



AN ARRL AFFILIATED CLUB

AUGUST ISSUE- 2011



President's Corner by Stan-W4HIX

July has flown by, maybe because it was a good time to relax after Field Day. One notable event was State Sen. Bruce Tarr's N1UIU visit on July 17th to present the Massachusetts House and Senate Joint Resolution supporting Amateur Radio. Our ARRL Section Manager Phil Temple K9HI brought along the Governor's proclamation recognizing the contributions of Amateur Radio and Rob Macedo KD1CY came up from New Bedford for the meeting. It was quite a turnout at the club.

CAARA members did a great job supporting the 13 Colonies special event this year. I know it was tough handling a four day event right after Field Day, but the organizers were very pleased at our performance. We've been asked to participate again next year.

The Field Day report was submitted to the ARRL and we scored 90 more points than last year. A report on the event is this issue of the newsletter. Personally, after recovering a bit (and getting the report in), I'm looking forward to next year.

There's plenty to do in August. We have two major events we manage (Gloucester Triathlon and Run Gloucester) plus the Essex Youth Triathlon. Of course there's the YMCA run around the Cape on Labor Day. We also have a lot of work to do on processing equipment donations to the club. And of course there's the Thacher Island expedition, plus a cookout sometime in August at the club.

CAARA is alive and thriving. Thanks to everyone for making this a fun and rewarding organization to be a part of. Hello to all CAARA members,

Well its the public service time of year and we are looking for members to help us with the communications for the Essex Youth Triathalon and the Gloucester Triathalon. Both of these events are on the same weekend. The Essex

Youth Triathalon is on Saturday Aug 6th and the Gloucester Triathalon is Sunday Aug 7th.Both of these events are in the morning. Even if you are new to ham radio don't be shy about signing up as these events are



great learning experiences of how to pass health and welfare traffic during a net envioronment. Plus you get a chance to use that radio you paid good money for while playing ham radio and serving the public at the same time. Some of you may have already signed up(You know who you are) but we still need more help. To sign up for the yourh Triathalon you can email either Curtis AA3JE at <u>cwight@rockcreekpharmaceuticals.com</u> or me at <u>dburg101@aol.com</u>. If you want to sign up for the Gloucester Triathalon please e-mail Curits or eric

73's Dean Burgess KB1PGH- CAARA Clerk

KA1NCF at ka1ncf@nsradio.org.



Stan gives us his first impression of the inexpensive Baofeng UV-3R dual band FM transceiver. They're available on eBay for less than \$50 (including shipping) from Hong Kong. Page 17 CAARA Newsletter Cape Ann Amateur Radio Association 6 Stanwood Street Gloucester, MA 01930

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

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Jon Cunningham-Editor K1TP

Board of Directors- 2010-11

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Welcome to CAARA:

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

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

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

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

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

ANTENNA MYTHS VS REALITY

Submitted by N4JTE.

Definitely gonna open up a can of worms here but after seeing so many ill-conceived antenna questions and articles on various internet sites, I wanted to revisit a few concepts that seem to be written in stone and have become internet folklore myths propagated, so to speak, on your first google search.

UPFRONT;

Antennas are extremely subjective, even the most advanced phased array or that 700 ft multiband loop you got up at 100 ft. can fool us into thinking it's the best idea since Marconi. If you are using a slinky in your attic then build a magnet wire, invisible dipole, strung out to an available tree it's gonna make your day.

It's all relative to your experience.

I do not claim to be an expert, just coming from the knowledge gained from building at least 40 wire antennas from 160 to 2 meters over 30 years in multiple locations from stateside to Bahamas, Kuwait and many qth's in-between.

INVERTED VEE VS DIPOLE:

Sure, if you have a tight space and only one decent support it will do a credible job. HOWEVER, the whole low angle, better DX thing attributed to the inverted vee is hogwash ! UNLESS you can get the center up at least a 1/2WL and maintain a 90 degree angle at the feedpoint wires and keep the ends off the ground 1/4wl, you will be better off with a flat top dipole at half the height 90% of the time. There is one website out there that claims that you are better off with the ends at 2ft off the ground, amazing bad info!

VERTICALS ARE BETTER FOR DX;

Better than what? The hardest antenna to build in the ham world is an efficient vertical. To achieve the low angle take off is no easy undertaking.

Too much is beyond our control unless you live on an out island in the Caribbean.

Near field reflection, ground loss, and current path return can be maximized by an extensive radial field be it buried or raised. BUT; the far field reflection is gonna determine your reinforced take off angle and signal out there. Problem is most of the time that is beyond our control. Vertical polarization is a worthy goal, I achieved a 20 degree take off angle with 20db of front to back with phased ground mounted shrunken quads but still can only get 5dbi of gain due to low height and ground losses.

RANDOM LENGTH, MULTIBAND, LADDERLINE FED WIRES;

Yep it is a good way to get multiband capabilities with a single antenna, definitely better than coax, BUT, ladderline is far from lossless when used in extreme multiband mismatched conditions, see Tom's, W8JI, excellent findings on this subject on his website.

Do not assume you are getting your signal, ERP, effectively on all the bands your tuner might be happy with because of the prevailing myth that ladderline will somehow ignore a gigantic mismatch and perform lossless miracles. Does anyone really believe that a 450 ohm feedline facing a 20 ohm or 5000 ohm antenna is lossless?

NVIS ANTENNAS;

Somehow this military variation has become the antenna de jour for folks looking for instant reliable close in QSO's on 40 and 80 meters. Get over it, 90% of wire antennas are already low enough to qualify for this NVIS thing. I for one cannot think of any reason to put an 80 meter dipole at 12ft. to achieve a dependable 20 or 200 mile daily contact. If the propagation is working that day then that will be the paradigm of performance, be it at 10 ft or 40ft. Stick anything you can as high and flat as possible. If you are lucky enough to have supports at 1/2wl high on your band of choice, you might not be able to work your neighbor everyday but that's why somebody invented skype.

DOUBLE BAZOOKA ANTENNAS;

Let's pop this bubble, so to speak. The wide bandwidth, amazingly efficient myth is everywhere on the internet. It is probably the most over rated extremely heavy monoband wire out there.

Studies have shown, VK1OD and others, what a piece of junk this thing really is. The bandwidth is expanded around 15 KHZ, and actually has loss attributed to that miniscule bandwidth stretch! Seems like a lot of work and extra weight for an antenna less efficient than a dipole at the same height.

HALF SQUARES, DELTA LOOPS, QUADS,

I am assuming most people understand that these designs are all variations of wire vertical antennas, some closed loops less dependant on ground conditions but in the case of the 1/2 square, it is nothing more than a two element vertical, low gain, broadside array in desperate need of an excellent ground plane at near and far field to do anything equal to or better than a dipole at the same height. Occasionally it just might outperform a dipole if you have optimum ground conditions and achieve the lower angle takeoff often written of as gospel for any ground conditions.

OCD ANTENNAS;

That big heavy 9 to 1 balun is there to provide a relatively close match on multiple bands by selective compromise placement on the radiator. Nothing wrong with that concept except a lot of wasted power up there, but still better than on the feedline or the tuner in the shack. Sometimes it is nice to have the feedline closer to the shack entry due to available supports. It would probably be my choice if conditions dictated the need and I had 3 strong supports to hold this heavy sucker up the air.

DIPOLES DIRECTIONAL?

Not really, forget worrying about the orientation unless you get the sucker up in the air around a 1/2wl. Most of the time they will work perfectly fine in all directions if the prop is on your side. The beauty of the good old monoband dipole is it is about 90% efficient when fed correctly and cut to correct length.

Would I put up a rotatable aluminum dipole on an 80 ft tower for 40 meters, absolutely! That's when it does the directional thing, more a signal to noise advantage in a non gain antenna but worth the investment at the right height.

PARASITIC VS PHASED ARRAYS;

A little esoteric but my experience on this dictates the sharing of my experience.

This probably is the first and last time I will ever disagree with the master, ON4UN.

IF you are after maximum gain AND front to back the only way to go, at least on thin wire antennas on the

lower bands is to correctly phase them into a two element array.

Remember I mentioned antenna evaluation is based on relative experience?

My very first antenna article on Eham many moons ago was about a two element reversible 40 meter parasitic reversible quad. Wow was I impressed with myself until I built a smaller one phased and really saw the dramatic improvement, now I'm hooked on being the first one heard in DX pileups!

RESONANCE VS SWR;

I know this one has been beat to death but still annoying and frustrating when a manufacturer or article writer espouses a flat SWR as the paradigm of antenna performance. Of course beam antenna manufacturers are aware their antenna is not naturally resonant, that's why there are mucho matching systems at the feedpoint.

SWR means nothing, nada, as far as antenna performance unless it suddenly rises while the wind blew your antenna down.

The only resonant antenna at 50/72 coax feedline ohms is a true 1/2wl dipole up at least 1/4wl. I will leave it to others to better explain what standing waves are, better yet read a few books! EVERY other antenna is gonna be above or below that 50 ohm coax at its feedpoint. How we choose to match this situation separates the signals from the noisemakers.

If you are building your own design, and I suggest you do, have a clue what the impedance should be at the feedpoint. A perfectly built vertical is around 38 ohm, dipole 50/70 ohms, a full size loop around 100 ohms, an EDZ around 5000ohms, 2 element beams around 27ohms.

None of these excellent antennas besides the dipole will have a 1 to 1 swr.

Before the day of 50 ohm transceivers the SWR issue was not the make or break thing it has become today with the modern radios.

Study the facts about standing waves and it will become clear to you that is but one aspect of antenna

evaluation and in a lot of situations means a heck of a lot less than what you are actually trying to transmit a decent signal from.

FINAL THOUGHTS;

The true test of any antenna is CONSISTENCY and expectations thru many days, months, solar cycles etc. We all do the best we can and face multiple reasons for choosing what antennas we use. I only hope that some of my comments will help some newer hams take the time to study some real antenna theory, not the amazing amount of crummy ideas out there on internet antenna sites that promise impossible results.





Some pictures of a younger Briggs -AB2NJ, a recent CAARA silent key. RIP my friend!





W5KUB to netcast Huntsville Hamfest

Tom Medlin, W5KUB, says that he will once again be netcasting live from the Huntsville Hamfest in Alabama on August 20th and 21st.

This is a large Hamfest that pulls many people from not only the South-Eastern states but also across the entire United States. As is usual, Tom says that he will have prizes for his viewers.

He adds that as this is an all indoor Hamfest at the famed Von Braun Centre, it should have perfect connectivity to enable him to stream the event with what he terms as great quality video.

Tom's netcast from the Huntsville Hamfest complete with ongoing chat-room will be carried live at www.w5kub.com

HOME FIELD DAY

Erin W1ERN and Rick Maybury WZ1B did a home Field Day this year. This was Erin's fourth Field Day, first as a licensed Ham. The Maybury's home Field Day ran 1B from a tent in the back yard, using a Kenwood 940 into an R7. Throughout the day, evening and Sunday the WZ1B station enjoyed camaraderie with the W1GLO site, providing spotting services to the W1GLO CW team.

Stan posed a fun CW competition between the team of W1ERN/WZ1B and W1GLO. Rick and Erin made 400 CW contacts and Erin made 86 SSB contacts, for 876 contact points.



Home Field Day set up.



Erin W1ERN starting the contest.



Erin- W1ERN working the bands at 1:30 AM.



Mass Senator Bruce Tarr visits CAARA

On Sunday July 17th Massachusetts State Senator Bruce Tarr stopped by the CAARA clubhouse to present the club with a Massachusetts State Senate Proclamation recognizing the importance of amateur radio in the state. Bruce Tarr is an amateur radio operator with the callsign N1UIU and is a member of CAARA as well. Here's a group photo after the presentation with MA Senator Bruce Tarr, ARRL Eastern MA Section Manager Phil Temples K9HI, ARRL Eastern MA Section Emergency Communications Coordinator and Skywarn leader Rob Macedo KD1CY along with ARRL Local Government Liasion Hank McCarl W4RIG and the rest of the CAARA crew!



Hank- W4RIG has been busy earning digital awards for CAARA with the help of a few club members. Congratulations to all involved.



Stan-W4HIX accepting the Senate Proclamation from Senator Bruce Tarr.



The presentation brought out quite a few members of CAARA who enjoyed coffee, donuts, and a good time.

photos by Tony-N1JEI



Badges now available for CAARA members ! CAARA club President Stan Stone is willing to make CAARA name badges for those members who want them. The badges will be good for a lanyard.As you can see in the photo the badges have a black background with the white Caara logo with the sailboat and Thachers Island on the top with the words "Cape Ann Amateur Radio Assn Gloucester MA, USA under the logo. You also have your name and callsign on the bottom as well and the badges are laminated If you want Stan to make you badge please email him at <u>stan@lanescove.us</u> and make sure you give your name and callsign.

Water Below... Heavens Above

Working the International Space Station /MM

This afternoon Dick, N1LT and I went sailing on Lake Winnipesaukee on Dick's 25-foot boat. I brought along my Kenwood TH-D72A APRS handie. We worked the International Space Station 220 miles above us using only a wire dipole and 5 watts.

The day was perfect... nearly 85 degrees, sunny with a 10-15 MPH wind from the Northwest.b We left the Yacht Club around 1:00 pm and sailed for nearly an hour before setting up for the ISS pass. The space station was scheduled to go over a little past 2:00 pm. Until then we enjoyed perfect sailing and also beaconed our position using the earth-bound APRS system. There are several APRS digipeaters in the Lakes Region. Our position was i-gated periodically to the internet as you'll see in the Google Maps image later in the story.



Dick, N1LT, at the tiller

As 2:00 pm approached, I changed my setup on the handie talkie. First I switched to 145.825, the APRS frequency on the Space Station. I also changed the digipeating path to ARISS, so the Space Station would relay my signals. Then I unscrewed my rubber duck antenna and attached a homemade dipole. The dipole is simply a pair of 19 inch wires connected to a BNC binding post adapter.

Soon I was hearing signals from the ISS and watching signals from around North America being relayed through the ISS to my handie. I transmitted my position beacon with a few button pushes whenever there was a quiet moment. While Dick sailed I pointed my dipole south and west. After about three minutes, I received acknowledgement from the ISS that it had heard my signal and relayed it across the eastern US. Here's a raw packet from W4AEJ in Niceville, Florida who heard my beacon. Notice that my transmission was relayed through RS0ISS-3 (the ISS):

2011-07-19 18:15:28 UTC: <u>W1PID-7</u>>T3SW0S, <u>RS0ISS-3*</u>,qAS,W4AEJ-5:'c1'l!dY/>=



Jim, W1PID, works the ISS with a handie talkie

You'll notice in the information bubble that RS0ISS-3 has

digipeated the signal. You'll also see our track from the yacht club through the islands and out into the lake. I had beset our transmitted icon as a small sailboat.

You can see APRS information from around the world at http://www.aprs.fi Plug in the callsign and SSID you want to search for.

You can see the location of the ISS by going to the following site: http://issfanclub.com/

Dick and I returned to the mooring at 4:00 pm. We were exhilarated by the perfect sailing and by working the ISS while operating /MM.



Here's a screen capture of Google Maps which is used to show the position reports of W1PID-7.



Info about Ed-KA1EDY, a former CAARA member....courtesty Bill-WZ1L

Well, I was asked a couple weeks ago about an old timer who used to frequent the club.

I had not spoken with Ed Sternfelt since Christmas, when he was living in North Brighton, Mass.

Well, using my resources and a few other hen scratches on paper in the back of a file drawer, I was able to locate Ed's Brother, David, in Nashua, NH.

Since the EMAIL and telephone numbers were fruitless efforts, I called his brother and asked what happened to Ed.

David told me that Ed was only in North Brighton for a temporary period until a space opened at his current location.

He is currently a patient at the Green Meadow Nursing and Rehabilitation Center in Waltham, MA. I drove down there today to see him. He looks well, as his dietician put him on a diet and he's lost some weight. His current email address is: <u>kaledy@juno.com</u>

His current mailing address: 45 Woburn Street, Waltham, MA 02452-7919 His current Telephone Number is: 1-781-899-2004.

Russians on the International Space Station will launch a minisatellite to honor this year's 50th anniversary of Yuri Gagarin's flight, mission control said.

The mini-satellite Kedr, named after Gagarin's call sign, will transmit greeting messages in 15 languages and relay images of Earth and telemetry data to amateur radio operators as it orbits, RIA Novosti reported Friday. The satellite, to be launched Aug. 3, is part of the Amateur Radio on the International Space Station project.

Kedr will by launched by Cosmonauts Alexander Samokutyaev and Sergei Volkov during a scheduled 6-hour spacewalk.

Gagarin was the first human to journey into space in a Vostok spacecraft launched on April 12, 1961



THE CAARA REPEATER AND CLUB MEMBERS PARTICIPATE IN SUPPORTING THE BLACKBURN CHALLENGE RACE WITH CHECKPOINT COMMUNICATION











Blackburn Challenge Race Overview The Blackburn Challenge is a 20+ mile open water circumnavigation of Cape Ann. Participants row or paddle small boats in the open ocean waters around Cape Ann, and conditions can vary dramatically throughout the day. Occasionally the water can be very rough, with strong winds and high waves. While we have some powerboats on the course to monitor checkpoints, we do not provide boat escorts—you should expect to be out of their sight and fully independent most of the time. Unless you have solid experience in difficult conditions with the boat you plan to use, you should not enter this event. know.

2011 Field Day Report....Stan, W4HIX

CAARA lost one of its favorite members just prior to this year's Field Day, and decided to dedicate the event to Briggs Longbothum, AB2NJ/SK. Briggs always inspired the club to try new things, and this year was no exception.

The 2011 Field Day had a couple of new elements, a new site and a new Field Day chairman. With all the potential for disaster, CAARA members pulled of a very successful event. This was my first year captaining the event after being second-in-charge last year. Taking over such an important event is always a bit daunting, but the strength of the membership showed through.

CAARA moved its Field Day operation to the Fuller School in Gloucester for several reasons. The primary reason was to work at the site of the new Gloucester Emergency Operations Center. This gave CAARA the opportunity to operate in a place that it may be called to work in a real emergency, unlike Babson Field. It also gave us the opportunity to demonstrate to Gloucester's new Emergency Management Director Miles Schlichte the capabilities we could provide. Another reason was for better visibility to the public next to the new Gloucester Crossing. Gloucester Crossing also provided a convenient source for supplies, though this was used less than expected.

Many members checked the site earlier in the year for potential RFI issues, and no problems were found during their operations. Parking was plentiful, easy and convenient. No problems were reported from neighbors for operating the generator late into the night. The Gloucester DPW was very cooperative in granting permission to use the field and fixing the halyard on the flagpole, which was used for an inverted "V" 40 m dipole. Access was granted to the school to erect a 300' long wire antenna to the highest point on the building. The only disappointment was not getting access to the building's bathrooms, something we hope will happen next year. Jim W1DDX handled the job of arranging for The Shed to drop off a portable toilet.

The weather this year created some challenges. Rain on Friday night and Saturday morning was cause for concern. Muddy fields can make for a miserable event, but the water drained extremely well leaving no puddles or mud. Early on Saturday morning, a close lighting strike created a bit of excitement. The strike set off the intrusion alarm in the school, which was answered by a deputy fire chief and a ladder truck, plus a police cruiser. The rain subsided and the teams started work on laying feedlines, erecting antennas and creating a power grid. All of the structures had been erected on Friday afternoon.

Friday was the start of the operation, with most of the equipment delivered to the site and the tents erected. Many members helped with transportation including Curtis AA3JE and Bob KB1VSS. Several of the team stayed late, and for entertainment, the club's new video projected was put into service to project a movie on the inside wall of the main tent ("The Fifth Element", in case you were wondering). One member stayed overnight (yours truly) for security, with coffee and donuts delivered for an early breakfast.

CAARA sported its usually 3A classification (three transmitters on emergency power), plus a VHF station and a GOTA (Get On The Air) station. Ron Beckley brought the Red Cross Emergency Response Vehicle for the entire event. The ERV was used as the phone station and operated from its own power source. The 24-hour operation put the ERV through its paces—even the coffee pot was exercised.

This year saw many changes in the food service—all for better. Field Day participants were treated to a cookout, something that was restricted at Babson Field. Also one of the tents was used for equipment storage and sleeping, clearing the food tent for just food preparation and service. A new idea was tried out this year—a meal slip that was filled out by the members. Meals were prepared from the slip and delivered to everyone, allowing operators to work non-stop and not worry about missing a meal. Sue N1XQW and Sandy KB1PVN and Jen did

a great job with planning, preparation and serving of meals. Next year we might consider a cooked breakfast on Sunday morning and maybe a night lunch for late operations.

This year 6 m was hot with tons of traffic, and the 6 m Yagi, mounted on the beam with a rotor was well executed by Dick KR1G. Jake K1LDL pounded out the brass on CW—straight keying 125 QSOs with Paul W1PLM logging for him. The digital station has some problems, something we'll work out before next year. One of our youngest members, Allan KB1TRB, worked SSB for hours, while his father Bob AB1LT made a several attempts in the early morning to complete a satellite QSO (worth 100 points!)—missing by just the exchange on one contact. Larry KB1VMR worked the GOTA station for 97 contacts (worth 97 QSO points and 80 bonus points) and Bill WZ1L doubled the GOTA bonus points as coach. Dick WB1W picked up 100 points by copying the ARRL bulletin in three different digital modes. Dean KB1PGH, along with working VHF, helped pick up 100 points for the information table, and another 100 points for media contacts.

Operator Summary		QSO				
Operator		Callsign	Phone	Digital	CW	Points
Bob Edwards		AB1LT	14	0	0	14
Jake Hurd		K1LDL	0	0	125	250
Paul Anderson		KA1GIJ	178	0	0	178
Ken Ekstrom		KA10H	23	0	0	23
Steve Hatch		KB1MUY	5	0	0	5
Dean Burgess		KB1PGH	28	0	0	28
Sandra Lawson		KB1PVN	3	0	0	3
Allan Edwards		KB1TRB	19	0	0	19
Dick Copithorne		KR1G	42	0	0	42
Charlie Douglas		N1EDN	1	0	0	1
Susan Downey		N1XQW	3	0	0	3
Mark Watson		W1MAW	145	0	0	145
Dick MacPherson		WB1W	0	12	0	24
Ruth Hodsdon		WW1N	4	0	0	4
		Total	465	12	125	739
	Total	602				

GOTA Summary	Bonus		
Larry Beaulieu KB1VMR	97	80	177
Bill Poulin (coach) WZ1L		80	80
Total			257

QSO Breakdown

Band	Phone	Digital	CW
7 MHz	30	2	0
14 MHZ	165	6	125
28 MHZ	4	4	0
50 MHZ	266	0	0
Total	465	12	125
Multiplier	1	2	2
Points	465	24	250

= 602 QSOs

= 739 pts.

The logging system worked well. Members are slowly learning the NN1M logging program. Internet service was initially set up with a router in the EOC, but a base router couldn't pick up the EOC router to form a bridge. Later this was determined to lack of antenna gain, which will be easy to resolve next year.

One disappointment this year (and loss of 100 bonus points) was lack of a visit by an elected official. Gloucester St. Peter's Fiesta is almost always in competition with our event, and this year was no exception. State Senator Bruce Tarr was scheduled to visit but was unable to attend due to prior commitments. Bruce did make it up by delivering a joint Massachusetts House and Senate resolution regarding Amateur Radio to CAARA on July 17th. Hank W4RIG worked with Bruce on obtaining this resolution, as well a proclamation from Gov. Deval Patrick.

New vinyl banners were designed and prominently displayed this year. Two club banners 2' x 8' were produced and will be available anytime the club works portable or attends an event. Talk of a club flag surfaced, given the tall flagpole at Fuller School. CAARA also celebrated the award of ARRL Special Service Club designation earlier in the week with the display of our new certificate.

Bob WV1A provided his generator and came down on Sunday morning to conduct our VE session. One person passed her General exam, making for a successful session.

Tear down of the site went smoothly, with many hands taking down antennas, tents, packing gear, loading generators and coiling cords. Dave KA1LKX helped out by combing the field for any bit of trash that might have gotten away. The long wire antenna was removed from the school several days later (Note to self: Take antenna down from the ends, not the middle). This year most of the gear was properly stowed back at the clubhouse on Sunday afternoon and the digital station and SSB station were reassembled and operational.

This year's Field Day score came to 3,002, which was 90 points more than last year's 2,912. The bonus points are listed below.

Bonus Point Category								
7.3.1 100% Emergency Power (3 transmitters)	300							
7.3.2 Media Publicity	100							
7.3.3 Public Location	100							
7.3.4 Public Information Table	100							
7.5.5 Message Origination to Section Manager	100							
7.3.6 Message Handling (13 messages)	100							
7.3.7 Satellite QSO	0							
7.3.8 Alternate Power	0							
7.3.9 W1AW Bulletin	100							
7.3.10 Education Activity	100							
7.3.11 Site Visitation by an Elected Governmental Official	0							
7.3.12 Site Visitation by a Representative of an Agency	100							
7.3.13 GOTA Bonus	160							
7.3.14 Web Submission	50							
7.3.15 Field Day Youth Participation (1 w/QSO)	20							
Total								

So, what about next year? It looks like Fuller School will be a good site to return to. There was plenty of room for antennas, a good field to put up tents, a good place to cook, plenty of convenient parking, and a good public place to demonstrate our capabilities. With a bit more effort (and no Fiesta on Field Day weekend next year), we should see more than one elected official visit the site. Maybe Bob AB1LT will finally get that satellite QSO. Maybe we can get some Boy Scouts (or Girl Scouts) to come down and make a QSO or two. And if we charge up one our batteries with a solar cell array and make five QRP contacts, well get the alternative power bonus. But most important—I'm hoping for another enjoyable weekend spent with my friends of CAARA.

First Impression Baofeng UV-3R Stan W4HIX

I recently picked up one of the Baofeng UV-3R dual band FM transceivers. They're available on eBay for less than \$50 (including shipping) from Hong Kong. I noticed the radio online and it was a pretty close copy to the Yaesu VX-3R I bought a couple of years ago for a little more than \$150.

Everyone knows that when you buy a radio, that the price is normally reasonable, but the price of the accessories usually make you wince. Well, the UV-3R comes with about everything you could want headphone/mic, "drop-in" charger, and programming software and cable. So how about build quality? It definitely doesn't have the fit, finish or features of the Yaesu. The Yaesu has wide band coverage from AM/FM (stereo) broadcast, SW (AM, FM, NFM) up through 900 MHz and about a hundred menu settings. The Baofeng is pretty simple, but covers GMSR/FSR frequencies as well as 2m and 440 MHz. It also receives FM broadcast.

So how does it sound? We'll have to wait on some signal reports for that. Could it be a radio that you'd carry all the time? Very possibly—you certainly wouldn't be overly upset if it fell out of your pocket.



More later...

VHF/ UHF DUAL-BAND TWO WAY RADIO

- Frequency Range: 136-174 / 400-470MHz
- · Dual-Band Display, Dual-Standby
- Output Power: 2 Watts
- 99 Channels + 1 Emergency Channel
- 50 CTCSS and 104 CDCSS
- Built-in VOX Function
- 1750Hz Brust Tone
- · FM Radio (87.0MHz-108.0MHz)
- · LED Flashlight
- · Large LCD Display
- Hight /Low Power Switchable
- 25KHz/12.5KHz Switchable
- Emergency Alert
- · Low Battery Alert
- · Battery Saver
- · Time-out Timer
- Keypad Lock
- Monitor Channel
- · Channel Step: 5/6.25/12.5/25KHz



WELCOME TO THE CLUB



New club member Al- N1QEH helped out with the Blackburn Challenge Race. Al is a regular check-in on the Sunday evening 2 meter net.

Deployment of ARISSat-1/KEDR satellite expected August 3

After a postponed deployment in February from the International Space Station (ISS), the ARISSat-1/ KEDR amateur radio satellite is expected to begin its mission on August 3, 2011. This was the word received from Energia official, Sergey Samburov during an ARISS teleconference on July 19. Deployment of the craft is planned during EVA-29.

NASA TV will cover the EVA live starting at 1400 GMT on August 3.

1430: Hatch Open

1446: Egress ARISSat-1 and secure to airlock ladder

1452: Remove solar panel covers

1507: Translate to deploy site, activate PWR, TIMER1 and TIMER2 switches, verify LEDs on, and deploy (Internet streaming: <u>http://www.nasa.gov/multimedia/nasatv/index.html</u>)

ARISSat-1/KEDR is a satellite designed and built by amateur radio operators to specifically interest students in scientific and technological careers. Through the use of ham radio equipment, students and teachers should be able to access and utilize the satellite from a classroom environment with minimal set up.

ARISSat-1/KEDR is a cooperative effort between AMSAT, ARISS (Amateur Radio on the International Space Station,) RSC-Energia (The Russian Space Agency) and NASA. The design, development and construction of the satellite was done by AMSAT volunteers. Original plans called for the satellite to be housed inside an old Russian spacesuit, but when the suit became unavailable, a spaceframe was developed to house the radio equipment and solar panels. The new satellite was named ARISSat-1/KEDR. Another name for the spacecraft is RadioSkaf-V. The transmitted callsign will be RS01S.

The mission was specifically designed as an education-based satellite.

Some of its broadcast features include a voice identification, voice, digital and morse code telemetry, stored image and on-board camera transmissions via Slow Scan TV and digital telemetry from a Russian science experiment that will measure vacuum in earth's lower atmosphere. Other aspects of the mission include CW (Morse code) and voice message contests to interest students in participating along with stored images submitted by students all over the world as part of its payload.

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CORRAL	Contest Title Ph	SNS and NS Weekly Sprints	Lighthouse-Lightship Weekend	TARA Grid Dip Shindig	10-10 Summer Phone QSO Party	European HF Championship	ARRL UHF Contest	North American QSO Party	South Africa DX Contest	NAQCC Monthly QRP Sprint	CWops Monthly Mini-CWT Test	Worked All Europe	Maryland-DC QSO Party	Dominican Republic Contest	Straight Key Weekend Sprint	ARRL 10 GHz and Up Contest	SARTG WW RTTY Contest	Russian District Award Contest	CWops CW Open	Keymen's Club of Japan Contest	North American QSO Party	Feld-Hell New Member Sprint	SARL Digital Contest	ARRL Rookie Roundup	Run For the Bacon	ALARA Contest	Hawaii QSO Party	SCC RTTY Championship	YO DX Contest	Kansas QSO Party	Ohio QSO Party	South Africa DX Contest
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CON	Start and Finish	Aug 5, 0200Z - Aug 5, 0300Z	Aug 6, 0000Z-Aug 7, 2359Z	Aug 6, 0000Z - Aug 6, 2359Z	Aug 6, 0001Z - Aug 7, 2359Z	Aug 6, 1200Z - Aug 6, 2359Z	Aug 6, 1800Z - Aug 7, 1800Z	Aug 6, 1800Z - Aug 7, 0600Z	Aug 7, 1300Z - Aug 7, 1630Z	Aug 10, 0030Z - Aug 10, 0230Z	Aug 10, 1300Z - See website	Aug 13, 0000Z - Aug 14, 2359Z	Aug 13, 1600Z - See website	Aug 13, 0000Z - Aug 14, 0000Z	Aug 14, 0000Z - Aug 14, 2359Z	Aug 20, 6 AM - Aug 21, 12 AM	Aug 20, 0000Z - See website	Aug 20, 0800Z - Aug 21, 0800Z	Aug 20, 1200Z - See website	Aug 20, 1200Z - Aug 21, 1200Z	Aug 20, 1800Z - Aug 21, 0600Z	Aug 20, 2000Z - Aug 20, 2200Z	Aug 21, 1300Z - Aug 21, 16009Z	Aug 21, 1800Z - Aug 21, 2359Z	Aug 22, 0100Z - Aug 22, 0300Z	Aug 27, 0400Z - See website	Aug 27, 0400Z - Aug 28, 2200Z	Aug 27, 1200Z - Aug 28, 1159Z	Aug 27, 1200Z - Aug 28, 1159Z	Aug 27, 1400Z - See website	Aug 27, 1600Z - Aug 28, 0400Z	Aug 28, 1400Z - Aug 28, 1600Z

ATTENTION ALL MEMBERS !!! CAARA ANNUAL MEETING !!!! Wednesday September 14 at 7:30 PM CAARA Clubhouse, 6 Stanwood Street Gloucester, MA 01930



Next Issue: The annual CAARA Thatcher Island Expedition, Friday-Sunday, July 29-31. Should be a great story with pictures and the results of their on the air "DX-ing". They are packing some nice radios and an assortment of antennas and should be very succesful if band conditions cooperate and "Murphy's Law" doesn't rear it's ugly head.

We are always looking for articles and photographs from club members. Please send them to jpcrockport@verizon.net