



CAARA Newsletter



AN ARRL AFFILIATED CLUB

JULY ISSUE- 2009

WINTER FIELD DAY RESULTS



President's Corner

by Curtis AA3JE

Well we just finished Field Day, and boy was it a good one. We were able to put up three tents (VHF, CW and shelter) and two large shelters, one operational (GOTA, PHONE, DIGITAL) and one refreshments. The food was excellent, and the coffee service just great. We got up and running in two hours, and had everything back in the club two hours after shutdown. The scores are being calculated, but we did as well as last year or better. Very special thanks to Bob Quinn, who not only ran a testing session, but took a half hour video of the site.

I cannot express my delight at how the club is doing. During the recent lean years it was hard to get people to help, and we had the same group showing up for every event. It sure is not that way now. We had 20+ hands at field day, and they were dynamos. Jon Cunningham's pocket rocket launcher put the long wires far into the trees, and we had enough hands that set up and take down went very well.

We are heading into the summer recess, and with that comes the dreaded ELECTIONS at the annual meeting. The clerk will be sending a missive with this year's vacancies, so think about volunteering for service. It's going to be a good year coming up, and we'd like to have some new Board members to run it.

73's

Curtis Wirght, AA3JE



Greetings All-

I know it's been a long time in coming (and it's still not here) but there are some early returns from this year's Winter Field Day scorings. While these are raw score and may change the spread is wide enough that the placements look secure.

First of all, I want to thank everyone who participated in every aspect of this event and supported CAARA in our combined efforts. Winter Field Day was created to be an "ice-breaker" in the midst of the Winter Doldrums of life where the days are short, the nights are long, and the temps (at least around here) are low. The idea was for ham to break free of their Winter shells, heat up their hamshacks, and do what they do best— get on the air and make contacts. And that we did!

Second of all, I'd like to point you to: <http://www.spar-hams.org/contests/winterfd/index.php> where you can follow the link to the "2009 - Logs Received" to see all raw scores as posted to date. You will note that CAARA, with 4,018 claimed points, came in at #5 from all entries posting. I'd say we put up a darn good show too! Nothing to be ashamed of, especially considering all the fun we had. The top raw score was 5,924 by W3HZW of the Kent County ARC in Dover, Delaware. The scores of 5,071 by W0ALX, 4,653 by K8UB, and 4,432 by KB3BHL also landed ahead of us. No problem though, we know who they are and we'll get em next year!

Again my thanks to everyone, it was a helluva good time. See you for Field Day, Thachers Island, and everything else we muster up for.

Ciao for now & 73,

Briggs Longbothum, ab2nj
Winter Field Day Chrmn.

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-Editor
K1TP

Board of Directors- 2008-9

President: Curtis Wright AA3JE
Vice Pres: Briggs Longbothum AB2NJ
Treasurer: Hank McCarl W4RIG
Clerk: Dean Burgess KB1PGH

Directors:

Jon Cunningham K1TP
William Poulin WZ1L
Charles Downey N1OCT
Thomas Andrew KA1GTA
Richard Copithorne KR1G
David Delakas KB9YOZ
James Mondello W1DDX

Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Cingular tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations. CAARA also operates the W1GLO repeater on 224.900. The W1RK 443.700 repeater with antennas located in Magnolia is owned and operated by club member Ralph Karcher and it too is available for club use.

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.

CAARA and NSRA provide Public Service communication support for tour de Cure Bicycle Fund Raiser

On Sunday May 31 st the Cape Ann Amateur Radio Association and the North Shore Radio Association provided logistics communications support for the Annual ADA Tour de Cure Bicycle ride fundraiser for Diabates Research. There were 20 amateur radio operators who provided communications using the CAARA repeater frequency of 145.130 MHZ with Eric Horwitz- KA1NCF and Jim Palmer- KB1KQW as net control at the start and finish lines at Gloucester High School. There were amateur radio operators manning each of the six rest areas along the route that stretched from Cape Ann all the way into Newbury and there were six other hams in roving support vehicles helping riders with mechanical problems as well as shuttling supplies.



DTV Reception Maps

Use this program to check for the DTV signals that are available at your location. <http://www.fcc.gov/mb/engineering/maps/>

BUILDING THE 10-20 METER HEXBEAM by Jon-K1TP

You may have noticed the HexBeam being sold by Mike Traffie in his monthly ad in QST or perhaps at his exhibit at the Boxboro hamfest. I owned one of the first multiband models he built in the 1990's and since have sold it. One of my biggest mistakes. I have owned several beams including the Cushcraft A3 and A4 and had many problems over the years with trap failure and high swr in the winter months and running 1500 watts dxing doesn't help.

The hexbeam is a 2 element wire beam that operates on all bands between 10-20 meters and as a bonus loads up on 6 meters. It handles 1500 watts and with no trap problems or swr variations in extreme weather. It also only weighs about 22 pounds and can be turned with an inexpensive rotator exhibiting little wind load.

I planned on purchasing another Hexbeam but the price rocketed to over \$1000.00. It was time to think about homebrewing one. I had kept a copy of the Hexbeam instruction manual which gave all the information I needed to design and build my own model. A search on the web and I quickly found the Hexbeam users group on Yahoo and downloaded a set of plans of a new and improved "broadband design" by an English ham. This set of plans just showed up in a QST issue a few month's ago. I took the best ideas from the original commercial model and the homebrew versions and started building it in May.

I estimate it cost about \$200.00 for parts and I have spent 20 hours fabricating and assembling. The antenna works best at a 35 feet according to Eznec modeling software and the swr is under 1.5-1 on most of the band on every band!



The photo above show the 3/16 thick aluminum plate as I started drilling and cutting to the completed hex shape.



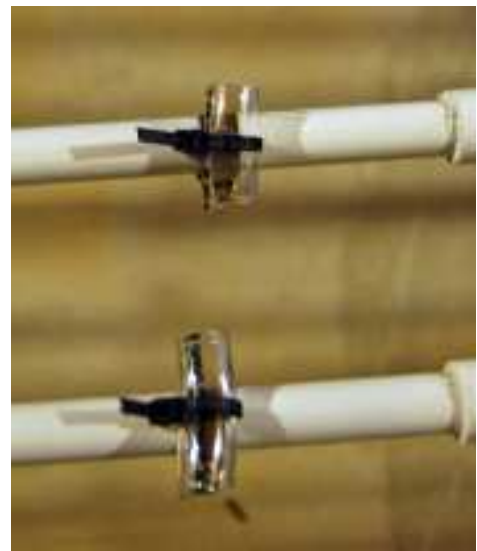
The base all drilled and assembled with clamps and pipe flange



The fiberglass poles glued together before I primed and painted them. It is important to paint fiberglass as it will breakdown in sunlight in a short period of time. PVC is not a good alternative for the spreaders but many use Fishing Poles with good results.



A set of director and reflector wires are made from Davis-RF "Flexweave" copper wire for each band.



Closeup of the painted fiberglass spreaders with a stainless clamp and connection point for the wire elements.



Closeup of the centerpost wiring before I sealed everything up with liquid tape.

I use DavisRF RG213 Buryflex which can be run underground and is impervious to weather. I wish I had used stainless bolts instead of the brass but that is what I had in stock.



The base and center post assembled with the weatherproofed connections awaiting the wire elements to be connected.



My new center post design on the left, I put the wires inside the pvc pipe after thinking about the possible corrosion to the exterior connections in this climate

EMERGENCY HURRICANE DRILL AT THE CLUBHOUSE



CAARA Emcomm Group participates in MEMA Hurricane Drill

On Monday June 1st the Cape Ann Amateur Radio Association Emergency Communications Group participated in the yearly MEMA Statewide Hurricane Disaster Drill. This drill started at 7 Pm until 9 Pm and included Eastern and western Massachusetts ARES, RACES and SKYWARN. This drill simulated a fictional Hurricane Madison making landfall along the New England coast. This drill was led by Eastern MA SEC Robert Macedo KD1CY and Eric Horwitz KA1NCF. This drill's purpose was to exercise communications networks during the response phase of a severe storm scenario in the face of significant infrastructure damage to landline and cell service as well as loss of commercial power. Three Repeaters were used during this exercise, the CAARA 145.130 MHZ machine , NSRA 145.47 MHZ machine and the Beverly 147.39 MHZ machine. Those who participated in passing traffic and relaying information in the drill were:

Curtis Wright AA3JE
Chuck Downey N1OCT
Bill Canty W1OKD
Hank McCarl W4RIG
Briggs Longbothum AB2NJ
Sandy Downey KB1PBN
Sue Downey N1XQW
Jen Downey
Paul McDonough W1PLM
Jon Cunningham K1TP
Dean Burgess KB1PGH





The two pics are the Emcomm group relaying simulated damage assessment message traffic from Bill Canty-W1OKD in Manchester and passing it on to Hurricane Net Control and the bag with the two radios and scanner are Chuck Downey`s- N1OCT portable Emcomm Go-kit. Courtesy Dean-PGH

2009 CAARA HAM OF THE YEAR

The Board of Directors has tallied the votes and Dick Copithorne-KR1G has been unanimously voted the 2009 CAARA Ham of the Year. Dick has gone above and beyond the call of duty for the club in so many areas. He has set up a well equipped test area on the second floor of the clubhouse with test equipment from his personal collection as well as test gear he has picked up at the MIT flea market, Hosstraders, etc. Dick has helped keep the club equipment up and running as well as helping many hams erect towers and antennas with the help of his boom truck. Thanks from all of us in the club!



STAN-W4HIX AND DICK-WVIV VISIT THATCHER'S ISLAND TO TEST WI-FI PREPARING FOR THE SUMMER ISLAND HAM RADIO ACTIVATION

The tall, slender twin light-houses on 50-acre Thacher Island, on the Town of Rockport's seal since 1888, are an indispensable part of the local seascape. Now designated a National Historic Landmark, the island is also recognized as a significant historic site for the nation as a whole. European visitors to Thacher Island date back at least to Samuel de Champlain in 1605 and Capt. John Smith in 1614. The island was later named for Anthony Thacher, an Englishman whose vessel, the *Watch and Wait*, was wrecked in a ferocious storm near the island in 1635 on its way to Marblehead from Ipswich.



Thacher and his wife, Elizabeth, were the only survivors of the wreck in which 21 people died. Four of Thacher's children from a previous marriage died in the wreck, and his cousin, Reverend Joseph Avery, died

along with his wife and six children. The General Court awarded Anthony Thacher the island "at the head of Cape Ann" to recompense him for his losses, and he originally dubbed the island "Thacher's Woe."



The island remained in the Thacher family for 80 years. It eventually was bought back by the Massachusetts colonial government at a cost of 500 pounds for the purpose of establishing a light station.

In 1967 federal officers brought Joseph Barboza Baron, who had testified against organized crime figures, to Thacher Island for safe keeping. Baron complained of the primitive living conditions on the island. The secret of his whereabouts was soon out, so he was moved to a rented estate on Gloucester's Eastern Point. He was eventually relocated to California under the witness protection program. One Coast Guardsman later reported that "Baron was a heck of a nice guy."

The south light and the fog signal were automated in 1980, and the Coast Guard moved off the island. The first-order Fresnel lens was removed from the south tower; it's now on display at the Coast Guard Academy Museum in New London, Connecticut.



In the spring of 2000 a new Coast Guard Keeper Class buoy tender was launched, the

Maria Bray, named for the heroic wife of Civil War-era keeper Alexander Bray. On its way to its homeport in Mayport, Florida, the vessel stopped for a ceremony near Thacher Island. Members of the Thacher Island Association were on board as Commander David Foley told the incredible tale of how Maria Bray kept the lights going through the winter storm in 1864. A wreath was placed in the ocean in her honor.

On January 3, 2001, Interior Secretary Bruce Babbitt designated Cape Ann Light Station on Thacher Island a National Historic Landmark, making it the ninth lighthouse station, and one of less than 2,500 sites nationwide, to receive this designation. Paul St. Germain, President of the Thacher Island Association, said "This is a great honor for Rockport and an opportunity for us to attract private and public grants for our ongoing preservation efforts for this historic site."

The Town of Rockport's Thacher Island Committee in partnership with the Thacher Island Association now maintains and operates the island, under lease agreements with the Coast Guard and the U.S. Fish and Wildlife Service, which owns a third of the northern section of the island. The Coast Guard will soon be transferring its part of the island to the Town of Rockport. The town is taking over responsibility for the maintenance of the south tower as well as the continued maintenance of the north tower. The Coast Guard continues to maintain the solar-powered light in the south tower.

JUNE MEMBER MEETING



Here is Dick Macpherson- WB1W instructing Club President Curtis Wright- AA3JE on how to use the N1MM logging program which we will use during ARRL Field Day.

On Wednesday, June 3, CAARA held it's final members meeting before the summer break. At this meeting we had two speakers covering two different topics. We had club members Stan Stone- W4HIX and Dick Macpherson- WB1W explain the ongoing project of setting up Wi-Fi service to Thatchers Island and the second half of the meeting included Stan and Dick's project of getting the three computers that were donated from NSRA up and running and ready for for us to use for logging QSO's during field day.

Stan started with a slide show of his trip with Dick out to Thatchers Island which included pictures of the lighthouse keeper's house which the Thatchers Island Association would like to have Wi-Fi service installed.

The second half of the meeting covered all the bases of the N1MM contest logging program and a hands on demonstration and practice session using the program. *Courtesy Dean-KB1PGH*

THE TALE OF EDDY CURRENT

This is the story of Eddy Current (from Ampton Court) who was arrested for the shocking crimes of the induction of Milli Volt, an 18 year old coil, and, for the theft of her joules. "I couldn't resistor" he told Judge Henry Coney (son of Ma Coney).

"You've already been charged for being a receiver. You have some dubious connections and you seem to be doing time-constantly. You are a silicon man. This second offence has diode consequences because you didn't meter in the normal way" said Judge Henry. Then he gave him electron morals "you must keep your energy level and not get excited".

He told the jury "I am positive that I've never met a more re-volting person, but don't let that ampere your judgement of therMistor Current". He said to Eddy "I'm solenoid, I re fuse to be light on you. I'll give you a sentence that Hertz to make you rectify your current way of life. Watt power I have!"

Eddy was lead without resistance through a battery of press people across a Hall effect and clamped in ions in a dry cell (with only one electrolyte) to accumulate a couple of thoughts without torquing to anyone.

His cell-mate was a chap called Mike Rophone, a positively live wire who was in for a salt and battery. Eddy cabled his girlfriend Cath Ode but he never received anode in reply.

A while before he was to be discharged he chipped the wail to create a tunnel effect and while Mike was diffracting the warders he escaped through a grid and jumped into an alpha sports car with Webber carburettors, and beta hasty retreat. He later switched to a high capacity mega cycle and raced ohm via a short circuit over Wheatstone Bridge where he was run to earth in a magnetic field. He later married Milli Volt and they had lots of small currents.

The Cape Ann Amateur Radio Association (CAARA)/ARRL Field Day was a great success this year. We set up five tents at the Babson Cooperage Museum on Rt. 127 and operated five stations from emergency power nearly continuously for 24 hours. This event demonstrated our ability to deploy a self-sufficient emergency communications station for the benefit of the residents of Cape Ann.

The operation had a cellular Internet connection, allowing the group to monitor the violent weather that passed just to the west of us (having lots of antennas in the air during thunderstorms is something that has to be carefully monitored and managed). WiFi was set up to link all of the tents together. We had many guests visit the operation, mostly people interested in amateur radio and also there to check it out for their kids.

Everyone had a great time and we are already thinking ahead for next year.

Stan Stone
W4HIX
CAARA Member

Buying on EBay by Curtis Wright- AA3JE

When my “teaching” oscilloscope finally lost lock and wandered off into the sunset, I found myself cruising all the likely sites to find a replacement. I did not find any I wanted at the MIT Flea, so I looked on EBay. WOW, what deals, What incredible deals!



So I bid and bid and bid some more, then I waited by the door for my new and splendid purchases to arrive.

The first one came. A GREAT looking little Tektronix 465 that was all mine for \$65! It was a great disappointment when it turned out to be Dead on Arrival. Not a flicker of life. It was so stone cold dead that it collected condensate from the atmosphere.

The second one came. A cool looking Tektronix 2235, a STORAGE SCOPE. It had only cost \$84. It was also dead. Really dead. 100% dead. Not a flicker.

The third one came. This was a stately looking Tektronix 7904, a real workhorse and only \$130. It actually worked.....for about 30 seconds, then the CRT failed and smoke started pouring out of the side of the casing.....It never lit up again.

The last one was a Tektronix 7845, an analog storage scope with broken latches on the plug ins making it a steal at \$65. After a few hours work I got the jammed units free and was delighted to find out that this scope was perfectly functional, if you did not mind the occasional banshee wail from the worn out vent fan.

So I have a few tips for you savvy buyers.

1. If a piece of electronic gear works it is greatly to the advantage of the seller to say so. ONLY buy items described as fully functional. Anything listed as “power tested only” is absolutely going to be DOA. Anyone who sells oscilloscopes knows how to do the self-test.
2. An EBay vendor who is in it for the long haul will provide a money back guarantee. One of my favorite vendors offers a 100% money back, no questions asked guarantee on surplus gear. Only patronize “**money back if not satisfied**” sites.
3. No one sells an item worth \$1000 for \$100. It just does not happen in real life. If it sounds too good to be true, it is. Do not look for jewels in the garbage.
4. If you really want some item, you have to be on line when the auction ends. There are lots of last minute bidders who swoop in to bid \$2 over what you bid.
5. If you buy stuff, sight unseen, you will buy some trash. Get over it.

Me? I have a hot Tektronix 500 MHZ dual channel storage scope with 8 plug ins for less than \$350. It's a fair deal. If anyone wants a dead oscilloscope, I can and will deliver.

Editors Note: From my personal experience over the years, Ebay is a great place to sell gear and get top price but when buying consider QTH.com, from hams you know, or at flea markets like Hosstrader's face to face. It seems people get caught up in the excitement of bidding and regularly overpay for ham gear on Ebay, not to mention the number of horror stories I hear on the ham bands about defective and DOA gear. Jon-K1TP

RAC Canada Day Contest 0000Z-2359Z, Jul 1
Venezuelan Ind. Day Contest 0000Z, Jul 4 to 2359Z, Jul 5
WLOTA Contest 0600Z, Jul 4 to 1200Z, Jul 5
DL-DX RTTY Contest 1100Z, Jul 4 to 1059Z, Jul 5
Original QRP Contest 1500Z, Jul 4 to 1500Z, Jul 5
MI QRP July 4th CW Sprint 2300Z, Jul 4 to 0300Z, Jul 5
DARC 10-Meter Digital Contest 1100Z-1700Z, Jul 5
RSGB 80m Club Championship, CW 1900Z-2030Z, Jul 6
ARS Spartan Sprint 0100Z-0300Z, Jul 7
NCCC Sprint Ladder 0230Z-0300Z, Jul 10
FISTS Summer Sprint 0000Z-0400Z, Jul 11
IARU HF World Championship 1200Z, Jul 11 to 1200Z, Jul 12
Feld Hell Sprint 1500Z-1800Z, Jul 11
SKCC Weekend Sprint 0000Z-2400Z, Jul 12
ARCI Summer Homebrew Sprint 2000Z-2359Z, Jul 12
RSGB 80m Club Championship, SSB 1900Z-2030Z, Jul 15
NAQCC Straight Key/Bug Sprint 0030Z-0230Z, Jul 16
NCCC Sprint Ladder 0230Z-0300Z, Jul 17
Russian Radio Team Championship 0700Z-1459Z, Jul 18
North American QSO Party, RTTY 1800Z, Jul 18 to 0600Z, Jul 19
CQ Worldwide VHF Contest 1800Z, Jul 18 to 2100Z, Jul 19
RSGB Low Power Field Day 0900Z-1200Z and 1300Z-1600Z, Jul 19
CQC Great Colorado Gold Rush 2000Z-2159Z, Jul 19
Run for the Bacon QRP Contest 0100Z-0300Z, Jul 20
SKCC Sprint 0000Z-0200Z, Jul 22
RSGB 80m Club Championship, Data 1900Z-2030Z, Jul 23
NCCC Sprint Ladder 0230Z-0300Z, Jul 24
RSGB IOTA Contest 1200Z, Jul 25 to 1200Z, Jul 26
NCCC Sprint Ladder 0230Z-0300Z, Jul 31

CONTEST CALENDAR JULY 2009

QST for details



2009 FIELD DAY FINALLY ARRIVES...



Curtis-AA3JE, Bill-WZ1L, and Bob-WV1A starting the long process of setting up on Saturday morning.



The Beverly Red Cross Truck was on scene to help us.



Dean “The Gloved One” KB1PGH setting up.



Ken, Briggs-AB2NJ, and Jim “Red Bull”- W1DDX, our Field Day leader.



It was great to see young hams at Field Day.



Dick-WV1W and Bill-W1OKD at the digital mode station.



Tom soldering the broken 80 meter dipole center connection in the new Red Cross Van with Ron- N1RJB looking on. Ron brought the Red Cross truck down for Field Day!



Dick-KR1G and Bob-WV1A setting up the cover for the generators.



An overview of the site in the top photo and the Main Tent to the left.



The K1TP tennis ball launcher was effective for installing the dipole antennas.



Sue and her family brought the grub for the hungry gang.



The pizza was delicious.

THE OPS OF CAARA FIELD DAY 2009

Dean-KB1PGH in the 6 meter
ssb position



Dick-WB1W on digital modes on 20
meters



Bill-WZ1L on 40 meter SSB.



Tom- K1NKA on the GOTA station



Rick-WZ1B operating and Stan-W4HIX logging at the high speed HF CW station.

The weather was not perfect but the turnout at Field Day was great. Special thanks to all who helped make this event one of the most popular events that the club sponsors. Thanks to Stan and Dick for setting up the wireless logging program and the internet access for all to enjoy. Thanks to Dick-KR1G for mowing the field and for all the other hats he wears. Thanks to Jim-W1DDX for chairing the event and his able committee and to Bob-WV1A for the use of his personal generator and shooting video of the event. Thanks to Sue and her family for providing the food and beverages for the hungry crew.

Most importantly, thanks to all who showed up to help setup and those who operated the stations...we look forward to next years Field Day!