QUINTE AMATEUR RADIO CLUB

P O Box 292, Belleville, Ontario K8N 5A2

M E E T I N G

DATE: Wednesday November 18, 1992
TIME: 7:30 p.m.
LOCATION: Room P1 Pioneer Building
Loyalist College
PROGRAM: Speaker: Keith Low
Subject: Computers and Amateur Radio

******* SPECIAL NOTE *******

The first page of this Newsletter will only be printed in the October copy. Please retain for future reference. There will be a copy made available to all new Members. This small change will save us a few dollars each year. VE3DQN

****** CHRISTMAS DINNER ******

The Christmas Dinner will be held at the Mirage Restaurant on December 4th, 1992. The cost of the dinner will be the same as last year $20.00 each this will include all taxes and tips. There will be five choices on the menu.

************ WANTED ************

The Club is looking for volunteers to form a working committee for Field Day 1993. Please contact a member of the executive if you are interested. If there is no response we will have to ask for volunteers Army Style.

After Ham and Eggs on November 21, 1992 there will be a **FOX HUNT!**

Changes to Directory

Change Address of VE3HYN to 90 Golfdale Rd.,Belleville,Ont. K8P 2T3
Phone stays the same.

VE3KFX Change address to 90 Golfdale Rd.,Belleville,Ont. K8P 2T3
Phone the same

Add VE3BPR John MacStevens 1139 Carp Rd. Stittsville Ont. K2S 1B9
613-836-2655

The Club wants to form a committee to start planning a special celebration. This celebration will be to Commemorate FIFTY YEARS OF THE QUINTE AMATEUR RADIO CLUB. Anyone wishing to be on this committee please contact a member of the Executive.

TO ALL Q.A.R.C. MEMBERS

When witnessing severe weather and you wish to report this storm, please contact one or more of the following stations:

EMERGENCY COORDINATORS

VE3MB	John Lester	VE3BPL	Don Davenport
VE3KKK	Ted Goodier	VE3PLS	Paul Stevens
VE3SV	Bob Boyd	VE3MDE	Bill Turland
VE3AFP	Karl Muller		

*** * * * * NOTICE * * * * ***

The Red Cross will be paying for a sandwich lunch for all members who are going to the Level One Red Cross Course on November 14, 1992 at Loyalist College. Thanks to John Lester VE3MB

****** T I P ******

For all members who are interested in ARES. You should carry a pair of large alligator clips so you can connect to a 12 volt battery.

ARES Bulletin October 26, 1992

Report on Antenna system test of October 23 and 24,1992.

As a general observation on performance, it is a great pleasure to be able to say that all of the antennae in place functioned properly. One antenna, the unit at Crow Valley Cons. Auth. was in a temporary location, and its poor performance pointed up the need for these antennas to assure that emergency communications can be maintained.

The first test on 23 Oct. happened to run into a giant inversion. Signals from all over east-central North America

were heard on the 2 metre band. We had considerable trouble at a couple of locations. The solution in part is to prepare ourselves to establish a high power rig when we respond to a call to an emergency. The transceiver is no problem, but power for it could be difficult. Some of our locations have full emergency power, so a 117 vac power supply is all that is required. At the remaining locations, an auto battery is the answer, or a portable gasoline powered generator.

It was clear that "intermod" - intermodulation distortion interference - has grown rapidly. The use of strip line filters and SWR indicators is now mandatory at all downtown sites. Even the better front ends in station quality receivers are not enough to conquer this interference. A supply of filters and SWR indicators must be obtained.

All four net control operators performed very well. Two were in charge on 23rd and two on the 24th. I was pleased to have George Foster VE3GJF operating from Marmora take our net on the 23rd and do an excellent job in the face of such rugged conditions.

It has been my policy to set up unlikely and difficult conditions so that NCO/s and volunteer operators are challenged to perform their message handling.

Speaking now about the radio operators, I can say that we have high quality and courteous operators everywhere. The high standards shown on each of our four nets reflects well on all of us. Only one site was not heard from due to faulty equipment. The operator was there, but the rig quit. He later reported an excellent reception showing that the antenna is working.

On another site, the operator did not find his net, but did indeed perform relay functions on the other net, so all was not lost.

There was quite a bit on non-standard message format use, but I noted that all NCO's got the messages down properly in the end.

For the interests of efficiency and accuracy I think we will all agree that a little brushing up at Club meetings, on our nets, and maybe an ARES net is indicated.

I was a little surprised to note that some of us are not familiar with all of the local repeater call signs and frequencies. I hope that everyone who does not use VHF much will carry a wallet card with all the local VHF data on it.

One or two stations were slow to find their net control because they didn't explore all the repeater frequencies.

One has to expect to search out the best path in a real disaster, so that is the first thing to do always.

Quickly determine which repeaters one can raise and determine what traffic is on each repeater.

Finally, I extent sincere thanks and congratulations to the two dozen people who took part in this exercise.

A JOB WELL DONE!

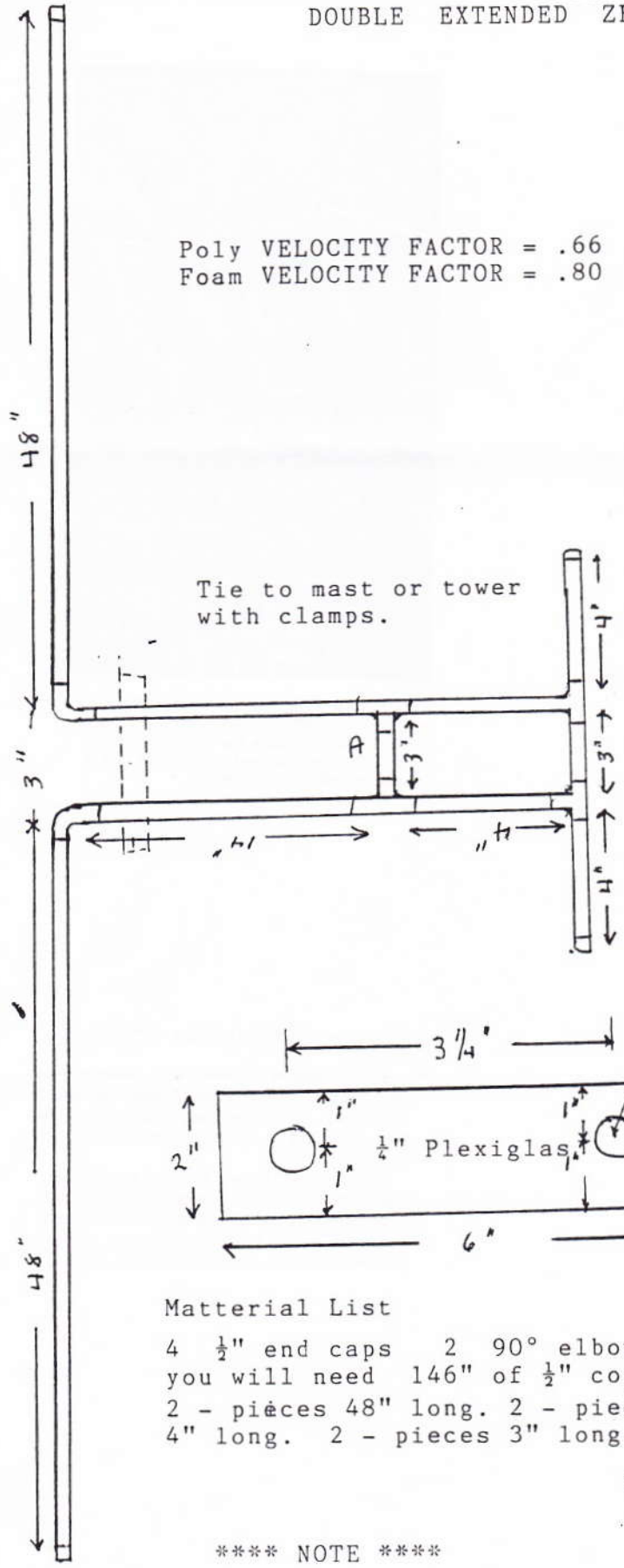
JOHN LESTER
VE3MB - E.C.
Hastings County

VE3KBR - 146.985 -6
VE3TJU - 146.730 -6
VE3KFR - 145.690 -6
VE3PBO - 146.625 -6
VE3MHZ - 146.835 -6
VE3TZW - 154.410 -6
VE3RTR - 145.150 -6
VE3KER - 146.940 -6

Antenna sites that have emergency power supply

Tweed Fire Hall	Yes	VE3RTR VHF Link repeater	No
Madoc Fire Hall	Yes	VE3MB Emergency Coord.	Yes
Marmora VE3TZW	Yes	VE3KBR VHF Repeater	No
Crowe Vally Cons. Auth.	Yes	Hastings Social Services	No
Campbellford Town Hall	No	OPP Dist 9 VHF ANT	Yes
VE3AUU digital packet NODE VE3BEL	No	OPP Dist 9 VE3MHZ repeater	Yes
Loyalist College VE3ALC	Yes	Trenton Hospital	Yes
Lower Trent Cons. Auth	Yes	Frankford Town Hall	No
Red Cross Branch Office	No	Belleville Police HQ	Yes
Belleville Hospital	Yes	Lennox and Add. Hospital	Yes
Deseronto Town Hall	No	Prince Edward Hospital	Yes
Prince Edward Cons Auth	No	Moira Cons Auth	No
C.F.B. Trenton C.F.F.C.	Yes	Trenton City Police HQ	Yes
VE3TJU VHF Repeater	Yes		

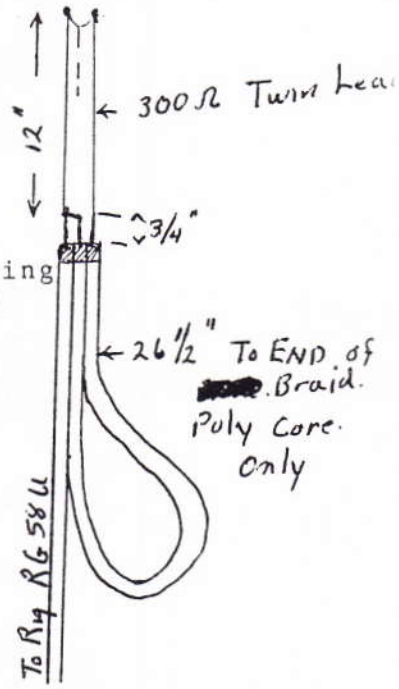
DOUBLE EXTENDED ZEPP)CT. 1986 From VE3LXE



Poly VELOCITY FACTOR = .66
Foam VELOCITY FACTOR = .80

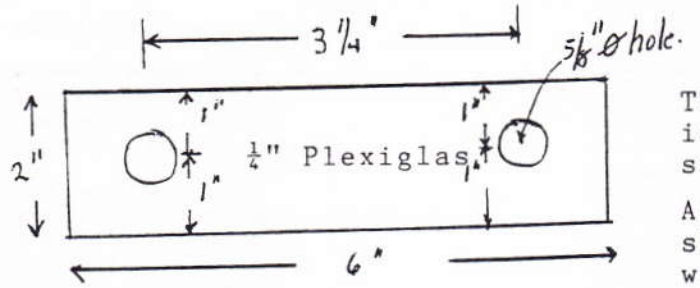
Tie to mast or tower with clamps.

Balun Data



Tie braid together and sloder to shorting bar at point A

300 OHM input point is determined by the lowest SWR. Once the lowest SWR is found solder to copper pipe.



This brace is to be put in place before soldering the pipe.

After soldering, brace should be set in place with silicone or a similar substance..

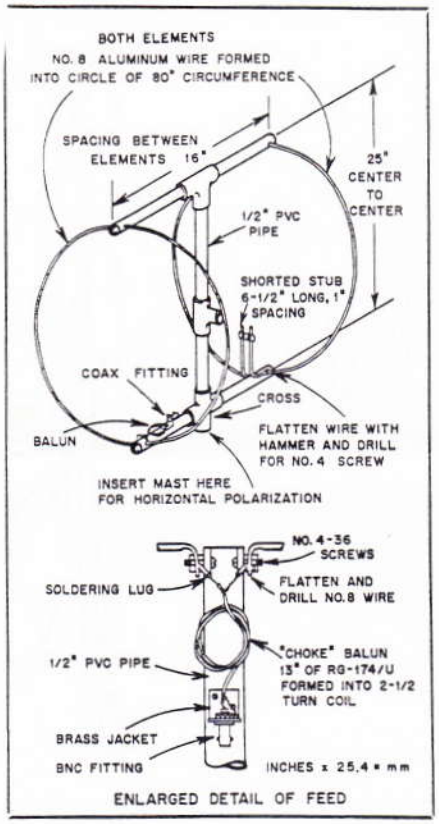
Matterial List

4 ½" end caps 2 90° elbows 4 tees all ½" copper you will need 146" of ½" copper pipe cut as follows 2 - pieces 48" long. 2 - pieces 14" long. 4 - pieces 4" long. 2 - pieces 3" long.

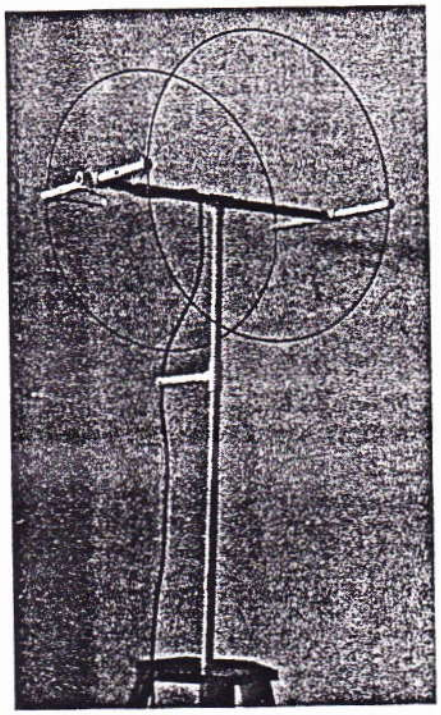
Redrawn by VE3DQN Nov. 1991

**** NOTE ****

ALL MEASUREMENTS ARE ACTUAL PIPE LENGTHS



Two circular elements are featured in this 144-MHz antenna which performs much like a cubical quad. W6HPH designed it primarily for indoor use. It can be vertically or horizontally polarized.



This 2-meter directional antenna can be constructed with PVC pipe and aluminum ground wire. The photo shows the "quad" vertically polarized. Note that the transmission line is supported behind the reflector.

A TWO-ELEMENT 144-MHZ ANTENNA

The two-element circular variation of the cubical-quad antenna for 144 MHz, shown in the accompanying photo and drawing, is well suited for an indoor antenna. It can be used for either vertical or horizontal polarization, gives a substantial amount of gain, yet it requires small space. Change of polarization is easy because of the simple construction detailed in the drawing. With vertical polarization, the coaxial transmission line should be brought out horizontally to a point behind the reflector before being dropped vertically. This arrangement avoids induced currents that could occur on the outside of the transmission line. The movable short on the reflector stub can be adjusted for maximum front-to-back ratio. The point of this maximum ratio is close to the position required for maximum gain. Without any matching device in the 50-ohm transmission line, the SWR of the writer's antenna measured 1.3.

Materials for this antenna are commonly available at many hardware stores and building supply dealerships with the exception of the cable and connectors. The PVC pipe can be stiffened by insertion of 5/8-inch (16-mm) hardwood dowel. With vertical polarization, the top two feet of the mast should be nonmetallic.

This antenna is not only simple to rotate, but also is easily moved about a house or attic. Often, just moving an indoor antenna a few feet can make a 20-dB difference in signal strength.

To determine the best location a steady carrier in the direction of interest will be required. This can be provided by a station across town or a mobile unit a few blocks away. — *Fred Brown, W6HPH, Lake San Marcos, CA*