reflector REF033B will officially be the Dayton Kids Reflector.

Megan McClellan, K5MEM, will spearhead the project from the ARRL Youth Booth starting Friday morning and continuing during show hours on Saturday and Sunday. The objective is to give the future young hams an opportunity to experience the fun and excitement of talking with someone far-away place using the magic of Amateur Radio. The participants in the Youth area will have access to handheld radios and a DV-AP, and will operate under the supervision of an experienced Control Operator.

Even if you not at this years Hamvention you can assist in this effort by connecting using D-Star to Reflector REF033BNorthern Haiti CW op **Tom, KC0W** (ex-ZD7X, XU7XXX), will be active from the extreme northern tip of Haiti (NA-096, WLOTA 0343, Grid Loc. FK39) as **HH5/KC0W** between 6-25 July 2013.
He states: "This will be a CW only DXpedition on 160-6m using vertical antennas over salt water. The operating location has unobstructed take-offs to North America, Europe and Africa. Haiti has been under-represented on CW.
QSL DIRECT ONLY via KC0W.... No LoTW, No bureau.during event hours Friday, Saturday, and Sunday. If nobody is talking, give them a call. Remember, for any QSO to begin it takes someone calling the first CQ. (N9JA, others)

HAMVENTION 2013: UPDATED AMSAT LVB TRACKER SHOWN AT DAYTON

One product at Dayton that likely won't make headline reviews but which is certain to be of interest to satellite enthusiasts is a new version of AMSAT G6LVB Tracker. The new unit replaces the original amber only LCD display with an O-LED or Organic Light Emitting Diode display will be available in blue, green and amber. The new display offers a high visibility contrast with a wide angle of view. More information and a photo showing the old and new displays can be found on-line at amsat.org. (ANS)

INTRUDER WATCH: RUSSIAN RADAR ON 75 - 80 METERS

In other news, the latest IARU Monitoring System Newsletter reports the Russian Over The Horizon Radar that has invaded the 3.5 MHz band is still very active. The interfering Radar system is believed to be located in the area of Makhachkala, on the Caspian Sea and transmits simultaneously between 3.515 to 3.545 and 3.560 to 3.590 MHz. As a result, amateur radio and other services are suffering interference during the evening hours. The German and Dutch telecommunications regulators have been informed and have been asked to intercede. (IARUMS)

HURRICANE WATCH NET SEEKS NEW MEMBERS FOR NET CONTROL STATIONS

The ARRL Letter says that with the 2013 hurricane season approaching, the National Hurricane Center in Miami, Florida, and the Hurricane Watch Net are gearing up for what could be a very active storm season. And in preparation for what Mother Nature might have in store the Hurricane Watch Net is seeking new members who can serve as net control stations.

For those not aware, the Hurricane Watch Net provides on-the- ground, real-time weather data from amateur radio operators who volunteer their time to monitor their own properly calibrated home weather stations. The hams then report the data collected to the Hurricane Watch Net, which in turn forwards it to WX4NHC which is the amateur radio station at the National Hurricane Center.

For more information on the role played by hams in this vital, life saving service, and how you can become a part of it, take your web browser to tinyurl.com/hurricane-net-2013.
(ARRL)

FCC UPHOLDS $15000 FINE AGAINST UNLICENSED OREGON BROADCASTER

The FCC has upheld a $15,000 fine against an Oregon resident for allegedly operating an unlicensed radio station.

Following up on a complaint from a local broadcaster in 2011, the Portland office of the Enforcement Bureau traced the signal on 97.9 MHz in Prineville, Ore. to the residence of Joshua McMurchie's. A police officer accompanied the FCC agent to the address where the FCC agent inspected the station and issued McMurchie a Notice of Unlicensed Operation.

Following another complaint in 2012, an agent again T- hunted the source of the signal to McMurchie's residence and found a transmitter there. The commission said that McMurchie admitted operating the station and offered to surrender the transmitter.

Last July, FCC issued McMurchie a Notice of Apparent Liability in the amount of $15000 raising by $500 it from the base amount of $10,000 because the unlicensed transmissions continued even after McMurchie was ordered to cease operation.

But in its May 9th release the FCC says that McMurchie never answered the original Notice of Apparent Liability. Based on that and the evidence before it the agency has now issued a Forfeiture Order for $15,000 giving him 30 days to pay or the case may be referred to the Justice Department for collection. (FCC)

RADIO BUSINESS: PUBLISHER SOUGHT FOR VHF COMMUNICATIONS MAGAZINE

A small but popular magazine targeted at those who operate 50 MHz and above is on the block. This as Andy Barter, G8ATD, announces his intention to retire from publishing the currently U-K based VHF Communications Magazine

According to Barter, he has published VHF Communications Magazine for the past 13 years and now wants to retire. He says that he will publish all 4 issues in 2013 but if anyone in the group would like to take over publication of the magazine from 2014 on and give it a new lease of life please contact him.

Barter says that the job of publisher involves translating articles from the German magazine UKW Berichte plus finding additional articles to fill the VHF Communications. In addition there is the work of producing the magazine, getting it printed and distributed, handling subscriptions plus orders for back issues and the like.

The current circulation of the magazine is 349 with just 80 of those from the UK. If this interests you, please contact G8ATD by e-mail to andy (at) vhfcomm (dot) co (dot) uk. (Southgate)

ARRL CENTENNIAL CELEBRATION: ARRL PUBLIC RELATIONS COMMITTEE SPONSORING "I AM THE ARRL" VIDEO CONTEST

As part of the ARRL's Centennial Celebration in 2014, the League's Public Relations Committee is sponsoring an "I am the ARRL" video contest. The Committee is looking for pairs of short video clips featuring ARRL members. One clip should show the radio amateur on the radio, while the other should show the same ham in his or her work setting saying who they are, that they like ham radio and that they are the ARRL.

As explained by ARRL Public Relations Manager Allen Pitts, W1AGP, an example might be a car mechanic in coveralls working over an engine who looks at the camera and says 'I am Henry Smith, N0XCC. I like to talk to people in exotic countries and I am the ARRL.' This clip would then be paired with a shot of him at home talking on the radio.

Pitts says that the ARRL is looking for videos that communicate that you are that guy or gal down the street and you are an important part of the ARRL. W1AGP adds that with Field Day coming up next month, there is a great opportunity for filming clips.

If this project interests you can find out more is on-line at tinyurl.com/arrl-second-century-video. (ARRL)

SOCIAL SCENE: AMSAT ANNOUNCES DATE AND LOCATION OF 2013 SPACE SYMPOSIUM

And if you are an amateur radio space enthusiast the

mark down November 1st to the 3rd as the dates for this years AMSAT Space Symposium. The venue will be the Marriott Hobby Airport Hotel not far from the grounds of the grounds of NASA's Johnson Spaceflight Center in Houston, Texas, which is the home of the famed ham radio station W5RRR.

The AMSAT Annual Meeting will be held in conjunction with the Space Symposium. This will provide you with an opportunity to hear about AMSAT's plans for the future and voice your own thoughts and opinions to organization's Board of Director members and other officials.

Over the coming months both the AMSAT Journal and AMSAT News Service will be issuing timely updates on plans for this years Space Symposium. More information will also be available on-line at www.amsat.org. (ANS)

HAM HAPPENINGS: OLE VIRGINIA HAMFEST JUNE 9

On the social scene, word that the Ole Virginia Amateur Radio Club will be holding its 39th Hamfest in Manassas Virginia on June 9th, and you are invited to be a part of the festivities.

This year in partnership with the 4 H, the club the gathering will be hosting a Youth Lounge to provide teen and preteen youth complete with on the air ham radio demonstrations. There will also be a number of educational events to foster amateur radio awareness among the younger members of the community.

Andrea Hartlage, KG4IUM, will be organizing and chairing the Youth Lounge. Hartlage, was the 2004 Amateur Radio Newsline Young Ham of the Year and a former ARRL Vice-Director. She is nationally known as a promoter of Youth in Amateur Radio and is an active member of the Youth in the Second Century Committee sponsored by the American Radio Relay League.

More about both the Ole Virginia Amateur Radio Club hamfest and its dedicated youth activities can be found on-line at www.manassashamfest.org. Organizers say that they hope to see you there.

EMERGING TECHNOLOGY: GOOGLE ASKS FCC PERMISSION TO CREATE EXPERIMENTAL 2.5 GHZ NETWORK

Google may be trying to create an experimental wireless network covering its Mountain View, California, headquarters. This in a move that some analysts say could be a sign that the company may be planning the creation of a super-fast wireless networks in other locations that would allow people to connect to the World-Wide-Web using mobile devices.

Google recently submitted an application to the Federal Communications Commission, asking for an experimental license to create an experimental radio service with a two- mile radius covering its headquarters. The network would only provide coverage for devices built to access frequencies from 2524 to 2625 megahertz. This is spectrum which could work well in densely populated areas and which mobile operators in China, Brazil and Japan are already building wireless networks using. This in turn means that compatible devices can eventually be manufactured.

According to Communications News, much of Google's application is confidential, but it does say that the first deployment of the experimental network would take place nside a specific building on Google's property. That building reportedly houses the company's Fiber Team, whichis part of the Google Access unit that has introduced high-speed wired Internet and video in Kansas City.

A Google spokesperson declined to comment on the purpose ofthe application, saying the company regularly experiments with new ideas. More is on the web at tinyurl.com/google-2- ghz. (TechNewsNow.com, ARSTechnica, CommNews, others)

A LOOK AT HAMVENTION 2013

The 2013 Dayton Hamvention will likely go down in the amateur radio history books as one of the best. And while it will be a while before we know the actual number of those attending, all indictors say that it was again a banner year. Amateur Radio Newsline's Stephan Kinford, N8WB,
reports:

It was rather foggy on Friday, May 17th when the doors opened at the Hara Arena for the 2013 Dayton Hamvention.

But the gloom outside was quickly replaced by crowds of hams inside the showplace ready for three days of ham radio fun. One of these was Hollywood producer Dave Bell, W6AQ:

Bell: "So the first thing I do is go down the ramp to deposit my ticket stub; my winning ticket stub which has never won. And then down into the main arena which I call the `snake pit' because it is always full and this Friday it was even fuller than usual. It was packed.

"I turned around and went out the the way I came in and into a relatively empty hallway to go around to where the rest of the merchants were and it was busy over there too. I think the merchants must have done a gangbusters business this time."

According to several long time attendees, numbers appeared good for an opening day as its been the past two or three years. The ARRL reports that its Expo area drew a substantial crowd with popular activities such as the W1AW 75th anniversary exhibit, the Youth Lounge and spectral purity testing provided courtesy of the ARRL Lab. And as usual, lines formed immediately for DXCC card checking.

There were several new products introduced at Hamvention 2013 and while we do not have time this week to cover all of them, perhaps one of the most interesting was Yaesu's new High Frequency transceiver. Tim Phactor, KT7F, of Yaesu described the new entry:

Phactor: "Weve come out with a very new HF rig which is called the FTDX-1200 which is an entry level TFT screen radio.

"Last year you may remember that we came out with the FTDX- 3000 which was an opportunity for those who liked the 5000 to have a price point a little less. So this year we just topped that with now an entry level TFT screen radio with a built-in bandscope and the kind of features you would find on a higher priced radio."

Not to be outdone, Icom was there with two new products. The company showcased both its ID-51A portable and IC-7100 mobile radios. Both are are D-STAR ready and as such they facilitate clear digital voice, short data messages,
worldwide D-STAR linked repeater access over the Internet and more.

The IC-7100 is particularly of interest in that it combines VHF and UHF analog and digital with all-band all-mode mobile operations using a new slanted control head with what is the amateur industries first touchscreen interface. This is the radio many saw previewed on the Ham Nation Internet TV
show a few months ago.

Icom, along with several other manufacturers were also prizecontributors to one of the highlights at the Hamvention for over a quarter of a century. That being the Youth Forum hosted by New York City educator Carole Perry, WB2MGP. This session usually pulls one of the largest crowds of any session and 2013 was no exception:

Perry: "Well this year was a banner year for the Youth Forum. It was our 26th year and we had close to 300 people in what I refer to as the love audience. Those who come out to support the kids.

"I had six young speakers age 10 to 18 who gave phenomenal presentations. We had a scientist doing a live demonstration on cloaking (which is) a new technology and he tied it into his childhood involved with amateur radio. And we had twenty-two radios that were donated by the manufacturers Icom, Kenwood and MFJ. And it was simply wonderful!"

Meantime, over in the ARRL Expo area there was also an emphasis on youth and according to the Leagues president Kay Cragie, N3KN, this young peoples interest in ham radio bodes

A photo of the May CAARA Members Meeting with Joe Gifun- NQ1D speaking. Joe was doing ham radio communications at the Boston Marathon when the bombings occured, Joe went into great detail of how amateur radio participated in the disaster communications.

CAARA GETS AN INTERNET UPGRADE !!!

The Board of Directors voted on improving the internet capability of the clubhouse for the membership and for emergency communications. The clubhouse now has full Comcast Business class broadband service as you can see with the photo of the new modem. We now have bundles our services so we have full phone services,internet and basic cable tv service through Comcast.All for only $20.00 more per month.This improved service will help us with many amateur radio aspects which require high speed internet.This will also imporve phone reliablity along with TV service which can be utilized for emergency operations center activities.

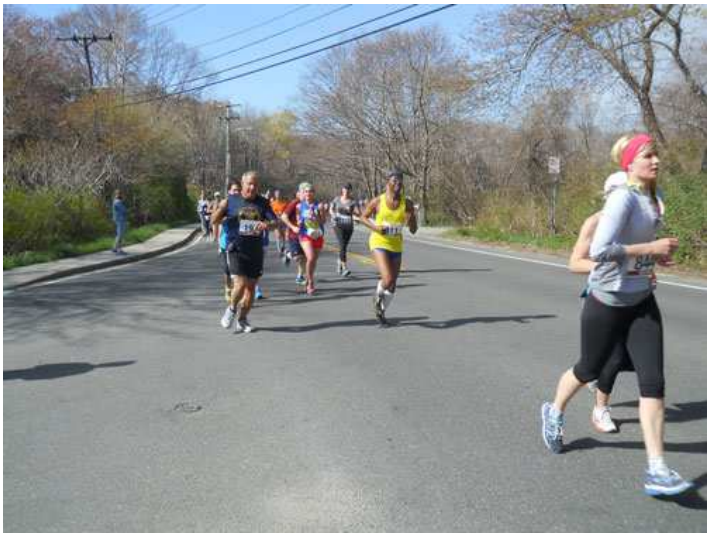
CAARA HAS A HOT SPOT !!!

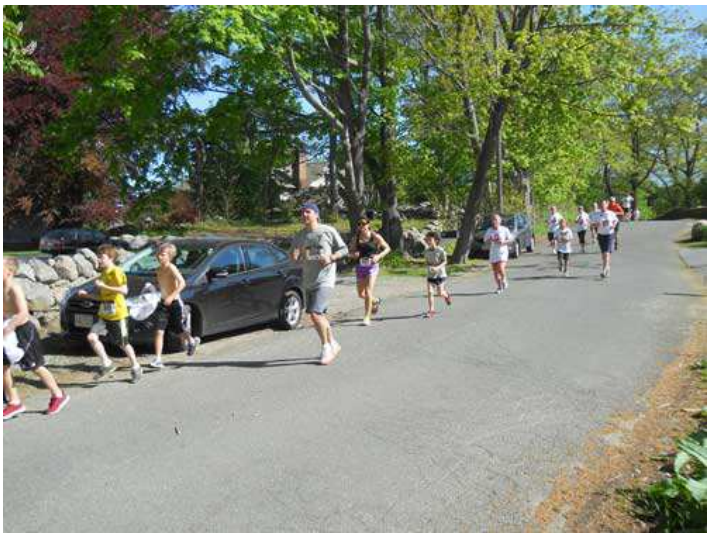
With the clubs new Comcast Business Class internet service comes an added benefit for all club mmebers.If you have an XFINITY account,just log in with your username and password on your IPAD or laptop device you can now access the internet through the clubs new internet HOTSPOT which is shown in the photo provided with the white Belkin box with the blue lights which is located on the first floor of the clubhouse.

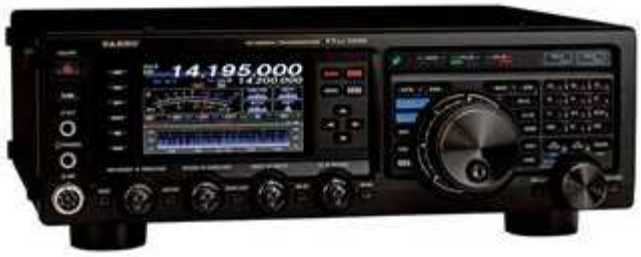
73
Dean KB1PGH

CAARA May Public Service Update : Your full service club at work!

The members of the CAARA Emergency Communication Group continued to provide public safety and logisitcal communications during the month of May for the Twin Lights Half Marathon on Sunday, May 5 and the Motif # 1 5K run on Saturday, May 18. The Twin Lights Half Marathon consisted of 1000 runners and the Motif #1 5k had about 400 participants. Radio support nets were established for both races with one ham shadowing the event safety officer, one ham in the "Trail Car" which followed the last runner and another amateur radio operator at Addison Gilbert Hospital. Other hams were place along the race routes per the usual net procedure. There were a total of over 30 volunteer hours provided to the public by CAARA members for both of the races. The following members operated during the events: Curtis Wright AA3JE, Stan Stone W4HIX, Hank McCarl W4RIG, Dean Burgess KB1PGH, Nate Dewolf KB1VST, Sue Downey N1XQW, and Roger Smith KB1YTJ. *by Dean- KB1PGH*







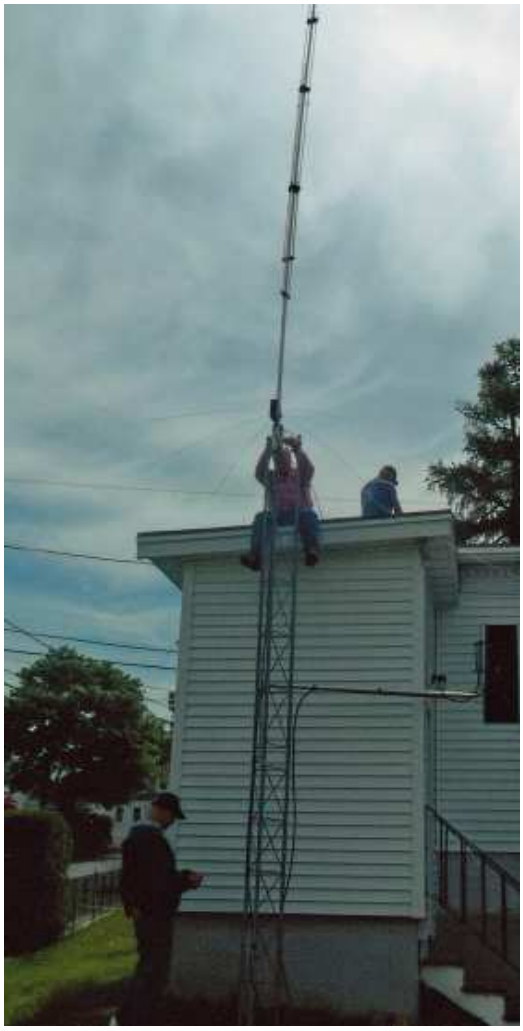
FT DX 1200 Series
HF/50 MHz 100 Watts

The FT DX 1200 provides up to 100 Watts on SSB, CW, and FM (25 Watts AM carrier) and a rugged state of the art highly balanced receiver circuit configuration for top performance on today's crowded bands. Similar to the high end "YAESU FT DX" series, it uses 32-bit high speed floating point DSP. A built-in 4.3-in TFT wide full color High Resolution Display with loads of information provides superior operability and visibility for the FT DX 1200 user. A High Speed Spectrum Scope located just below the LCD display gives the operator all the information needed to place them at the right place on the band with the right receiver set-up to have a satisfying experience with a casual QSO chat or while digging out a rare desired weak signal contact.

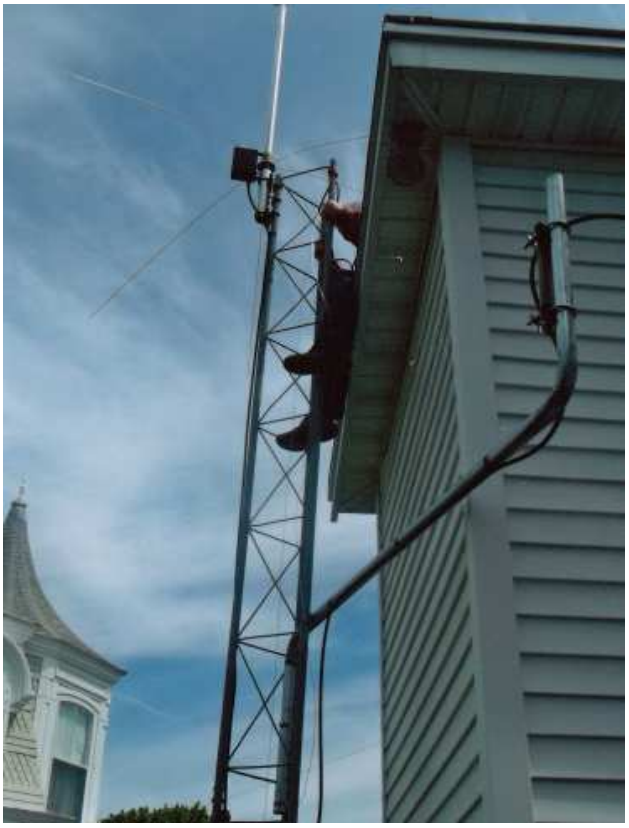
NEW PRODUCTS

The Kenwood TH-D72A Data Communicator is equipped with a built-in TNC (1200/ 9600) and provides APRS® (Automatic Packet/Position Reporting System) and includes an integrated GPS. The TH-D72A can be employed, as part of Kenwood's Skycommand System II+, when used with the TS-2000 series Transceivers. The TH-D72A also offers EchoLink® memory compatibility and a mini-USB connector for enhanced computer connectivity

(L-R) Ruth-WW1N, Rick-WZ1B, Joe-WB1CHJ, Tom-K0TB , Pete, KL1LJO, and Lucy Gatchell



CAARA hams erect tower and install antenna for Joe-WB1CHJ in Gloucester.



The History of the Gloucester Repeater
By: Robert W Spanks, Jr. WA1UCG

In March of 1978 The Cape Ann Amateur Radio Association was in flex. During the Blizzard of 1978 we lost our President Norman (Dave) Curley. Dave was a member of the Can Do crew which was lost at sea. Dave had taken office in September from Tom Bernie K0TB (WB0BYJ).

After the funeral in early March, CAARA Directors held a special meeting to determine how and who would replace Dave. Warren Grimes WX1R (WA1YLX) stepped up to the plate. Warren agreed to be the president and was elected by the board and approved by the membership.

During that time in Amateur radio 2 meter use was expanding and becoming more popular. Rigs available were mostly crystal controlled. One of the early non crystal controlled rigs was manufactured by Heathkit HW2036 that rig allowed you to dial in the frequency and you could set the transmitter either +600 or -600. Repeaters in the area were Salem 146.88, Topsfield 147.285, Derry New Hampshire 146.85, Boston 145.23, Waltham 146.64 to name a few of the poplar repeaters that were in use from the cape.

At the April 1978 meeting of CAARA President Warren Grimes under new business spoke at length to the membership about the need and direction he wanted the club to go. Warren **STRONGLY** felt that the way of the future and expansion of membership in CAARA was to have our own repeater on Cape Ann. Warren went on to explain that he recognized the club was small and at that time we did not have much money in the treasury but even if we needed to give up the building and meet in a church basement or at the Civil Defense Headquarters at the DPW Yard on Poplar Street the money we were spending on the building could be put towards purchasing a New Repeater, duplexers and Phelps Dodge antennas which would give us a great start.

Members left the meeting that night with a lot to think and talk about. Many of the members talked on their own about different ideas of how the club should proceed when they got together for coffee or breakfast.

Three members got together and talked about how they could put a repeater on the air what would be needed and how to do it for very little money. Those members were Ralph Karcher W1RK, Fran Vidal W1US (WA1HCN) and Tom Bernie K0TB (WB0BYJ). Larry Sargent W1ZBE was also involved and offered to help in any way he could.

Ralph Karcher got a hold of President Warren Grimes and gave him the news that we would have a repeater on Cape Ann and we did not have to vacate the building that we would have both because they all felt that having our own building was also important to the growth of CAARA.

Warren proceeded to call all the directors and give them the news that Ralph had relayed and that the group would let the club know what would be needed and the cost at the next CAARA meeting. All the directors were pleased with the outcome and waited to hear from the group.

At the May meeting of CAARA the details were laid out for the members. Ralph Karcher stated that in order to place a repeater on the air we would use split sites. A receiver to be located at the Clubhouse and a transmitter would be located at Fran Vidal’s house at 26 Harrison Avenue so the transmitter could be controlled by Fran should anything fail or the transmitter locked on and transmitted a continuous signal.

CAARA would need to provide a DEDICATED LINE from the telephone company from the clubhouse to Fran's home. Ralph stated that he had a Motorola transmitter and receiver
at home and he had begun to modify them for the 2 meter band. Ralph also stated that he had begun a search for a frequency so we could proceed forward. Ralph also stated that Tom Bernie was working on an interface device and relay so the signal that was received at the receiver could be converted and transmitted over the dedicated line to the transmitter and yes we have a repeater. Ralph also mentioned that he would be devising a timer and ID circuit to ID the repeater every 10 minutes as was required by FCC Regulations.

So work began ……. After a few weeks Ralph notified Warren that he found a frequency the frequency was 147.345 / 147.945. CAARA ordered Crystals per the specifications stated by Ralph and the final preparations were in progress.

The transmitter was installed at Fran's location. The club had a 2 meter Cushcraft antenna donated and the receiver and antenna were installed at the clubhouse. I believe it was in the month of June. Preliminary checks were done and all worked as designed.

Fran Vidal did the necessary paper work as control operator to notify the FCC that he was placing a repeater on the air, its location, a map showing effective radiated power, and how the system worked. CAARA had its own repeater WA1HCN/R.

Well everything was going well. CAARA stations were testing signals left and right …. Great signals up the line in Peabody, Beverly, Danvers, Newburyport, Seabrook, NH. We thought Wow this is great Gloucester is on the map. Then one Saturday morning we heard a signal …. and some stations talking. They sounded just like they were in downtown Gloucester and we heard another ID and listened …. That does not sound like WA1HCN/R. Well as luck would have it there had been another repeater on that frequency located in Webster, Massachusetts. The Webster Repeater had not been on the air for a while. The repeater owner put the station back on the air with a new repeater setup as there was interest for 2 meter operation in that area again and now we had two (2) repeaters on the same frequency which could key up each other.

The CAARA Club via Ralph Karcher W1RK and Warren Grimes WX1R (WA1YLX) contacted the owner and tried to work out a way that we could both stay on the frequency. CAARA tried different antenna heights, different phase antenna patterns but nothing worked. The Webster Repeater was located on a high mountain (I believe it was 500 above sea level) and located on a tower that was 200 feet tall. So you can see how line of site worked well for them.

After figuring that this frequency would not work out for both repeaters, Ralph Karcher again searched the 2 meter frequencies for an alternate frequency. This time Ralph searched and listened for 3 weeks. Finally he felt comfortable with his alternate frequency and told Warren Grimes. The decision was made to switch to the frequency 145.130 / 144.530. So CAARA once again ordered new crystals, Ralph Karcher went to Fran Vidal's location and installed the crystals retuned the transmitter and yes we the CAARA Repeater was back in business. We now had a new frequency, no interference and signals were great just as before.
So Fran Vidal notified the FCC about the change and submitted all the necessary paper work.

The repeater ran great, CAARA started to increase its membership and interest in the NEW CLUB located at the END of THE WORLD in Gloucester was the talk all up and down the NORTH SHORE.

Well the only down side of locating the repeater at Fran Vidal's location was when he tried to operate his HF Station it would interfere with the repeater. So Fran Vidal suggested that the club try to find another location for the transmitter that would be better than his location.

Fran Vidal had some contacts at Varian and he spoke to them about the possibility of locating the transmitter at their site. Fran wrote a letter to the President and CEO of Varian and explained what he was looking for and the benefits that CAARA provided to the community Varian agreed to allow us to place the transmitter and antenna on their property.

CAARA then began the process of relocating the dedicated line from Fran Vidal's location to Varian a small group of CAARA members coordinated with Varian's Maintainace Department Manager as to a location for the repeater within Varian's building and where we could mount the antenna and how to run the coax to the transmitter. This all took place quickly and the transmitter was relocated.

Now signal tests were again being done by the users and what we found out was Varian was a higher location than Fran's and the transmit signals were going father out. Of course the down side was the "EARS" better known as the receiver was not as sensitive to match the transmit power. So in an effort to better balance the two we decreased the transmit power and it helped a little bit.

In 1978 at the Annual Meeting Fran asked the club to begin a search for another Repeater Trustee? CARRA members at the Annual meeting thanked Fran Vidal for helping the club to get
A repeater on the air. At that meeting Milt Ratynski K1MSS agreed to take over the trustee position as soon as the paperwork was complete with the FCC and Ralph Karcher could get the new IC chip with Milt's call sign. Also at that meeting President Warren Grimes was stepping down and CAARA had just elected John Graves WA1JG (WB1EHL) to the Presidency. Warren thanked everyone who was involved with making the repeater a reality and he said he felt very strong that CAARA would continue to **GROW** now that people knew GLOUCESTER had a club and repeater.

So beginning in October 1978 we had a new trustee, a new Repeater Call sign K1MSS/R and a new President.

Things continued to go well with the repeater and the club. CAARA started a 2 meter net in order to get more use out of the repeater. In the beginning not on a regular bases or night it mostly was someone getting on the repeater and calling a net to order and see who would check in. The best part was to see who would check in the farthest distance away.

The repeater had a lot of use by commuters going and coming from work. Just idle chit chat and CAARA was on the rise. Members were joining, members were excited to come to the clubhouse for Sunday coffee and doughnuts and we were beginning to get involved with Public service events with the city.

The first event was in September 1978 the around the Cape Road Race on Labor Day. Fran Vidal who was the Dispatcher at the Gloucester Police Department asked the club to assist the Police department with communications for the race. It was a big success and the race committee was very impressed with the communications we provided.

The repeater continued to run excellent …… but in August of 1979 MURPHY'S LAW kicked in. Something happened to the transmitter and the output was so weak that you could not get a signal from Varian to the

bottom of the rotary. If you went around the rotary and started up 128 or if you went around the rotary and started up Washington Street either in the direction of AGH or towards the train station you could not hear the repeater.

Ralph Karcher was contacted and agreed to look at the transmitter to see what had happen. Ed Araujo AK1U went and got the repeater transmitter from Varian and delivered it to Ralph at his home. CAARA was worried because we had committed to the Road race committee to provide communications for the race which was 3 weeks away. Ralph notified John Graves and the directors that they would not have to worry about the race as the problem was bad but he could fix it and have it ready in about a week to 10 days. The problem was Old equipment, Old parts eventually break down. That's what happen. Well good old Ralph went to work on it and rebuilt the COMPLETE TRANSMITTER with parts he had in his shack. In just 3 days Ralph notified Ed Araujo that it was ready to be put back in service. Ed picked up the transmitter reinstalled it at Varian made a few adjustments that Ralph suggested and just like new the repeater was stronger and better than ever.

In October 1980, Bob Spanks WA1UCG took over the presidency from John Graves WA1JG (WA1EHL). Bob and his directors had many ideas about to expand the club and what type of activities we should have. Building on Warren Grimes idea of a strong repeater Sunday night 2 meter nets were started. These took place at 7:00 p.m. weekly. The repeater held up great and we had anywhere from 5 to 10 check in's.

In April of 1981, Bob Spanks got word from Jack Harrigan W1PSG that the Topsfield repeater had purchased a new Kendacom repeater and a new set of duplexers. Bob (Woody) Wood W1VYI had the old repeater up for sale along with the home made duplexers. Bob Spanks called Woody and asked if he could come up and look at the duplexers and old repeater. Woody said sure come on up. So Bob jumped in his car and made the trip. Woody showed the repeater and duplexers to Bob and Bob Spanks asked him how much he wanted for the unit. Woody told Bob that if CAARA wanted it he would let it go for $100.00. Well in those days CAARA did not have a lot of cash that they could use so Bob Spanks asked Woody if he would hold the unit for a month till he could talk to some people and get the money. Woody told Bob I can do better than that just load it in your car and take it now. Well the unit was too big for the car so Bob Spanks made a call to Paul Bernard KA1BTM and asked when they could go and pick up the new repeater with Paul's truck. Paul said Sunday Morning so Sunday Bob and Paul jumped into the truck went to Topsfield and brought home the new CAARA Repeater. Good thing it was a Sunday morning as we had help to get the unit into the clubhouse and up those stairs to the second floor.

Ralph Karcher was contacted and told about the purchase and Ralph said he was familiar with the unit as he knew Woody and the receiver and transmitter was the same model as we were using. Motorola. Ralph fired up the repeater and did some tests took some measurements and said that we would need to do a little work but we would need to order a new set of crystals so he gave Bob Spanks the specifications that were needed and Bob ordered the new crystals.
Ralph also said that we would need a variable devise to control the voltage and current to the power supply and as always Ralph had one in his shack at home. We also purchased from Radio Shack a variable devise to control the Squelch circuit.

Well in a couple of weeks Ralph had the Repeater all tuned up and ready to go. A few members made donations to CAARA and with those donations CAARA paid Woody in full, purchased two (2) new Cushcraft 2 meter antennas and 200 feet of new low loss coax and PL-259 connectors. Well CAARA was flying high we were about to retire the first repeater that Ralph Karcher and Tom Bernie had built and we were about to enter the **"BIG LEAGUES",** receiver, transmitter, controller and HOME MADE DUPLEXERS. We thought we had the

world and Warren Grimes was saying with a big smile “TOLD YOU SO”. I must admit Warren was right even though I wanted to toss him out the second window the night he suggested that we put a repeater on the air even if it meant giving up the building.

So the new repeater was installed at Varian we attached one of the antennas to the handrail on the roof which was part of the air cooling units on a 10 foot mast and we attached the second antenna to a 20 foot mast and mounted that antenna to the railing also with some guy wires to support the height.

Well CAARA was very surprised to find out that the receiver which was now located at Varian had improved greatly. CAARA figured that we would see some improvement but never imagined it would be as good as it was. After weeks of testing and recording contacts we were getting signals and stations checking in from all along the east coast from Massachusetts to Maine also to the south as far as Rhode Island and west as far as Concord, Massachusetts and the signals were clear and 85 to 100 % full quieting.

Things were working well with the new repeater, everyone was pleased and enjoying the coverage, but CAARA was about to find out what THERMAL HEAT was all about. Because the repeater was located in an enclosed cabinet and was located in a Mechanical Room at Varian the heat did a job with the squelch control circuitry, surprisingly the frequency did not drift as the crystals were in a crystal oven so the temperature was constant but the squelch that was another story. Ralph Archer always said the way to set the squelch is open it all the way then close it till the static noise disappeared then back it off till the noise is on the edge. Well that was what we did and that’s when the fun began. We would have the repeater open and noise would appear, Bob Spanks or Jon Cunningham would run up to Varian and adjust it, then it would be closed to much and the stations on the extended limits of coverage could not access the repeater so we would open the squelch a bit, then the stations would be able to access the repeater again. Then the noise would appear again so one of us would head up to Varian and close it a bit. CAARA’s routine was open …. close ….open …. close ….. but somehow we made it work. It was funny as I think about it today and I laugh. Not sure how Jon feels about that time.

At the annual meeting in September of 1981 Bob Spanks WA1UCG was elected President. Tom Andrew KA1GTA approached Bob in October 1981about what the cost of a new repeater and duplexers would be and what manufacture would be the best to purchase. Bob wondered why Tom was asking this and Tom told Bob he wanted to make a donation to CAARA of a new repeater and duplexers and Tom wanted Bob to research and get back to him. Well Bob felt a little uncomfortable spending Tom’s money and he expressed that to Tom. Tom’s reply was well let’s do it another way would you research which manufactures and obtain quotes from them for what you feel would be a reliable repeater for CAARA to have and let me know the costs and I will let you know what to purchase. So it was agreed that is how CAARA would proceed.

In 1981 there were basically two manufacturers which supplied repeaters and duplexers to the amateur community, first was Spectrum Analyzer in Kansas City, MI and second were Kendercom in Groveland, MA.

Spectrum had been manufacturing repeaters for a longer period of time and Kendercom was new to the market but Kendercom was a little more advanced in their design as their machine was utilizing the microchip technology which was just coming on the market at that time.

Bob Spanks WA1UCG contacted them both and spoke with their engineering group about cost, accessories and shipping to Massachusetts. Bob made a visit to the Salem repeater group to see the Spectrum Analyzer and

speak to their repeater technician about the pro and cons of that unit then Bob visited with the Topsfield Group to see the Kendercom Unit.

After the visits and receiving the quotes from the manufactures Bob gave a copy of the quotes to Tom. Tom asked Bob which repeater he thought CAARA should purchase and why. Bob gave Tom his thoughts and Tom asked a few questions and Bob replied to them. Tom said let him have a day or two to look at everything and he would let CAARA know his decision.

Tom got back to Bob and told him to place the order with KENDERCOM in Groveland, MA and let him know the details of purchase and he would assure the money would be available.

As soon as Bob got the word he called his Board of Directors and told them of Tom's final decision. The board members were very thankful and they personally called Tom to thank him on behalf of the club.

Bob talked to Jack Harrigan W1PSG who knew the owners in Groveland and took care of all the details in placing the order, Jack told Bob we would need 50% deposit to place the order and it would take 6 weeks to manufacture, test and deliver. Bob spoke with Tom gave him the details and Tom told Bob he would get a certified bank check and deliver it to Groveland.

Well the directors felt that since we were getting a new repeater and duplexers that we should also get two (2) new Cushcraft 2 meter antennas to replace the existing ones. The repeater trustee Milt Ratynski K1MSS was very excited that we would have a modern repeater and duplexers with Phone patch capabilities as well as the ability to use touch tones to turn the repeater on and off as needed. That was always a BIG problem CAARA faced with the repeaters if something went wrong and the transmitter was stuck in the Transmit mode it might take a while to turn it off depending upon where people were and who was available.

Word spread quickly that CAARA was getting a new machine. Stations that would check into the repeater would ask when the big day was. It made all the club members very proud and excited that our little club was getting all this interest not to mention that Warren Grimes WX1R (WA1YLX) was beaming from ear to ear as the whole concept was his thought a few years earlier.

Well the six weeks went by rather quickly, and during that time CAARA installed the new Cushcraft antennas that CAARA had purchased at Varian we checked the coax and connectors and they were in great shape so we left them along.

Jack W1PSG got the call from the manufacture that the repeater, duplexers and linear amplifier was ready for pick up. Jack contacted Ralph Karcher W1RK and the two of them coordinated a time to meet and install the new unit at Varian. It did not take them long to install the repeater as the repeater came in its own enclosure.

The dedicated line which we had used for the original repeater was transferred to a phone line and that was connected to the repeater for phone patch capabilities as well as digital control of the repeater. One of the features of the repeater was that you could control the unit by external tones via the receiver, but if there was a problem doing that you could dial up the repeater using the phone line and with a touch tone phone shut the machine down. That feature was extremely important as "JAMMERS" appeared frequently on many repeaters. The jammers would listen and record tones in order to gain access to your repeater. Some were successful but most were not. CAARA was very lucky our codes were never got broken.

The repeater operated great we never had a problem with the machine for many many years. The coverage of the machine was unbelievable. Some CAARA members worked in Boston and Cambridge and they could hit the repeater with 90 to 100% full quieting. Other members worked in the 128 Technology Belt, Waltham, Lexington, Concord area and they could access the machine with no problem. It goes without saying up the coast of Massachusetts, New Hampshire and Maine the repeater signal was fantastic. Varian had proved to be a GREAT location for CAARA's repeater.

During 1986 the ARRL was proposing ideas to generate new interest in Amateur radio. The FCC was concerned that Amateur Radio was not expanding but the Amateur ranks were shrinking. Also, during that time there was a lot of pressure on the FCC from other users outside the Amateur spectrum to obtain additional band width.

Earlier in the year the FCC had taken away from amateurs a part of the 220 MHz band and gave it to UNITED PARCEL SERVICE for their use in expanding communications within their industry. ARRL was very concerned about the potential loss of frequency spectrum in the Amateur Band both now and in the future and fought that rule making very vigorously but in the end lost the battle.

ARRL then proposed to the FCC via a Proposal of Rulemaking to give Novice licenses voice privileges on the 220 MHz band as well as 10 meters. After months of hearings and meetings in 1987 the FCC granted the ARRL's proposal and the expanded privileges were set to begin on March 30, 1987.

The board of directors at CAARA reviewed this proposal at their directors meeting and the unanimous feeling was that CAARA should invest in a 220 repeater and duplexers in order to support all present Novice members of the club as well as future Novices because CAARA was providing yearly Novice Classes to the public.

Well as always the topic of how CAARA would pay for the repeater setup was talked about in detail. It was determined that in order to purchase a complete setup the cost would be about $2000.00.

At the directors meeting that evening $400.00 was pledged by four directors. Director Ed Cobb WB1CGX offered the club a no interest loan and told CAARA that the payback time frame could be as funds were available. Upon a unanimous vote by the board CAARA accepted his gracious offer to the club and assured Ed that the club would try to engage the membership for donations in order to pay him off as soon as possible.

Next the directors talked about where to place the new repeater and antennas. The board agreed that we would speak to Varian and explain how much space would be needed and see if they would allow us to place the second unit on site. Varian agreed to allow CAARA to place the new repeater and antennas on site. Next CAARA wrote to the frequency coordination committee which was being administered by the ARRL on behalf of the FCC. CAARA asked for a frequency and the frequency of 224.900 was assigned to us. The directors via Jack Harrigan W1PSG placed an order with Kendercom in Groveland, MA. for a new repeater and duplexers.

Again six weeks went by and the order was ready for pickup but in the meantime the club had purchased two new ….. You guessed it CUSHCRAFT 220 antennas and coax and CAARA installed them at Varian and ran the coax down to the location where we were going to place the new unit.

Jack Harrigan W1PSG made the arrangements to pick up the new unit. Jack also arranged with Ralph Karcher W1RK, Larry Wright W1EGJ and Mac McElroy W1OMN to install the new repeater at Varian.

The new unit was installed and tested. The coverage was just as great as the 2 meter repeater was. We were having stations checking in and testing the new repeater from all over. CAARA as a club was advancing to again support novices with their new privileges as well as supporting all the other class licensing operators.

CAARA had a lot to offer new novices rather they were already licensed or heard about CAARA on the radio or who took our Novice Class then joined the club they were able to see the benefits that CAARA provided them as a club.

- A place to operate and get on the air after obtaining their license
- Get help with operating a station or help with setting up a station at their own QTH
- Having an experienced amateur to talk to and answer some of their questions
- Having an experienced amateur to talk to and obtain knowledge on what type or brand equipment to buy was a big help

During this time CAARA's membership grew to a strong 160 members. It is the most members that any CAARA member of that time can recall the club having.

The two repeaters ran flawless no problems at all coverage was good and many people were using the 2 meter and 220 repeaters. Carra even had two nets on Sunday night. 7:00 pm was the two meter net and 8:00 pm was the 220 net. A lot of people who were on the two meter net transferred to the 220 net and just continued to enjoy the atmosphere.

In the early part of 1989 there was a proposal before the city via the Industrial Economic Development Committee. This committee had the full control of the publicly developed Industrial parks.

The telecommunications company Cellar One had made a proposal to the committee to purchase a small piece of land which was available with the intent of placing a Cellular tower on the lot. Their proposal was for a tower, in ground fuel tank, emergency generator and Cellular Equipment. Over the next several months the committee held public meetings and approved the plans of Cellular One. The next step was for the city boards to review and approve the plans before sending them to the City Council for their final review and approval.

Around September or October 1989 the city council approved the plans and issued the permit for the construction of the tower. At that time one of the members of the club had their wife on the committee. She mentioned to the Cellular One representatives that there was a public service group in the city that provided emergency communications to the city when needed and that the organization was looking to improve coverage to better help the city. The Cellular rep told her to have the organization contact them and see what could be worked out.

Milt Ratynski K1MSS who was the repeater trustee as well as a board of director for CAARA contacted cellular One as the representative and told them about our organization and what services CAARA provided the city. After several meetings with Milt, Cellular One agreed that CAARA could place their 2 meter repeater unit at the site along with two Phelps Dodge antennas and hardline.

It was agreed that Caara would provide the antennas to Cellular One's contractor when requested and the contractor would install the antennas and hard line on the tower for CAARA at no charge. Cellular One also

agreed that they would bill Caara the Wholesale cost for the Hardline and CAARA was to let them know what type of connectors we required at the antenna and the repeater and they would provide them and bill us the same way.

Milt presented the terms of the agreement to the directors at their next meeting and surprisingly the board was split on accepting or even if we should consider the offer. Some board members were concerned about access to the site as well as how would we maintain the antennas that would be placed on the tower as it was stated in the agreement that **"NO ONE EXCEPT FOR A CERTIFIED AND PROPERLY LICENSED STEEPLEJACK CLIMBER COULD ACCESS OR CLIMB THE TOWER".**

Some board members were only concerned about cost and did not want to focus on the pluses of a better signal and overall improvement of the 2 meter repeater.

The board appointed a small 3 person committee. Their job was to report back to the board and members CAARA what the cost and benefits of this project would be. The committee met several times and came up with the following. They estimated that the total cost to the club would be $700.00 dollars. The breakdown of this cost was for two (2) Phelps Dodge antennas, hardline, connectors and to relocate the telephone line from Varian to the tower site.

The benefits of the project they reported were a first class 2 meter installation with top of the line antennas, and coax (hardline), coverage would be greatly increased especially to the maritime traffic in the summertime, being on an emergency generator gave us the same benefit as we had at Varian. They also mentioned that having the 220 remain at Varian and the 2 meter repeater relocated to the cell site gave CARRA the benefit of two top notch repeaters in Gloucester which could be used by other emergency communications groups off Cape Ann.

The down side was that we would still have to deal with signal noise that is generated within the industrial park and could possibly interfere with the repeater operation as well as losing the capably of easy maintaince to the antennas.

A meeting was held and the facts were presented. The board was hesitant to act because of cost. At the members meeting all the concerns were reviewed and talked about. The members asked the board to make a final recommendation at the next meeting.

Well in the meantime there were two CAARA members who felt that this was the opportunity of a lifetime and if missed would never be able to get a deal like this again. So these two members talked to members in the club privately about the opportunity and why CAARA should take advantage of this offer now. These two members were able to raise $1000.00 in a two week period.

Well at the next directors meeting one of the members presented this to the directors and gave them the names of the donators and when to expect the funds should the board accept it.

Well it was not a very pleasant directors meeting that night. The directors who were against the project were very angry and a few even suggested that they might resign because they felt that these two members had gone against the boards wishes. It was quickly pointed out to those board members that this could not be true as the directors at the members meeting only communicated their concerns to the members and the members asked the directors to return to the next meeting with a definitive yes or no. It was also pointed to those board members

that the minutes of the directors meeting which had been read earlier did not state that the board recommends to the CAARA membership not enter into this agreement. Well those directors were still very angry but now could not recommend against the project due to funding.

There was more talk that evening about the pro and cons but when the vote was taken all but one director voted to proceed.

The next membership meeting it was taken up and the members approved moving forward with the relocation. The good part was at that members meeting a few more members made pledges to the fund. It was an exciting evening to be able to move forward with the project.

Well the day came and the ground was broken Cellular One was about to become a reality. The project went very fast track. CAARA has the building of the tower on tape as our own Bob Quinn WV1A filmed the complete erection of the tower from start to finish.

One day I received a call from then president Dave Linsky KA1LKX that the company constructing the tower wanted the antennas. Ralph Karcher W1RK came and picked up the antennas at my house where they were being stored and wanted to check them out before giving them to the construction company. Ralph confirmed that all was well with the antennas and they were ready to be installed.

CAARA antennas were the first two antennas from the top of the tower and CAARA was very excited when we found out the location. CAARA expected the coverage was going to be GREAT.

Another gift that CAARA was given was Cellular One had told us that they would provide the hardline and bill the club for the cost only of the hardline. Well the project went smoothly that Cellular One installed and tested the hardline and donated that to CAARA. That was about a $250.00 dollar saving on the project that CAARA did not have to spend.

Now the day was here to put the repeater and Amplifier on line. Ralph Karcher W1RK, Larry Wright W1EGJ and Mac McElroy W1OMN went to Varian and loaded the repeater into Larry’s truck and made the long drive to the new repeater location.

The new repeater was installed with no problems. Preliminary tests were done by Ralph and the SWR was 1.3 to 1 and the power was a full 25 watts. So the signal testing began for the next several weeks everyone was on the **NEW CAARA REPEATER** and boy was the coverage out of this world. We were hitting locations up the coast from Massachusetts to Maine and down as far as Rhode Island. Out to the west we could get stations from as far away as Framingham.

Of course the percentage of quietness varied but if I remember correctly the quieting was about 85 to 100 percent. Those stations all could communicate well with the repeater and we could hear and communicate with them with no problem. It was proving to be the best decision that the directors could have made on behalf of CAARA.

CAARA was about to have its first little setback. We were notified by Cellular One that the Fire Chief Barry McKay had complained that we had the prime receiving location on the tower and that his antenna for the Fire

Department was located low on the tower. He requested (but I believe he demanded) that the antennas be switched so Cellular One told CAARA that they were going to move the Transmit and receiving antenna but would keep the receive antenna higher and the transmit antenna lower.

Well CAARA was not surprised about this as Barry for some reason was never a huge supporter of CAARA but there was not much we could do. So the switch took place but we still had great receive and transmit coverage.

This coverage still exists today as we recently retired the original repeater that Tom Andrew KA1GTA donated to CAARA and replaced it with the new Kenwood repeater.

In closing, one of the many blessings that CAARA has had over the years was the deep generosity and support of its members. Rather it was investing in the clubhouse or investing in the repeater you could always count on the membership to step up and do the right thing to expand on our hobby and to ensure that CAARA will always be a strong club and ready to provide emergency communications whenever needed.

I am sure that Warren Grimes is looking down at CAARA today and saying “so you wanted to throw me out the window Bob” but I was right with a great big smile. Yes Warren was right he had the forsight to see that a strong club and good repeater was the future.

Warren you were right ….. God Bless.

73’s

Bob Spanks, Jr
WA1UCG

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http://www.drsparksite.com/teslathon2013.htm