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Messenger 2.0



Blackstone Valley Amateur Radio Club's Quarterly Newsletter

W1DDD.org

Ol' Man Winter fails to dampen spirits At BVARC'S first Winter Field Day



The Group that braved the cold winter day

By RONALD R. BLAIS - KB1RYT

Mark Twain, the celebrated author and pundit, once observed about New England's notoriously erratic climate, "If you don't like the weather in New England now, just wait a few minutes."

An intrepid group of BVARC members recently braved Mother Nature's fickle winter offerings while, simultaneously, establishing a new club milestone.

Undeterred by an ominous, overcast sky, the prediction of a wintry mix of precipitation, and damp, raw temperatures, about 20 club members trekked to Lincoln Woods State Park, Lincoln, on Jan. 25 to participate in the club's inaugural Winter Field Day exercise.



Because emergencies are often as unpredictable as New England's weather, happening at anytime anywhere, the purpose of the exercise is to encourage emergency operating preparedness in a winter environment, according to the Winter Field Day Association, the event's sponsor.

Launched in 2007, winter field day's rules mirror those of ARRL's Summer Field Day, although each event is a separate entity.

Participating stations were encouraged to operate for 24 hours utilizing all HF bands except 12, 17, 30 and 60 meters, as well as VHF, UHF and satellite.

The BVARC team established four stations, three HF and one VHF, at its rendezvous point on the shore of Olney Pond, Mickey Callahan, K1WNC, one of the local event's organizers, reported.

An iCOM 7300 radio with a half wave NED fed antenna operating on 20 and 40 meters was set up inside a tent.

A trio of outside stations, also went on the air, Callahan said.

Mike Kenney, K1ETA, worked one QRP station attached to a homemade dipole while Jim Johnson, K1GND, used an Elecraft KX 3 attached to a new PAC antenna at the second QRP station. A two-meter VHF station also was operational.

The local team started setting up at 10 a.m., was operational at 11 a.m. and broke down at 3 p.m., Callahan reported. In that period, about a dozen contacts were logged, with a station in the Czech Republic the furthest, he added.

The Lincoln Woods site hugging the Olney Pond shoreline was

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From The President

Hello everyone. First I would like to thank the membership, the officers, Board of Governors, and volunteers who have made this club active and thriving. We have had some bumps in the road, but we are still running strong and I'm looking towards the next 65 plus years of BVARC thriving.

I would like to thank Ron KB1RYT and Teri W1PUP for bringing the newsletter back to life again. It has been missed and definitely great to have back.

I missed Winter Field Day, from the pictures and discussion about that at the January meeting, it was quite a fun time. Hopefully I can attend next year.

And speaking of Field Day 2020, I'll be there with the camper and I know Cassie KC1IAS (soon to be K1GTC) will be there to operate FT-8 and FT-4 if the rules allow it.

I would like to thank the membership for the donation to the American Kidney Fund in memory of my father Lee K1GTC who became a Silent Key on January 10. I would also like to thank the members who sent cards, called and texted me and took the trip to Charlton on January 19th for the calling hours and funeral service.

At this time you should have received your notification of the BVARC Constitution and Bylaws change to be voted on at the meeting March 30th. This bylaw change allows the Club to use email or first class mail to notify Club Members of any changes to the Constitution and Bylaws. Currently the Club has to send out actual paper notices to everyone about the change via US Mail, costing the club 55 cents per member, plus printing and envelopes. That can add up to a high sum as right now we have over 60 members (Bob WB1P and Ray KC1HQB have the actual figure).

This year we have some great events coming, another trip to W1AW, a trip to Marconi Beach on Cape Cod, Parks on the Air, possibly a trip to the New England Steam and Wireless Museum and other fun events like learning to build, learning Morse Code, and VE Sessions. Also don't forget the Consortium, held on the first Monday of the month at the Asia Grille, club meetings on the last Monday of the month, and VE Sessions every other month on the 2nd Saturday at 9am. Make sure to visit <http://WWW@W1DDD.ORG> for updates on dates, times, locations and reference materials from the Consortium.

So I hope your finals stay cool, the DX hot, and QSOs numerous.

Just for Members **FOR SALE**

**Astron RS 35 M VOLT AND
AMP METERS**

35 AMP POWER SUPPLY. \$75.00.

CONTACT: BUDDY. K1CYQ
tallyho22@aol.com



DX QSL Cards **REMINDER**

To members to bring their outgoing DX QSL cards to a meeting to be filed with cards from other members?
<http://www.arrl.org/files/file/QSL/Outgoing%20QSL.pdf>

BVARC members may pool their outgoing DX only QSL cards for forwarding at no cost to them. The club picks up the cost.

Bring your outgoing DX cards to
Bob-W1YRC.

Consortium Concepts

When the idea of developing a program for teaching basic radio concepts hatched in Bob Beaudet's, W1RYC, mind he harbored no lofty expectations for his concept. Rather, the opposite gripped him. "I didn't think it would go more than two or three months," recalls the veteran ham. It proved a poor prognostication.

Thirteen years later, Beaudet's idea, The Consortium, has blossomed into a vibrant BVARC educational program, extending not only to club members but outsiders, as well.

The program's longevity and popularity has left its originator pleasantly surprised. "I never thought it would go 13 years," he says, a note of amazement in his voice.

Beaudet is joined by another veteran ham, Jim Johnson, K1GND, in planning and teaching Consortium subjects.

Since its inception, the duo has steadfastly refused to waver from the Consortium's dedicated purpose of teaching basic radio elements. Basic radio is the Consortium's bedrock and will not be shaken from that foundation, Beaudet insists.

The Consortium meets on the first Monday of the month at the Asia Grille restaurant at Lincoln Mall.

Those wishing to dine prior to the program are encouraged to arrive at 5 p.m., with the night's offering starting at 6:30 p.m. For anyone desiring to attend a Consortium session, Beaudet advises, "Come early to get a seat."

Upcoming Consortium topics:

- March 2: Grounding and power supplies plus operating procedures and mode related topics.
- April 6: Setting up a fixed (home) station. Operating procedures and mode related topics.
- May 4: Basic antenna design, coax choice and use of an antenna analyzer. plus op procedure, etc.
- June 1st: open
- September 14: Choosing a location for a shack and construction tips, Ken Trudel, N1RGK, instructor, plus Op procedures, etc. Beaudet and Johnson instructors.
- October 5: Solar flux Index, A & K indexes, what they mean and how to use them led by Trudel plus Op procedures, etc. with Beaudet and Johnson.
- November 2: open
- December 7: open

HOMEBREW



and gadgets

BY MICKEY CALLAHAN – K1WMC

The title of this column might be a little misleading if you're expecting a review of a new and improved beer from a micro-brewery. Despite my love of beer, I want to start a series of articles that will allow all curious hams to either experience for the first time or for pure nostalgia the fun of building and experimenting with simple circuits, kits, and gadgets that will enhance our joy and experience of being amateur radio enthusiasts.

I still remember my first major electronic kit build back in 1960 of the ever popular Heathkit AR-3 shortwave receiver that I built for an eighth grade science project. Believe it or not, I still have the radio and managed recently to get it working again. Not only did I learn how to solder but it was the impetus for me to later pursue an early career in electronic engineering. Even though I left the world of engineering to pursue other interests, I still enjoy, in my later years, experimenting with electronic circuitry and the challenges and camaraderie that ham radio creates for me.

I truly believe that there is pure joy and satisfaction in taking individual parts and some raw materials and making something that not only works as intended but enhances our knowledge and understanding so we can in turn make our experience better as radio amateurs. I'm also hoping that other members will come forward with their experiences of exploration and contribute to this column. Let the journey begin.

Having spent some time last year with Mike Kenney, K1ETA, setting up portable QRP HF radios in several local parks, I quickly learned that even with five watts you could make contacts far and wide as long as you had a reasonably efficient antenna. More so

Make a Dual Band 20 and 40M Dipole From a Kit

- PART 1 OF 2



Pacific Antenna 20M and 40M Trap Dipole Kit Manual at www.qrpkits.com

if you were working with 100 watts or more. The truth being that the antenna is the most important part of the RF system next to the operator. However, setting up a portable station generally requires a bit of hiking and braving the outdoor elements. In other words, it's got to be lightweight and easy to carry and set up and breakdown quickly, especially if you're by yourself.

Even though I've been happy using my Alpha multi-band, loaded vertical whip antenna, I discovered that Mike with his homemade speaker wire dipole for 20 and 40M was doing a much better job of making QRP contacts than my vertical using 100 watts of power. I decided that something had to change.

From my experience last year, I've come to the conclusion that I needed to improve my portable antenna system while maintaining a set of personal operating preferences that are

as follows:

- Antenna must be very lightweight (less than 8 oz.)
- Provide operation on both the 20 and 40M bands without needing switching or jumpers
- Can be used at RF power levels up to 100W
- Easy to make with readily available parts and tools
- Low cost (less than \$50.00)
- Easy to set up and take down in the field

First, I could easily replicate the antenna that Mike was using but being somewhat stubborn, I decided to be different mainly because Mike had to connect or disconnect jumpers every time he wanted to switch between 20M to 40M. Not a hard task but more of an inconvenience.

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CW CORNER

HOW I WENT ABOUT LEARNING MORSE CODE (CW)

BY MICKEY CALLAHAN – K1WMC

When I finally got my ham license just over 4 years ago, I had several goals in mind. My first was to set up a station and become proficient in operating SSB on the HF bands as well as study so I could eventually get my General and Extra Class licenses to take advantage of the additional HF frequency privileges. Since that time, it's been a constant learning-by-doing experience and a bit humbling at the same time. My second goal once I obtained my Extra Class license was to learn Morse Code, better known as CW to us hams. Having since obtained my Extra license more than two years ago I decided it was time to learn CW. This is where my story begins.

Having attended BVARC meetings and the monthly Consortium for over 4 years and finally getting my Extra "ticket," I got the courage to ask Bob Beaudet, W1YRC, if he would be interested in assisting me and others in learning CW. I can't say enough good things about Bob's response of a resounding

yes! However, he went one step further and suggested that we make it a group effort. With that thought in mind, we polled the membership and determined that there were others in the club who also wanted to learn CW.

Before I go on with my story, you are probably asking yourself, why learn CW if the FCC no longer requires it to obtain a ham license. For me the answers are simple. First, ask yourself why not? For me, it's having the ability to get your signal out in less than ideal propagation conditions. We all know that CW makes the most efficient use of bandwidth and is less prone to noise interference. Secondly, I've developed an interest in QRP which pretty much demands the use of CW when using power of 5 watts or less. Thirdly, consider it a challenge, sort of like a merit badge that you earned in Boy or Girl Scouts or simply another notch on the totem of life. For me, it also helps keep my brain sharp as I get older. Learning something new at my age helps to stimulate the old brain cells from getting lazy!

With Bob's wonderful and giving hospitality (cookies, pies, and coffee included!), a group of 6 eager

members have been meeting at Bob's house twice a week where he's had us learning and sending CW using complicated words and phrases to help improve our sending and receiving skills as well as simulating typical QSOs. He has also been demonstrating sending techniques using both the straight key and various paddles. As we've progressed since early Fall of last year, he has checked us individually for our sending techniques by using our code practice oscillators (CPOs) that were obtained at the very beginning of the class. The goal was for each of us to spend at least 20 minutes per day practicing with our CPOs in learning the individual letters, numbers and punctuation characters.

What I learned from the experience is that there is no substitution for practice. You can't learn CW unless you keep up with it every day for at least 20 minutes per day rain or shine. Bob was adamant about this and he's right. What has helped me over the last few months since spending time with Bob and the group is to set aside time each day and couple that with the use of several very good, and highly recommended online programs which I'll list at the end. Learning the characters and their associate "dits" and "dahs" is relatively easy. Even learning to send them using a straight key is not difficult. I have found that the challenge is being able to recognize the characters when on the receiving end. The brain needs to be trained to stop counting the dits and dahs and instead, compose words or abbreviations associated with words from the sounds you hear. I like to think of it as musical chords that are made up of individual notes.

As of today, I've managed to be able to send up to 20 words per minute (WPM) using a straight key with at least 90% accuracy.

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Honing their Morse Code skills at a CW class conducted by Bob Beaudet, W1YRC, far left, at his home are, from left, Art Carpenter, KC1IVI, Ken Trudel, N1RGK, and Mike Kenney, K1ETA. Mickey Callahan, K1WMC, also is a class member.

Across THE Spectrum

Eastern Connecticut Amateur Radio Group Flea Market

April 26 from 8 a.m. to noon at the Thompson Raceway Restaurant, 205 Thompson Road, Thompson, Conn. Donation \$3. Table rental \$15 and parking lot rental space available for \$15. A raffle is included. Contact Jon KA1MPG at KA1MPG@AR-RL.NET or 508 943-4467.

Technician Class

The North Smithfield Emergency Management Agency is sponsoring a free course for individuals interested in obtaining an amateur radio entry-level technician class license from the Federal Communications Commission (FCC).

The course consists of eight Thursday night sessions stretching from March 12 to May 14 from 7 to 9:15 p.m. in the basement of the North Smithfield police station, 575 Smithfield Road. Instructor will be Bill Lincourt, KC1ANX.

The Blackstone Valley Amateur Radio Club will administer the FCC's technician class test at a date, time and location to be determined.

Lincourt recommends students obtain Gordon West's technician class book as a reference tool and to complete homework assignments.



**Reach out between
12:30 & 1:30 on 2m and 20 m
to help make connections**

An introduction to ham radio will be held March 7 from noon to 1:30 p.m. at the Masons Lodge, 42 Central St., Gardner, Mass. The agenda includes:

12:00 - 12:15 Short presentation;
12:15 - 12:30 two videos;
12:30 - 1:30 Hands on
Everyone gets to go on the air.

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selected, Callahan explained, after he and Kenney, who are familiar with the park, scouted a number of possible sites.

"It was flat, grass covered, had ample parking, easy to reach for the handicapped and had a nice view," Callahan said of the final selection, while also not overlooking the availability of a portable toilet nearby.

The picturesque setting received the group's thumbs up.

"Everybody loved the spot," Callahan said.

Throughout the dismal conditions, Ol' Man Winter's wintry punch melted away through the warmth of camaraderie, the sipping of hot cocoa and a pot of chili, supplied by Teri Diiorio, W1PUP.

"That was a big hit with everybody," Callahan remembered of the hot meal.

The seeds of BVARC's first Winter Field Day venture were sown and germinated within the ranks of the club's field day committee.

"It was a collective effort by the field day committee," Callahan pointed out.

The winter exercise is a reflexion of the club's growing commitment to generate greater membership participation in club programs and activities as well as introducing the public to the joy, challenge and benefits of ham radio.

"The idea was to get more club participation, to enjoy each other's company and enjoy ham radio," Callahan said of the field day's goal.

The club's first Winter Field Day proved a learning experience, he said. Will the next Winter Field Day challenge be accepted?

"Everybody's game," Callahan replied emphatically.



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However, I'm still limited to receiving about 10 WPM with reasonable accuracy. My ultimate goal is to be able to send and receive at least 15 to 20 WPM comfortably and accurately. As the old saying goes "Practice, Practice, Practice!"

Finally, I've attempted a few QSOs with limited success and feel that I've at least broken the "nervous barrier." I also have to conclude that it has been Bob with his generous dedication of time, encouragement and hospitality that has made the CW learning experience both fun and exciting.

Suggested Online CW Learning Resources:

- Just Learn Morse Code – www.justlearnmorsecode.com
- G4FON Koch Method Trainer – www.g4fon.net
- ARRL CW Training Resource Listing – www.arrl.com

After much online research, I discovered a relatively inexpensive 20 and 40M trap dipole kit from Pacific Antenna (www.qrp-kits.com). The kit cost under \$30 and comes complete with all the necessary parts to assemble the antenna. (See picture below). The only tools one needs is a pair of wire cutters and wire stripper, soldering iron and solder, along with a tape measure and a heat gun or other heat source for shrink tubing.

The making of the antenna first consists of building two 40M trap coils wire-wound (wire provided) on individual hollow plastic tubes acting as coil forms. These traps act as a loading to shorten the overall length of the dipole. Additionally, two 27pF 3KV capacitors in series are soldered to each of the two printed circuit boards serving to resonate the trap coil and isolate the inner part of the antenna for 20M operation.

The circuit boards are narrow enough that they will slide into the hollow trap tubes.

The wire ends of the trap coils are also soldered to the circuit boards and then wrapped in heat shrink tubing to provide some weather protection and to keep the assembly intact. The trap or load coils along with the capacitors create a resonate LC circuit where the capacitance (C) is wired in parallel to the inductance (L) of the coil. With the wire provided, two lengths are cut to 16'9" for each of the 20M sections and two lengths of 8'3" are cut for the 40M section of the antenna.

The overall length of the antenna will be the sum of the four sections of wire plus the length of each trap coil. Rather than go into further construction details, for those interested, one can go to Pacific Antenna's website mentioned previously to see detailed pictures and instructions.

I'm just about done with construction but the next step will be to get it outside and set it up so I can tune it as I suspend it from my newly acquired Spiderbeam 40 ft. fiberglass telescoping pole. So, as the plot thickens, you'll just have to wait until the next installment to find out how well it works. Stay tuned and see a preview of what's to come!

Preview of the next installment –

1. Tuning the antenna using an antenna analyzer
2. How to determine the SWR
3. How one goes about determining the near-field RF radiation using a home brewed field strength meter.

Snapshots

A Peek Through the BVARC Archives

In August 1955 Mother Nature walloped Greater Woonsocket with a devastating one-two punch from hurricanes Connie and Diane, the latter dumping up to 20 inches of rain across the region. As the threat of flooding swelled, alongside the area's rivers and streams, the Woonsocket Red Cross sent an SOS seeking help with communications. A BVARC team, including Normand R. Thibault, W1AUT, of Blackstone volunteered and established an early warning net to monitor river conditions. When the Spindleville Dam, Hopedale, failed, unleashing a tsunami downstream, Thibault, was instrumental in alerting public safety officials. His prompt warning provided Woonsocket authorities with vital advance time to initiate evacuation procedures before floodwaters inundated the city's Social District. In a Feb. 1956 QST magazine article lauding Thibault's action, he is credited with saving hundreds of lives. His effort also earned him ARRL's Public Service Award. His daughter, Patty Vilnit of Blackstone, a BVARC member, has inherited her father's call sign.



BVARC Pair Nominated for ARRL Service Awards

Bob Beaudet, W1YRC, is nominated for the Knight Distinguished Service Award, while Jim Johnson, K1GND, is nominated for the Technical Service Award.

The Knight award recognizes exceptionally notable contributions over an extended period of time by a section manager to his/her section and beyond along with exceptional contributions to the health and vitality of the ARRL and its field organization and whose actions are in the spirit of the unselfish contributions of Joe T. Knight, W5PDY. Beaudet has been a section manager since January 2002.

The Technical Service Award is given annually to a licensed radio amateur whose service to the amateur community and/or society at large is of the most exemplary nature within the framework of Amateur Radio technical activities. Johnson has been co-leader, with Beaudet, of the club's Consortium, a 13-year educational program dedicated to teaching basic radio subjects. The ARRL's Technology Task Force will serve as the award panel and will review the nominations received from the members and select the winner.

Club members are encouraged to provide supporting comments and endorsements for both nominees to Steve Ewald, WV1X, supervisor of ARRL's field organization team, by email at sewald@arrl.org or wv1x@arrl.org. Deadline is April 30.