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The President's Corner: Van N4ERM

Super VE Testing

Our last VE test session on 18 March 2017 was one of our most successful in recent times. Under the practiced leadership of Pat N4UGH all eleven who tested walked away with something including 2 Extra, 1 General and 8 new Technician licenses. Congratulations to all, especially Ferguson KK4MCY and Paul K4PGM on their Extra tickets and Carl KM4SGC on his General CSCE which was hand delivered to Carl at this home by yours truly.

MS Walk

Our friend Kelly N4EWG led an outstanding crew of MS Walkers and Volunteer Communicators on this year's MS Walk on Sunday, 2 April. In addition to Kelly, Joe W3OJO, Fred N4ZCG, Bill KJ4OFD, Ferguson KK4MCY, Jim KJ4EMX, Bill KU4W, and our CFARS event photographer Jim KI4YRH.

** NOTE- There are lots of similar events held throughout the year which could use event communications such as CFARS provides. Let me know if you're interested in supporting some of these volunteer events.

RARSFEST

The Raleigh amateur Radio Society annual Hamfest is on Saturday, 15 April from 8AM to 3PM at the Jim Graham building on the State Fairgrounds (1025 Blue Ridge Road) in Raleigh. CFARS has two tables and chairs reserved for the event. If you have something to sell, bring it along and put it on our tables. If you have something you don't want/need any more, DONATE it to CFARS and we'll sell it for the benefit of CFARS. We may also have a Possum Trot sign-in book at the fest. Come get your name entered along with the multitude of other Possum Trotters. See you in Raleigh!

On a personal note

On 6 June 2012, at the invitation of John N4NAB and Steve K9MRA, I went to do some QRP in the Park at *Cliffs of the Neuse State Park*. It was a great eye-opening experience. We thought: "Wouldn't it be great to operate portable from ALL of North Carolina's State Parks?" So I set about it. On Friday, 31 March 2017, I completed operating from all 41 of the State's beautiful park/recreation areas. Each of the parks has their own distinction and charm. I invite and challenge you to come along and operate from our wonderful North Carolina State Parks.

UPCOMING STUFF

April

- 2 MS Walk
- 15 Raleigh Hamfest
- 17 Monthly Club Meeting - Program: Something Great TBA!!!!
- 29 - 30 10-10 Spring Digital Contest

See you there!

73 de Van N4ERM

CFARS Officers

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 Vice Pres.....George KM4ODS km4ods@gmail.com
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 Recorder.....Bill KJ4OFD kj4ofd@arrl.net
 Newsletter Editor...Mike KN4XP kn4xp@yahoo.com



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The Cape Fear Amateur Radio Society News is the official newsletter of the Cape Fear Amateur Radio Society. It is published monthly as a PDF. The newsletter is emailed monthly when the latest version is available. Please provide your email address to the Newsletter Editor. The CFARS News welcomes articles and other contributions. Please email submissions to the newsletter to cfars_newsletter@yahoo.com. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the last Friday of the preceding month. The views expressed in the CFARS News are those of the individual authors and do not necessarily reflect the views of the Editor or CFARS.

Club Repeaters

(PL 100 Hz)

K4MN
 2 m 146.910/146.310
 70 cm 444.400/449.400

K4MN
 6 m 53.810/52.810

WA4FLR
 2 m 147.330/147.930

Club Membership

Dues

CFARS club membership dues are due and payable in January each year. CFARS does offer you the option to pay your dues no later than March. Yearly dues are \$15.00. CFARS offers a lifetime membership option for \$150.00. If your dues are not paid by March you will not be a voting member of the club. The right to vote on issues for the club comes with club membership.



CFARS Club Patches are available for purchase. Contact **Chuck KJ4RV** for your patch today!



March 2017 Club Meeting Minutes

On March 20th the Cape Fear Amateur Radio Society meeting was called to order at 7:30 pm by **Van N4ERM**. The meeting was held in Room 219 of the Science Building at Methodist University, Fayetteville, North Carolina. **Van N4ERM** led the *Pledge of Allegiance to our Flag*. **Pete K4QFK** led the invocation. The introductions were made in the normal CFARS manner.

A motion was made by **Kelly N4EWG**, seconded by **Jim KI4YRH**, to approve the minutes of the March meeting. By vote the motion carried.



COMMITTEE REPORTS:

Treasurer: **Chuck KJ4RV** gave the treasurer's report. We collected some money and we are still solvent.

Repeater: **Bill KU4W** reported the repeaters are up and krowing well.

Net Manager: **Chuck KJ4RV** reported check-ins are down slightly for the month of March.

Membership: **David KR4OE** presented **Leland Strother KN4AHK** as a new member. He was voted in as our newest member. Several of our guests asked for applications. **Chuck KJ4RV** will send packages to **Ted W0SMT** and **John KM4WEF** via snail mail.

Newsletter: **Mike KN4XP** our newsletter editor, is looking for articles from the club to put into the newsletter. Send your articles to him at cfars_newsletter@yahoo.com

Health & Welfare: No report.

Swapfest: No report.

VE Testing: VE Testing was held last weekend. We had 11 to test, and had 8 new Technicians and 1 new General and 2 new Extras from the testing. Thanks to Pat N4UGH and the rest of the VE's.

Public Relations: No report.

Old Business: The Digital Repeater Committee had no report. **Irv K3IRV** is still trying to contact repeater coordinator for Southern Pines to have him come speak about a DMR repeater for the club to replace the 440 repeater. **Pete K4QFK** still needs help taking down his antenna and tower. **Van N4ERM** spoke about the Charlotte Hamfest held 2 weekends ago, there was not a lot of people from CFARS there, but we did have a table and sold a lot of stuff. RARSFest in Raleigh is coming up on April 15. Get your stuff together, sell your old stuff, buy some new stuff.

New Business: The *MS Walk* will be 2 April 2017. **Kelly N4EWG** volunteered to head the team. Thanks **Kelly**. **Pat N4UGH** needs help setting up her new station and we will get folks together when she has time. Contributions of equipment were made by **Dick WB4OND**, **Sandy KC4TBQ**, **Bill KU4W**, **Chuck KJ4RV** and **Larry KM4USB**. The Club has received a letter from the Special Forces Amateur Radio Brotherhood requesting our help for their on-air program from 12-17 June, including our trailer/hexbeam, any equipment and anyone wishing to operate with them. **George KM4ODS** will honcho the effort. Special event station **KC1SF** will be on the air for the event.

Program: **Irv K3IRV** gave an interesting presentation about the 2017 DX Marathon. It is a repeating annual contest from Jan 1 thru Dec 31 each year and is a competition with yourself each year. Information about the contest can be found at www.dxmarathon.com

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Door Prize Drawing: David KR4OE held the prize drawing. Ben KM4ODT and Irv K3IRV won ARRL ball caps. Tony N3RWO won a 2m YAGI antenna kit. Paul K4PGM/AE won a package of 9 volt batteries. Elton W4GVW donated the ARRL ballcaps. Van N4ERM donated the Yagi and batteries. Additional donations of door prizes will be appreciated.

A motion was made by Fred N4ZCG, seconded by Irv K3IRV, to adjourn the meeting. By vote the motion carried. The meeting was adjourned at 8:30 pm. We had twenty two (22) members and five (5) guests in attendance at the club meeting.

Submitted by **Bill KJ4OFD**
CFARS Recorder

Items For Sale

Icom 2730 2MTR/440MTR - \$400
OPC-837 controller cable (11.4FT long), MBA-5 controller bracket, MBA-4 controller bracket, DC power cord, HM-207 Mic and Manual

Kenwood TS-120s Comes with hand mic power cord, and manual. It was just aligned and serviced. \$275.00.

Steve Harris KA4CZL 910-514-2472

ALPHA DELTA DX-CC - \$ 85.00
Multi-band resonant dipole, Power rating – 1000 watts, 82 feet long
Bands - 80,40,20,15,10 Meters 17 with tuner

Contact Joe W3OJO
910 366 9674 or W3OJO@twc.com

NC SENATE BILL 364 AND AMATEUR RADIO EXEMPTION

NC Senate Bill 364 has been introduced in the North Carolina Senate to curtail use of mobile communications while driving. There is no language in the current draft to exempt Amateur Radio. This is of tremendous concern, much like a similar bill enacted in Delaware without an Amateur Radio exemption. It became technically illegal to operate mobile in Delaware until an Amateur Radio exemption was later added as an amendment.

You are urged to send the following suggested email draft to your State Senator. Time is of the essence. Now is the time to alert your State Senator that an Amateur Radio exemption is needed. Please insert you name and contact information in the draft email (see below) and forward it to your State Senator.

To find your State Senator, see <http://www.ncleg.net/representation/WhoRepresentsMe.aspx>

Thanks to **Bill Morine N2COP, ARRL Roanoke Division Vice Director**, for providing this information!

House Members

[Representative Elmer Floyd](#)
Democrat - District 43
[Representative Marvin W. Lucas](#)
Democrat - District 42
[Representative William O. Richardson](#)
Democrat - District 44
[Representative John Szoka](#)
Republican - District 45

Senate Members

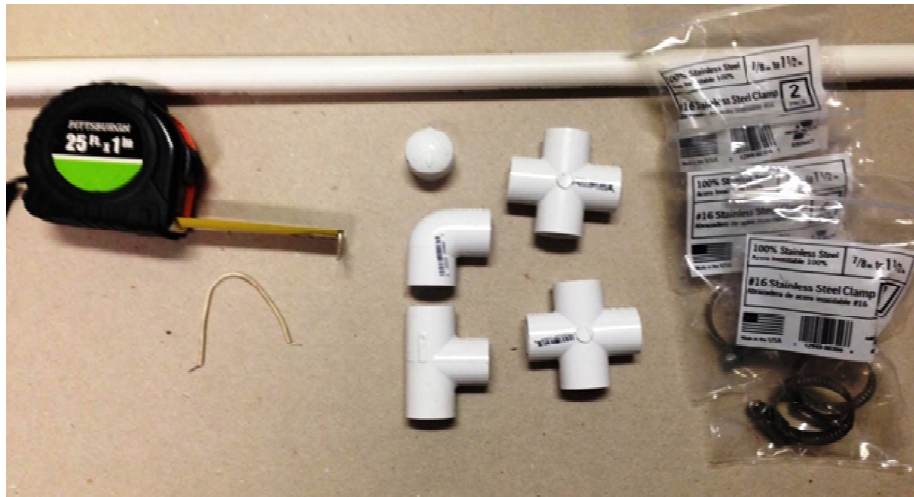
[Senator Ben Clark](#) Democrat - District 21
[Senator Wesley Meredith](#) Republican - District 19

2-Meter Measuring Tape Yagi Antenna

| <u>Lowes Part #</u> | <u>Description</u> | <u># Needed</u> | <u>Cost Per</u> | <u>Extended</u> |
|---------------------|---|-----------------|-----------------|-----------------|
| 23967 | 1/2" x 5' Sch 40 Pipe | 1 | \$1.76 | \$1.76 |
| 24087 | 1/2" Sch 40 Cross | 2 | \$1.32 | \$2.64 |
| 23873 | 1/2" Sch 40 Tee | 1 | \$0.33 | \$0.33 |
| 23867 | 1/2" Sch 40 Elbow | 1 | \$0.40 | \$0.40 |
| 23937 | 1/2" Sch 40 End Cap | 1 | \$0.38 | \$0.38 |
| 80887 | 1 1/2" Stainless Hose Clamp (2 per bag) | 3 | \$1.88 | \$5.64 |
| | | | TOTAL | \$11.15 |

Harbor Freight

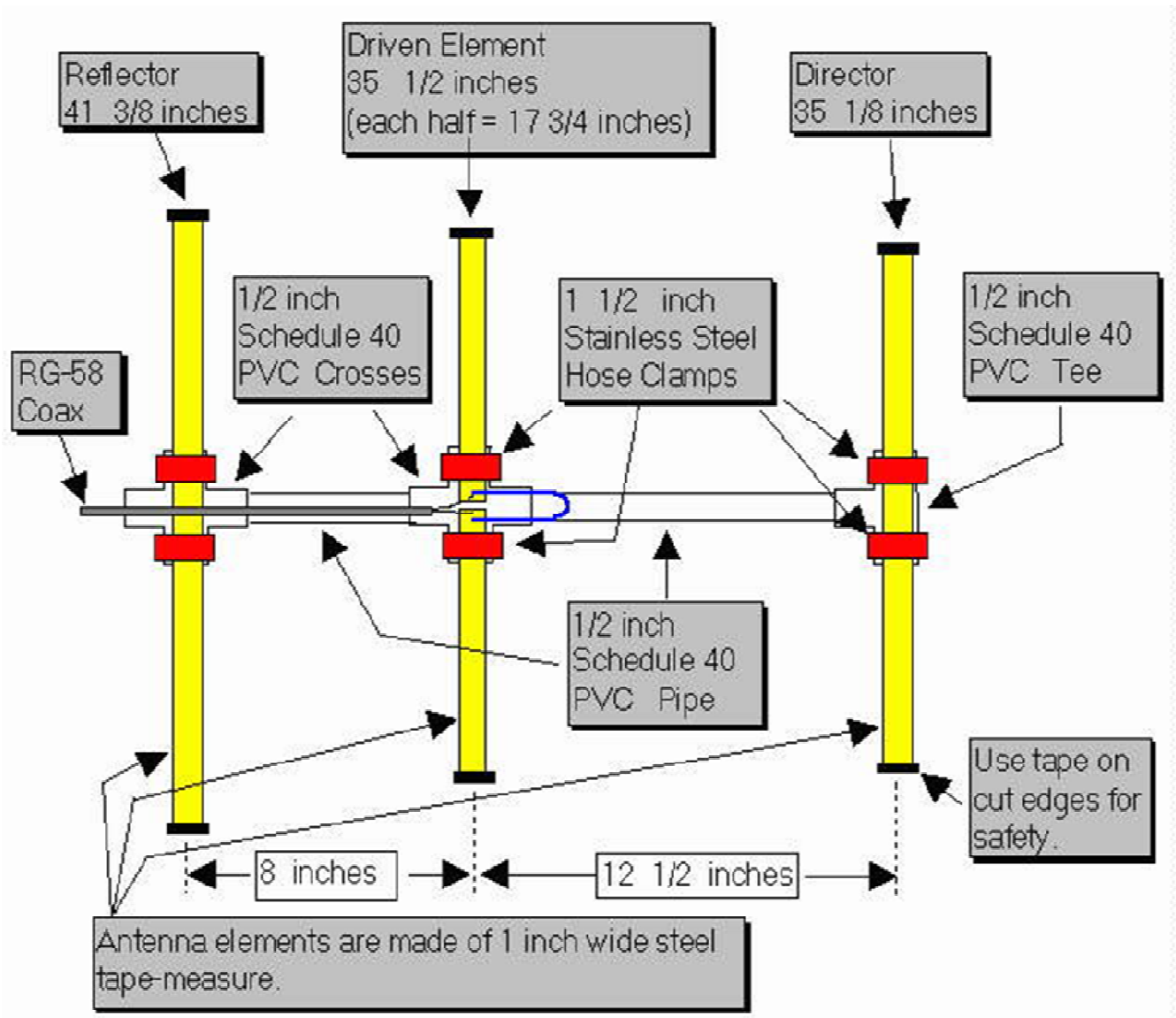
| <u>Description</u> | <u># Needed</u> | |
|-----------------------|-----------------|------------------|
| 1" x 25' Tape Measure | 1 | Free with Coupon |



Tape Measure 2 Meter Yagi

If you wish a slightly neater looking beam, use the self tapping screws. If you do not mind spending a few more dollars for the hose clamps, use them instead. If I were to build another beam I would use screws for the director and reflector, and hose clamps for the driven element. That would give me the best of both methods.

Rubber faucet washers have been used by some builders between the tape measure element and the PVC fittings on the director and reflector. These allow for the tape to fit the contour of the PVC fitting and will make the antenna look better. Now you know what to do with those washers left over from the assortment you once purchased; You know the ones I mean, the washers that do not fit the faucets you have in your house. If you are an apartment dweller, ask around, these things are stashed in almost every homeowners basement or garage.



Construction:

Cut a length of tape measure to 41 3/8 inches. It will be the Reflector element. Cut two lengths of tape measure to 17 3/4 inches. These will be used for the Driven element. Cut one length of tape measure to 35 1/8 inches. It will be used for the Director. Once you have cut the tape measure to length, put vinyl tape on the cut ends to protect yourself from the sharp edges. You will want to scrape or sand off the paint from one end of each of the driven element halves so you can make a good electrical connection to the feedline.

If you are planning to solder the feedline to the driven elements it is best to tin the elements first before attaching them to the PVC cross. If you don't, the PVC will melt as you apply heat to the element. It would be a good idea to also take the time to form the wire used for the hairpin match into a "U" shape with the two legs of the "U" about 3/4 inch apart. Tin the ends of the hairpin if you plan on soldering it to the driven element. If you tin 1/4 inch of each end of the hairpin it will leave 4 1/2 inches to shape into the "U".

You will need to cut two lengths of PVC pipe to use as the boom. One should be cut to 11 1/2 inches. It is used to form the boom between the Director and the driven element. The other piece of PVC should be cut to 7 inches. It will be used between the Reflector and the Driven element. Just about any saw will cut through the soft PVC pipe. I used a hacksaw.

When we mass produced this antenna as a club project, we marked the pipe and used a portable jig saw to cut the lengths in assembly line fashion. It took longer to measure the pipe than to actually make the cuts. Since the pipe is available in ten foot lengths, you can make a few beams from a single 10 foot length. In any case, you might want to cut a few extras lengths for your friends. They will want to duplicate this once they see your completed antenna.

At this time you can pre-assemble the PVC boom, crosses and tee which will support the tape measure elements. I did not use any cement or glue when I assembled mine. The PVC pipe is secured in the fittings with a friction fit.

The hose clamps I used are stainless steel and have a worm-drive screw which is used to tighten them. They are about 1/2 inch wide and are adjustable from 11/16 inch to 1 1/2 inch diameter. Attach the tape measure elements to the PVC fittings as shown in the accompanying drawing. It is normal for the Reflector and Director elements to buckle a bit as it is tightened to the PVC Tee and Cross. You can eliminate this buckle if you use the washers and self tapping screws to attach these elements instead of the hose clamps. I do not think the beam will withstand as rough a treatment as when hose clamps are used.

Upcoming Hamfests**April 15th**

Rarsfest
Raleigh, North Carolina
rars.org/rarsfest

April 22nd

22nd Down East Hamfest
Kinston, North Carolina

May 27th

Durham Hamfest
Durham, North Carolina

VE Testing**2017 VE Testing Schedule**

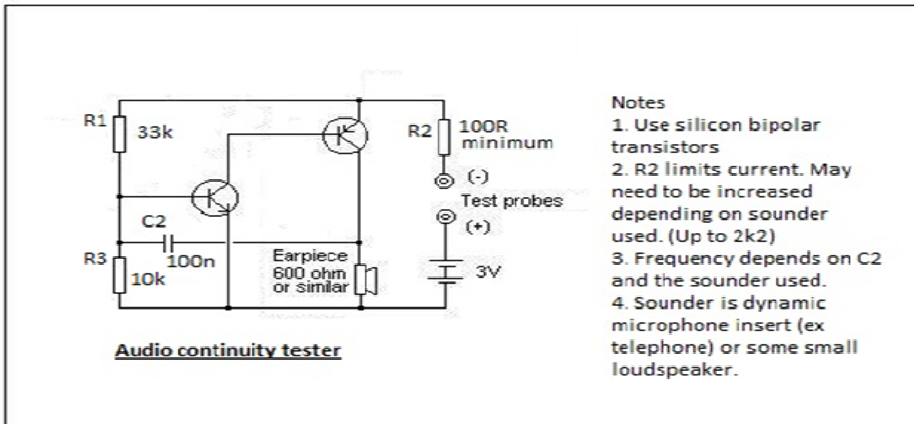
June 10th
August 12th
October 14th

VE Testing Fee for 2017 is \$15. Bring your original license and any CSCE's plus a copy of each. Bring a picture identification.

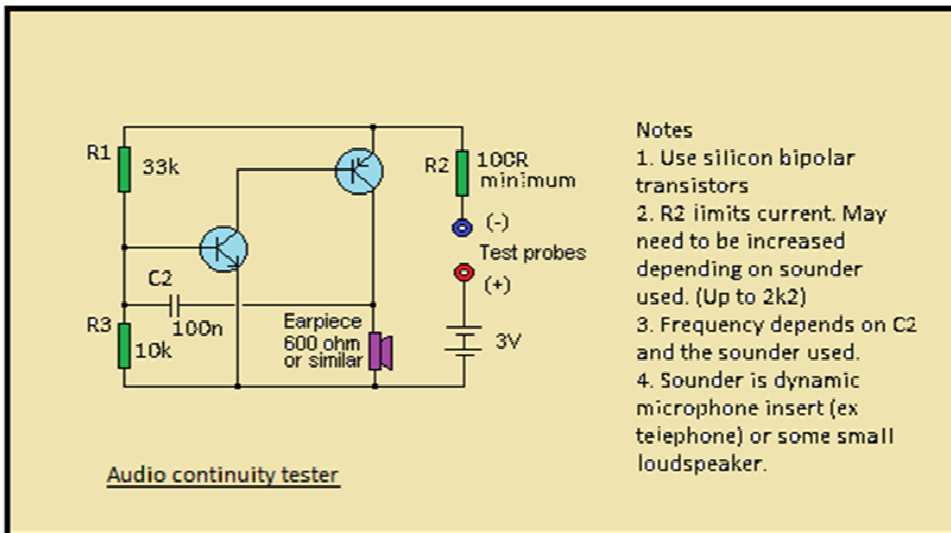
“PLAYTIME”

This month you will see the start of a series of basic circuits that you can make up and play with. Get those bits from the “junk” box and play. Circuits are adapted, modified and tried – obtained and modified from sources such as ARRL, Radcom, EE and some unknown. Only basic information, hints and suggestions will be provided.

Playtime No. 1: A continuity tester.



Test for continuity in a circuit
A low resistance in a circuit will be detected by a change in tone.
Diodes and LED's can be checked. Germanium and silicon diodes will give different tones.
Basic lead checks can be made for transistors - base to collector/ emitter. (Like a diode)



A footnote with more info than the above follows. Also colour was not introduced until much later. The original idea for the series was that they would be “fillers” for the EMDRC bulletins.

Playtime footnote.

Regarding the playtime series, it may be noted that minimum information is provided on components. This is done on purpose as it is expected that anyone who plays with the various circuits presented will use whatever is available in the “junk box” that would be similar to what has been suggested in an article.

The leads/pin numbers of components such as transistors and ICs are not provided as these can be obtained from internet sources or catalogues that may be available. Resistor ratings will generally need not be greater than ¼ watt. You should be familiar with resistor colour codes! Electrolytic capacitors of course need to be selected to suit the voltage of the circuit and often the value is not critical for the Playtime series of articles.

It is hoped that anybody new to the hobby will gain some experience and enjoy the challenge of perhaps making some of the useful circuits.

Eric VK3EAC