



SIGNAL

October 1993 Volume 2 Number 10

The President's Column

Seems like I just wrote the last column and here we go again. I'd like to thank Scott for his last two presentations. His presentation on car alarm systems was very good and I know the younger members of our club were very taken with the ultimate alarm system. His efforts in developing, analyzing and sharing the survey results with us is greatly appreciated. Some of the ideas can be worked on piece meal, but a couple of things stuck in my mind. First, shutting down for the summer. I would like everyone to think about that and I will ask for a show of hands at the next meeting. That way it won't be decided at the June meeting like this year. This will help the new officers to plan next year's schedule.

Another comment(s) that's more difficult to address is reducing the business part of the meetings. Everyone has to help on this one. For my part, I won't announce events that we are not directly involved in or don't need volunteers for. All announcements should be put on a sheet of paper and put with the flyers on a designated table for everyone to check out. Our business meetings aren't really that long, but we can make them shorter. I've been going around to different clubs to see how they operate and feel pretty good about our activity. Recently I went to one club which had a rather lengthy business meeting before the guest speaker. They had a report from each activity and officer.

Many times during a meeting items are brought up from the floor. Those that require decisions should be brought to one of the elected officers by phone or radio, or by coming to a board meeting (the Thursday before regular meeting). Then they can be addressed or at least organized before the regular meeting.

Announcements can be sent (by mail, hand delivery, packet) to Clint KD1OL, the newsletter editor. Then they can be put in the newsletter so everyone gets informed, not just those at the meetings, and it will save meeting time.

One thing I liked about the last couple of meetings was the things people brought to show. It was unplanned but fits the idea of meeting in small group discussions about some common interest or project they completed at the end of each regular meeting.

It's time for another club QSL card shipment. My stack is up to only 10 or 15 this time but I know Clint is anxious to send them out again. That's what happens when you get into contests, he must have piled up quite a few contacts. Bring in your cards and a QST label and Clint, KD1OL, will ship them out. Remember, all it costs is your QST address label.

Remember, all members of the club are welcome to the board meetings. If you have an activity you want the club to sponsor, an idea for a speaker or activity you would like to see at a meeting or even some ideas you would like to kick around, please give me a call and we'll put you on the agenda. If all else fails you know where I am every Saturday morning!

We started the Ham class and had a terrific turn out. There were half a dozen club members there to help out. It may not be the most exciting thing to sit around and watch a class take place, but there are plenty of questions to be answered over the course of an evening. If everyone could come to one class over the next 15 weeks there would be moral support for the

volunteer instructors and some real Hams to look at hi hi.

The Treasurer's Report

The NVARC treasury still needs income ideas.

Are we going to have a table at the upcoming flea market? We did not last spring and we probably missed putting \$300.00 or so in our coffers. Last fall the club's effort wasn't really very great, yet we realized around \$300.00 profit. I would really like to see us get together a really big effort for a large, nice table creating a significant profile for the NVARC that the upcoming flea market. However, only two or three of us cannot do it. We need many more members participating. We will have a system of controlling what is brought in and what it is sold for. It will be simple to operate and guaranteed to work. We do need items for sale and people to help man the booth.

Our treasury is healthy now with about \$800.00 in it and the Training Classes are doing their part in expanding our bank account. We do have several projects in mind that will require some money. When these are finalized they will be presented to the membership. I am excited about the way things are going presently and hope everyone gives the Executive Committee their inputs on what we as a Club should be doing.

Respectfully,
Ben Akins, KB1FJ

A Letter From the Editor

With this issue of the NVARC SIGNAL you will notice a difference. Due to a few things, Roger N1OJW is no longer able to continue the fine work he has done in the past. I, Clint KD1OL have picked up the position due not to my abilities, but due to the fact that I have a computer and the requisite Laser Printer with which to put the newsletter together. While I will occasionally have a article to add I will not be writing the newsletter myself. This newsletter is for and BY the members of the Nashoba Valley Amateur Radio Club. That's you. While I will do my best to get the newsletter TO you, I need you to get the articles to ME. The address is:

Clint Talmadge
63 Lowell Road
Pepperell Ma
01463-1706

Or you can leave a message or a short article on Ben's KB1FJ PEPMBX on 145.09.

This Months Speaker

This month we will be treated to a presentation by Ed Hammond, WN1I, from CUSHCRAFT Signals, the manufacturer of high quality antennas in Manchester, NH. Ed will be talking to us about some of the design theory involved in antennas, differences and key things to look for in buying an antenna. He will also be sharing with us some of the new advances at Cushcraft.

Ed is a top expert in the field with a major manufacturer and it should be a very interesting talk.

What a great meeting to BRING-A-FRIEND. Ask a ham you know to come to the meeting as your guest. Ask a ham you talk to on the air to come. Ask a non-ham to come. This is an excellent way to get more people to experience NVARC.

A LETTER FROM HOME

As Stan (the Prez) mentioned at the last club meeting it's time for us HAMS to put our QSL's where our mouth is. There are three bills before congress that are of vital interest to all Amateurs.

Senate Joint Resolution 90 and House Joint Resolution 199 both state the same thing. They recognize the role played by Amateur Radio during emergencies and natural disasters. Further the role played by Amateur Radio is a National Resource to be valued and protected. In addition recognition is given to "TECHNICAL PROGRESS IN ELECTRONICS" by the Ham community.

House Resolution 2623 seeks to indemnify Amateurs from litigation based on alleged damages caused by, or during volunteer service in the public interest. It's a "GOOD SAMARITAN" bill for Amateurs. This month's QST tells of a Ham being sued because he identified an Amateur as a source of malicious interference. The suit was ruled as without merit, but had it been a different place with different judge or jurors, the story may not have ended so happily. As it was, the Volunteer Ham

had to defend himself with an investment of his time and money. We need HR 2623. As it stands, you should probably think twice before calling in an erratic and presumably drunk motorist on 495. The call is recorded and your identity becomes public information. You are open for a potential suit. JIM SOKOLOVE is watching.

We have three elected officials in Washington that should be made aware of your concern. It has been suggested that we send QSL cards. State on the card that you would appreciate their support on these three proposed bills. List them and maybe include a comment on why you feel reluctant to utilize your training and equipment to its fullest with the current lack of recognition and the threat of litigation. We are a SUE happy society. Being sued, even if there is no legal basis can cause immense psychological and financial trauma.

Don't put it off. If you don't have QSL cards write a letter or a post card. Send them one of those eye-catching cards off the rack. Send them a note tied to rock. Send them a FAX. Let them know we're out here and we are watching.

Senator Edward Kennedy
Senator John Kerrey
U.S.Senate
Washington, DC 20515

Representative Marty Meehan
U.S. House of Representatives
Washington, DC 20515

"N-O-W" WR1Y

LOCAL HAM IS A WINNER !!

If you take out your October issue of QST, and I know you have it because I'm sure you are an ARRL member, and look on Page #110, you will see that NVARC's own AD8V, Ed Stratton, took the TOP spot in the W/VE Single Band Category for 160 meters in the 1993 ARRL DX CW contest !!! Ed was working from W1FJH's shack in Mason N.H.

CONGRATULATIONS ED !!!

The Rubber Duckie Replacement

"OK, so you're on a trip somewhere with your H.T., and a gorilla steps on your rubber duck antenna. Broken! Great, now what?... Can't check in or out of the net."

Here's a simple antenna you can make with parts available at any electronic store.

I've made a few and I use them often. They work great. My rig runs cooler with these antennas than it does with the duck antenna. The performance difference is noticeable. Since the antenna you make is specific for one band, it is very efficient.

Here's what to do.

1. Calculate the length of wire you will need to work the frequency.

$$\frac{468}{f \text{ (Mhz)}} = \text{length of wire in feet.}$$

Notice that inches are in 1/12 units and this calculation will yield 1/10 units. So make the conversion to inches and work with that. Don't worry about being exact to the 10th of an inch. you will be trimming the wire. let's try one $468/146.0 = 3.228$ feet. That is 1/2 wavelength. You need to divide by 2 to get 1/4 wavelength, 1.664 feet. Or 12 inches plus 6 1/2 inches. Close enough Now add 2 inches. 1 inch to connect to the connector and 1 inch of adjustment. It's easier to cut a wire than to make it longer.

2. Cut a piece of insulated 8 or 10 gauge solid copper wire to the total length you need.

Measure twice, cut once. If you are unsure, error on the side of the wire being a little long.

3. Using a BNC Binding Post Connector (Fig 1) or a BNC Screw-On Coaxial Connector (Fig 2) Insert the wire into the center conductor position and solder if necessary.

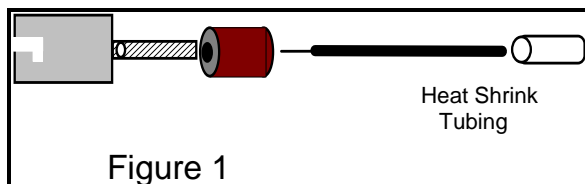


Figure 1

4. If using a Binding Post Connector, screw on binding post. If Screw on Connector, Fill with Epoxy and let it cure.

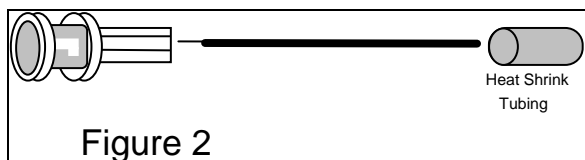


Figure 2

5. To Tune your antenna for 1:1 SWR, use a reflected power meter for VHF or UHF as needed (Fig 3). Do not use a feed line. Attach the Antenna and HT as direct as possible.

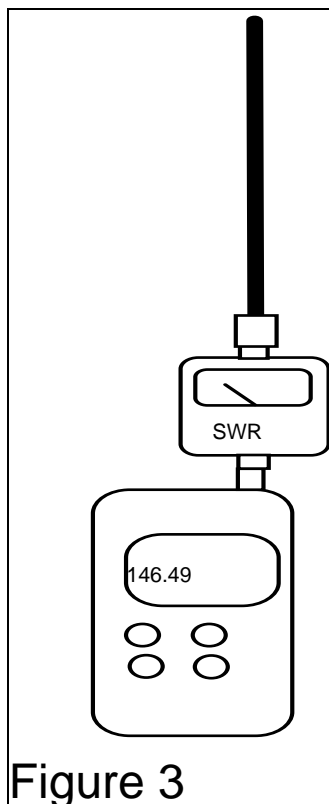


Figure 3

6. Transmit on Low Power - Simplex. Be Sure To ID when testing.

Cut the Antenna Top 1/4 of an inch at a time until you see the reflected power needle reach below 1.5:1. This is an excellent time to be patient and not get excited. If you think you are way off and take an inch off you may find that

you now have an antenna that is too short and it is not possible to rescue it. Take a little at time. Find a reading below 1.2:1 and you might want to just take it. SWR will vary anyhow from that frequency to the ends of the band. so attempting to achieve a pure 1:1 SWR would just be an exercise in frustration. It won't be 1:1 when you change frequency by a fair amount.

7. Put Shrink Tubing over the connector and at the antenna tip. Leave a little over the top as illustrated to provide a "bumper" in case it accidentally pokes a face or arm.

This is pretty simple, and fun project. It gives you an "indestructible" antenna for hiking, biking, or just traveling around with your rig in a brief case. Good Luck, 73.

Scott WX1J



**Nashoba Valley
Amateur Radio Club**

Nashoba Valley Amateur Radio Club

President:	Stan Pozerski, KD1LE
Vice President:	Scott Pyles, WX1J
Secretary:	Duane Long, KD1JY
Treasurer:	Ben Akins, KB1FJ

Meetings are held on the 3rd Thursday of the month at 7:30 p.m. at the Pepperell VFW hall.

This newsletter is published monthly. Submissions, corrections and inquiries should be directed to the newsletter editor, Clint Talmadge, KD1OL. Articles and graphics in most IBM-PC formats are acceptable.

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