



Nashoba Valley
Amateur Radio Club

SIGNAL

A club since 1992



Since 1993



Since 1996

de N1NC

June 2016

Volume 25 Number 6

This Month's Meeting

We're back this month to having two entertaining and informative talks. We will be joined by Ranger Philip Lupsiewicz, of the Lowell and Concord national parks. Phil will tell us of the NPS Centennial from an insider's viewpoint.

Plus, Dennis Egan W1UE will be up from Marlborough to tell us about "Remoting an Amateur Station." Dennis is an old friend of the club, having spoken to us before. He's an accomplished DXer and contester.

And, since this is Field Day month, Jim AB1WQ will bring us up to date on plans for this June 25-26 event.

This will be a full meeting, so we'll want to start promptly.

The President's Corner

It is June already and our last regular meeting before the Summer break is coming up. For those of you we might not see until Fall, have a safe and enjoyable summer. If you do something interesting radio wise, I hope you will share it with us in the Fall.

Tech Night continues through the summer and this month's meeting should be the conclusion of Jim N8VIM's overwhelming successful oscilloscope project with some 25 scopes built. Now that many of you have one we would like to know what uses you have found for the device. If you find an interesting use make some notes and take

some pictures. You could give a short show and tell at a meeting, give a five minute description at Home Brew Night in December, or if you really want to go big make a ten or fifteen minute talk at Members Short Subjects in January. There is an available venue for whatever detail you wish to give.

With the conclusion of the O'scope project there will be open time at Tech Night to resume technical discussions, trouble shooting or other projects. Let us know if you have something in mind.

Though I'm busy preparing for Field Day I'm looking forward to, and working toward, putting together a mobile/portable station to get into National Parks on the Air (NPOTA). I'd like to get together with a couple of other people who would be interested and try some operating from Lowell and possibly some of the other area NPS locations. I'm thinking of doing it under the N1NC club call and the easiest way is to repurpose the FD computers using N1MM after FD, which by the way is only two weeks off. With that thought in mind, give Jim AB1WQ a call if you can help out on FD, It is our largest club-oriented event and it takes a lot of hands to pull it off.

73, Stan KD1LE

Last Month's Meeting

What happens when a close-knit local club has a meeting with no prearranged speaker? We gather 'round and have a full-length meeting's worth of real face-to-face communication. That's what.

Jim N8VIM gave us a quick update on the Tech Night oscilloscope project. (*There's more elsewhere.*)



K1NKR photo

Jim AB1WQ explained the plan for Field Day. A Field Day budget was approved by the membership at NTE \$600. There was a discussion of WRTC towers and ladder masts.

Stan KD1LE opened a discussion of possible summer NPOTA activities.

Dan KW2T described the content of some 1940s wartime issues of QST he had found. His presentation style was like a fireside chat: historical, informative, and thoroughly entertaining. (*More elsewhere.*)



K1NKR photo

John KK1X held a raffle that brought in \$55. John K1JEB and Dan K1RAU each selected an Arduino, while Peter N1ZRG took the Ferromagnetic Core Design & Application Handbook, by Doug DeMaw W1FB, which Peter himself had donated. (Guess it was too good to give up?)

News and Happenings

Field Day

June is here and the operating-publicity-contest-social event of the year is right around the corner! "Incident Commander"

Jim AB1WQ will soon publish an all-hands Reflector posting with some of the preparatory details. But here are some salient items. The event will be held 25-26 June in our usual spot, the Pepperell Conservation area on Heald Street. We'll be at least 2-alpha (two emergency powered stations), but we have the equipment committed to support 4A. The decision to implement the additional stations will be dependent on interest and manpower—hint, hint. Leo K1LK will again be our esteemed chef. There will be a digital Amateur TV link set up between N1NC (NVARC) and N1FD (the Nashua Area RC's FD site in Hollis). And we get a 20-point bonus (limited to 100 points) for each youth who makes a QSO. More info at the meeting.

No matter what your interest—set-up, operating, socializing, representing the hobby--come to Field Day. It's the premier event of the year!

Tech Night

The "build your own oscilloscope" project, originally scheduled for June, got off to an early start in May. It's still not too late, though. The June Tech Night is for on-time starters, late finishers, and a lot of Elmering. Second Thursday, 7pm, downstairs at the Community Center.

Overall, everyone had a great night, and most of the kits are not yet completed so I hope to see you all next month as well!



N8VIM photo

John K1JEB was the first to get his kit assembled and powered up, but there was a problem! The LCD was cracked. I gave him an LCD from another kit and ordered a few spare kits today in case there's another one

with a problem. After installing the new display, his kit worked properly.

Next to finish (I think) was Dan KW2T. He powered up and was greeted with a completely white LCD screen! This was a simple problem. In the steps you check power at a test point for 3.3v, and if it's good you're supposed to solder JP4 closed which then jumps power over to the microcontroller. After soldering JP4, Dan was also in possession of a properly working kit. There was another kit that was working properly, but I forgot who's it was (sorry about that!).

For those of you who have not yet attended, here's a tip from George, KB1HFT:

"Boy, those resistors are small! And the color codes, Yikes! I couldn't make heads or tails out of them, even under magnification. So I sorted 'em all using an ohmmeter, and labeled & arranged them using my patented "Styrofoam board"* method."

de Jim N8VIM

Reviewing History

12/7
10:30 W1MEK 5 8 5 7 10⁴⁸ Read me the close down order
W1MEK was my last QSO before close down.
Checked 101X for operation on Batts - F.B!
Installed plug on pwr supply for 2-1/2 meter Batt. rig.
Jim M. Gustaw

"12/7, 1045p-1048p. [worked] W1MEK. Read me the close down order. W1MEK was my last QSO before close down. Checked 101X [receiver] for operation on Batts - F.B! Installed plug on pwr supply for 2-1/2 meter Batt rig." From the December 1941 log of W1JP (SK)

During last month's meeting, Dan KW2T read from some 1941 and 1942 QST magazines he found at NEARFest and related what ham radio was like during World War-II (an appropriate precursor to the coming Memorial Day weekend):

- the FCC announcements on shutting down all ham operations on Dec 8th, 1941,
- the requirements to register any and all transmitting equipment,
- the creation of the War Emergency Radio Service on the 2-1/2 meter band (114 Megacycles),
- some letters to the editor, one from a man who had joined the military and

sold all his equipment to the Signal Corps, one from an eyewitness to Pearl Harbor,

- the Field Day operation where they took semaphore flags and flashlights to a hilltop to communicate to some nearby operators.

Especially interesting were the ads, some from companies that still exist (Radio Shack and Newark Electronics), wanting to help in the war effort, and encouraging everyone to buy War Bonds.

It was a scary time, when all of life was affected. Just about every page of the magazine was somehow related to the war effort. It was an interesting look back at those times in ham radio.

de Dan KW2T

Editor's Note

Greetings. This editor thing will be a hard post to fill. Stan has been newsletter editor since March 1994. In preparation, I've been doing my homework by reading old newsletters from our club and from the others in the area. In my humble opinion, folks, our newsletter already stands head and shoulders above all the others. This will be a hard post to fill.

You need to know that I intend to be an editor, not the author of all the filler material. The Signal has had some fine member-submitted material over the years. Let's continue that tradition. If you're not comfortable with your writing ability, submit something anyway; I'll be sure it's presentable--and you'll get all the credit.

What to write about? Well, the best articles are based on your own interest. You're more of an expert than you think. And you might be surprised to find out that other members will look to you as an Elmer.

Ideas: Recent activities, operating technique, DX, V/U/SHF, modes, public service, rules and regs, technical subjects, hints and kinks, strays, station descriptions. That's just a start. It's a big hobby.

Here's another idea. Search out a question from any of the exam pools and write a story about it. Maybe it's something you're really into. Maybe it's something you want to increase your own knowledge of. Maybe it's something you think others just don't get. You'll gain new insights as you investigate and sort out your thoughts.

73, Skip K1NKR

Public Service

Here's a possible article topic.

On the Air

Here's another possible article topic.

The Technical Corner

Here's yet another possible article topic!

Hints and Kinks

KD1LE recently loaned me a short 70cm Yagi. When I looked at it, I saw an ingenious modification for us hilltoppers and portable operators.

The antenna is a conventional Cushcraft (See fig. 1.), with the usual through-holes and saddles. In the past, I've used long bolts and wing nuts to enable what I thought was quick assembly and disassembly. I've lost a lot of wing nuts!

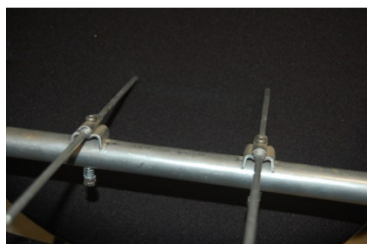


Figure 1 (above)

Figure 2 (below)



K1NKR photos

Stan's solution is even better. He passed the bolt through a spring and then put two back-to-back nuts at the end of the bolt. (See fig. 2.) Presto--a no-disassembly antenna that allows rotating the elements to be in line with the boom for transit or storage.

de SkipK1NKR

Strays

Do you remember old radios with 10 microfarad filter capacitors in an aluminum can? How about the same capacitance in a thumb-sized package more recently scavenged from a computer power supply? What's next? Will Moore's Law be applied to capacitors? The October 2015 IEEE Spectrum reported that UCLA researchers had assembled laser etched graphene, a graphite oxide dielectric, and a tiny amount of electrolyte to form micro-super-capacitors: 400 to 1000 millifarads in one-fifth the thickness of a piece of paper and an area varying from a few square micrometers up to the centimeter scale.



Like a Rolling Stone...

A mobile phone gathers no Morse.

Treasurer's Report

Income for May was \$45 from membership fees, \$2 from ARRL membership renewals, and \$55 from the April meeting book raffle. Expenses were \$18.00 for newsletter postage and \$200 for the annual liability insurance premium, leaving a net expense of \$116.

Current balances:

General fund \$3,114.80

Community fund \$4,886.41

As of 2 June, we have 49 members who are current with their dues and 11 renewals outstanding. Many members have an anniversary date of April 1, as that is the Club's birthday. Thank you to those of you who hand in your dues before Ralph comes to you. Please check your renewal status on the roster circulated at the monthly meeting or ask Ralph.

If you are joining ARRL or renewing your membership, please consider letting Ralph send in the paperwork for you. The Club will buy the stamp and will get a commission from ARRL. ARRL membership checks should be made payable to NVARC; Ralph deducts the Club commission before forwarding your paperwork to Newington. As an Special Service Club, the ARRL expects a majority of Club members to also be ARRL members.

de Ralph KD1SM

Board Meeting Notes

Board meeting 6/2/2016

Attending: Stan KD1LE, Jim N8VIM, John KK1X, Ralph KD1SM, Rod WA1TAC, Ed N1YFK. Observing: Peter N1ZRG, Skip K1NKR

Programs: Dennis Egan presenting on setting up a remote station and Ranger Philip Lupsiewicz on National Parks (June). Stan will contact Gene Novacek WW4EN regarding his possibly hosting the summer picnic again. Bo Budinger WA1QYM on Clubs (September). Card sort (October)

Bruce has registered N1NC with Logbook of the World (LOTW).

Discussion of NPOTA operation possibilities.

Discussion of Field Day logistics.

Respectfully submitted,

de John KK1X

Club Services

The NVARC Club Net meets every Monday evening at 8 PM on the 442.900 Pepperell repeater. (And is ably managed by George KB1HFT. Thanks, George!) Stop in and bring your input and questions.

**NVARC Property as of 17 May 2016,
de John KK1X, Secretary/Equipment Custodian**

Holder's Call	Holder's Name	Qty	Property Description
KD1LE	Stan Pozerski	3	5' Brown folding tables
KK1X	John Griswold	4	MFJ Code practice oscillator
KD1SM	Ralph Swick	1	Swingline M711 stapler
KD1SM	Ralph Swick	1	Club banner
KK1X	John Griswold	1	Badge laminator
KK1X	John Griswold	1	Badge punch
WA1TAC	Rod Hersh	1	Kenwood TS-451 transceiver SN 6100025
WA1TAC	Rod Hersh	1	Astron RS-35M power supply SN 9506184
N1ZRG	Peter Nordberg	1	Cushcraft R7 antenna
KD1LE	Stan Pozerski	1	Projection screen

Meeting Coffee Bar

As always, many thanks to Ed N1YFK for running the coffee "bar" at the meetings. Don't forget to leave a donation if you partake.

Calendar

Upcoming Events

June

9 Flea at MIT

July

17 Flea at MIT

August

20 Windsor Hamfest, Windsor ME

21 Flea at MIT

28 NoBARC Hamfest, Adams MA

September

9-11 N E Division Convention, Boxboro MA

18 Flea at MIT

24 NE Antique RC Flea Market & Training Session, Brookline NH

Upcoming Operating Activities

June

- 11-13 June VHF Contest
- 18 Kids Day
- 18 Stew Perry Topband Challenge
- 25-26 ARRL Field Day

July

- 9-10 IARU World Championship

August

- 6-7 August UHF Contest
- 20-21 10 GHz & Up (Round 1)
- 21 Rookie Roundup RTTY

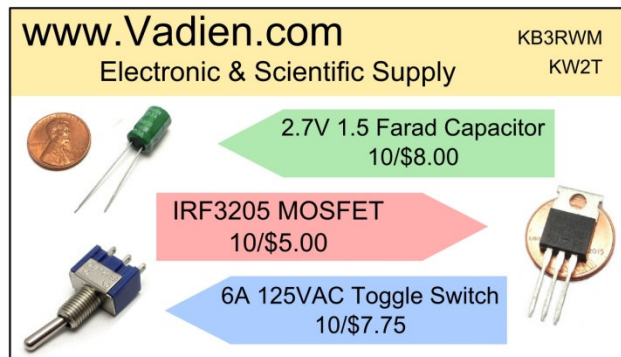
September

- 10-12 September VHF Contest
- 17-19 10 GHz & Up (Round 2)
- 24-25 EME 2.3 GHz & Up

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Nashoba Valley Amateur Radio Club

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W1ESR

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PIO:

Librarian: Peter Nordberg N1ZRG

Property Master: John Griswold KK1X

N1NC Trustee: Bruce Blain K1BG

Join NVARC! Annual membership dues are \$15;
\$20 for a family.

Meetings are held on the 3rd Thursday of the
month at 7:30 p.m. in the Pepperell Community
Center.

Contact us on the N1MNX repeater.

442.900 (+), 100Hz

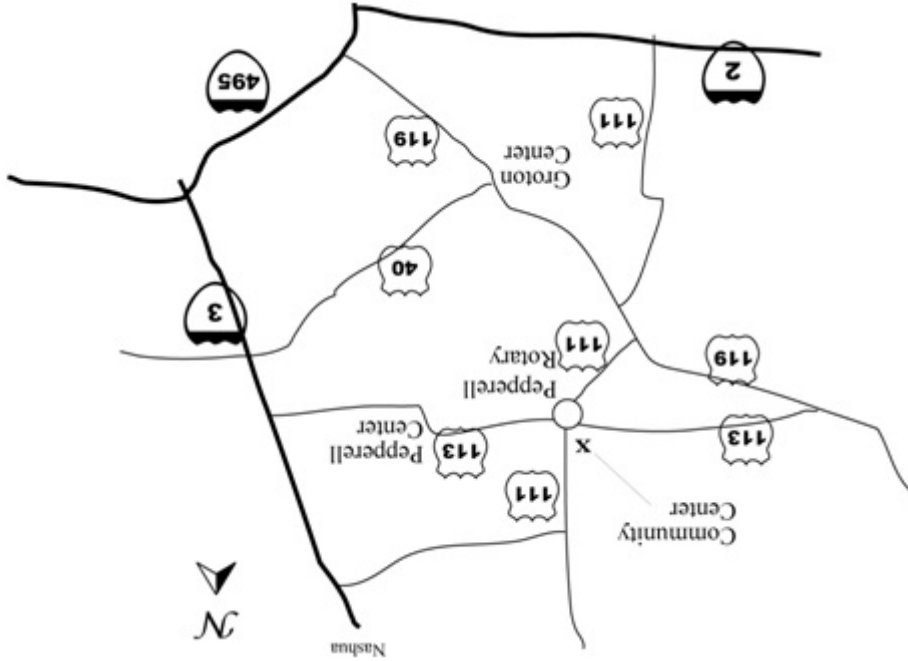
147.345 (+), 100 Hz

53.890 (-), 100Hz

This newsletter is published monthly. Submis-
sions, corrections and inquiries should be di-
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