Quinte Amateur Radio Club

Belleville QRM Radio

P.O. Box 292

Ontario, K8N 5A2.

Newsletter By Don Dalrymple VE3DQN

Meetings: Location: Room P 2 Pioneer Building
Loyalist College.
Date: Wednesday March 18, 1992
Time: 7:30 PM
Program:

Executive:	President	Mike Papper	VE3VMP
	Vice President	Jim Williams	VE3AGT
	Secretary	Tim Pekonnen	VE3HCM
	Treasurer	Steve Sweetman	VE3WOE
	Past President	Norm Moore	VE3NFD

On going Activities:		
Publicity:	Jim Williams	VE3AGT
	Steve Sweetman	VE3WOE
Property	Al Taylor	VE3WV
Newsletter	Don Dalrymple	VE3DQN
Repeater Committee	Al Smardon	VE3OX
	Norm Moore	VE3NFD
Packet Committee	Al Smardon	VE3OX
	Ross Dryden	VE3AAU
Emergency Coordinator	John Lester	VE3MB
	Don Davenport	VE3BPL
Field Day 1992	Len Brooker	VE3ASR
Amateur Radio Course Director	Al Smardon	VE3OX
Mall Display	Mike Papper	VE3VMP
2 Metre Fox Hunt	Ivan Graham	VE3GTH
	Tim Pekkonen	VE3HCM
H.F. Contest	Bob Mitchell	VE3RRM
Refreshments	Bill Campbell	VE3NFP

H ams and eggs, 8:am each Saturday at the Mirage Restaurant 257 North Front Street Belleville.

2 metre net every Thursday at 7:pm. on repeater VE3KBR. swap net to follow regular net.

Regular meeting, 3rd. Wednesday each month excepting July and August.

Regular meetings for the Prince Edward Radio Club are held on the first Thursday of each month except for the months of Dec. Jan. Feb

A 2 metre net is held by the Prince Edward Radio Club every Tuesday night at 7:00 pm. on repeater VE3TJU 146.730 down 600.

*** Note ***
The following was sent in by Alan Lamb VE3TTK

This article is a reprint from the Edmonton Emitter Newsletter.

2 METER ETIQUETTE: HOW'S YOURS?

Keep an ear on our local repeaters these days and you'll hear a welcome trend: plenty of users, and many of them new amateurs, bringing new ideas, new enthusiasm, and new faces to an already diverse and interesting community. Sadly, though, we're also hearing lots of poor operating practice, both from old-timers and from newcomers. Either way, the source is a lack of correct repeater etiquette. Now, some may say, "who cares what I do on the repeater -- I've got my licence, haven't I? I can do what I like." But a repeater is a shared community facility; observing a few common sense rules brings minimum conflict and maximum use for everyone. Here, then, are 10 suggestions and observations, based on recent listening. Do you see yourself in any of them?

1) Don't monopolize the repeater. How often have you heard two stations who are only three blocks apart shooting the breeze on VE6HM, when they could easily be working simplex? If you must ragchew on the repeater, make it easy for others to break in.

2) Autopatch operation: a) Announce you are using the patch; b) Dial, c) Talk; d) HANG UP (#); e) <u>THEN</u> (and only then) ANNOUNCE YOURSELF CLEAR OF THE PATCH. Keep calls short and polite: <u>you</u> are responsible for the language of the party you are calling. Lastly, business calls are not only poor etiquette, they are ILLEGAL, and can cost you your licence.

3) All that's needed to announce that you're on the repeater is to give your callsign once, slowly and clearly. Phonetics are optional, but usually aren't needed. Likewise, when calling another station, a 1 x 1 call is sufficient: "VE3ABC, this is VE3BBC." Period. Endless repeating callsigns on 2 meters is the mark of the truly bum operator.

4) While talking to another station, let the courtesy beep or squelch tail finish before you start replying. This allows other stations to break in if necessary.

5) If you break into a conversation, make your call and then turn the frequency back to those who were on before. That's what you'd like to have happen to you, isn't it?

6) Swearing on the air is against the law, it is extremely bad manners, and shows you to be a mindless foul-mouthed twit.

7) Q signals are abbreviations intended for high frequency CW operation, and are not necessary on voice. It's just as easy to say "I'm home now" as "I've reached the home QTH." or "I'm signing off" instead of "I'm going QRT."And "Destinated"? YUK!

8) Using the 10-codes (10-4 being the most common) quickly makes you extremely unpopular. 10-codes are for CBers; hearing them on the ham bands really irritates most licensed amateurs. For that matter, all CB lingo is a quick ticket to making yourself unwelcome. Be smart: stick to plain language.

9) Politics and religion are no-no's on 2 meters, just as they are on HF. If you don't like the Prime Minister or the Pope, keep it off the air. You never know who is listening.

10) Use the Golden Rule: Do unto others as you would be done to. If everyone uses polite good manners and common sense on repeaters, we'll all be a lot happier.

Bill, VE6ABC

The following information is intended to help you select a frequency for simplex use, repeater use, digipeaters etc. The first step in choosing a frequency is to study the present listings of repeaters, especially those in your area, along with the band plan usage, and come up with a frequency choice. The next step is to contact one of the members of the provincial Repeater Advisory Committee in or closest to your area.

BAND 144 - 148		
FREQUENCY (MHZ)		UTILIZATION
144 - 144.1		Moonbounce and Terrestial CW
144.1	C	CW Calling Frequency
144.1 - 144.2		Moonbounce and CW/SSB Weak Signal
144.2	S	SSB Calling Frequency (QSY on contact)
144.2 - 144.275		AM Narrow Band Modes (ACSSB, SSB)
144.275 - 144.3		Propagation Beacons
144.3 - 144.5	O	OSCAR Sub Band **
144.5 - 144.6		Linear Translator Inputs
144.6 - 144.9		FM Repeater Inputs
144.9 - 145.1		Weak Signal, Digipeater, FM Simplex
145.1 - 145.2		Linear Translator Outputs
145.2 - 145.5		FM Repeater Outputs
145.5 - 145.8	E	Experimental Modes ***
145.8 - 146.0	O	OSCAR Sub Band
146.01 - 146.37		FM Repeater Inputs
146.4 - 146.58		FM Simplex
146.52	F	National FM Calling Frequency
146.61 - 147.39		FM Repeater Outputs
147.42 - 147.57		FM Simplex
147.6 - 147.99		FM Repeater Inputs
		The Frequencies 145.01, .03, .05, .07 .09 are widely used for Packet Radio Contact your local Repeater Coordinator and CRRL for the latest information. *** Canadian Amateurs are reminded that Frequencies in this Sub Band are used by MIR and Shuttle Radio Amateurs.

The following may be of interest to some of you . It is a reprint from the Feb. Newsletter of the Pioneer Amateur Radio Club.

New Hardline Matching Transformer

Ham radio operators, in general, are a resourceful bunch. Most HAMS HAVE SOME EXPERIENCE WITH MAKING SOMETHING OUT OF NOTHING, AND JUST ABOUT EVERY AMATEUR PRODUCT ADVERTISED MAKES YOU SAY, "Why didn't I think of that??" The hardline matching transformers manufactured by ZD Engineering are just such an item. Not only do these matching transformers allow the use of very cheap CATV coax for ham radio, they also perform environmental and social services, as well.

What's So Good About Hardline?

If you're new to ham radio, all of this interest in hardline may be somewhat confusing. After all, why deal with big holes in the wall and stiff, uncooperative cable, when a piece of RG-8 or RG-58 does the same job? The answer is cable loss.

Cable loss refers to the amount of power that is lost on the trip from the transmitter to the antenna. It varies from cable to cable. A percentage of your transmitter power is used up on the way to your antenna due to cable resistance and other factors. this "missing" power is turned into heat which dissipates along the cable rather than being radiated from the antenna.

As you might guess, cable loss increases as the cable gets smaller, and as the frequency gets higher. It also increases as the VSWR increases, which means that you lose even more power in the coax if the antenna isn't properly matched. Loss isn't much of a problem on the HF bands, but on VHF and above it's a real concern. For Example...

Consider a 2 metre transmitter feeding an antenna on a tower, with a coax cable length of 100 feet. An average loss factor for 100 feet of RG-8/U at 146 MHz might be 3.5 dB. A 100 foot piece of 7.8 inch hardline has a loss factor of about 0.6 dB-a difference of almost 3 dB. What this means in terms of performance is that the same difference in radiated signal can be realized by either doubling your transmitter power--or by switching to hardline. (While different varieties of cables have different loss factors, the values presented here represent reasonable averages.)

If hardline is such great stuff, why isn't everyone using it? As usual, the answer is money! prices vary, but a good estimate of communications grade hardline, in amateur quantities, is right around "several bucks a foot." Yikes! Not only that, but even if you get the feed line for free, the connector prices are prohibitive.

As luck would have it, there is one source of free (or nearly free) hardline. The type of cable used for main runs by CATV companies turns out to be a very high grade of hardline, and it comes in 1/2, 3/4, and 7/8 inch sizes. These cables typically run for miles, and s "short end" to a cable company is often anything less than 500 ft. These short ends are often available for the asking-nice long sections of low loss hardline- just haul them away. But there is one problem--it's 75 ohm impedance cable. And then you still need to buy those expensive connectors.

The Solution

Fully aware of all of the above facts, the folk at ZD Engineering put two and two together and came up with six. The ZD Engineering Hardline Matching Transformer allows the use of standard CATV hardline for communications use. Each adapter consists of an appropriate connector (UHF or N) and a quarter wave matching section that mounts on the end of the hardline.

A pair of matching transformers turns a piece of hardline into a flat 50 ohm transmission line (for only $30) It may seem like magic, but the ZD Adapter impedance transformer trick is based on straightforward transmission line theory. One characteristic of a quarter-wave section of transmission line is that it has the ability to match two unequal impedances provided that the impedance of the quarter-wave matching section is of a specific value. The value happens to be the square root of the product of the two values to be matched--in our case, 50 and 75 ohms.

Transformers are available for 144 MHz, 220 Mhz, 440 MHz and 1296 MHz. In addition, straight connectors are available.

But Do They Work?

The proof of the pudding is in the transmitting, and in this case the ZD Transformers worked just as expected. A series of tests was run using both 7/8 and 1/2 inch line, at power levels of 10 and 100 watts.

In all cases the measured loss was exactly what was expected from the coax itself--the transformers introduced negligible, if any, additional loss.

Just think how happy things will be around the house--once you tell the XYL how you saved a thousand dollars on hardline by using ZD Matching Transformers, and then only spent $500 on a new rig.

ZD ENGINEERING
605 Baisley Ave.
Findlay,OH 45840
Tel. (419)424-8765
Price Class $28-$30 per pair

Reprint CARF NEWS BULLETIN

A DELEGATE ISSUE

The question of the lack of an Amateur to serve on the Canadian delegation to WARC-92 threatens to scuttle the negotiations for the proposed single national amateur radio organization. Hopefully, saner heads in CARF and CRRL will prevail and will continue to meet to map out the final stages of the merger program. However, Canada's amateurs have a right to know CARF's position on this issue.

To put it all in a nutshell, DOC asked CARF and CRRL to jointly nominate one Amateur to the delegation. The key word is "jointly". The idea is to work together in a mature and responsible manner. In discussions with key CRRL executives over the past year CARF suggested three respected WARC experienced candidates.

Each is an active Amateur! Each is a prominent and experienced career professional in spectrum management matters. Two of these candidates had already served as joint CRRL/CARF CCIR Study Group representatives. As was the case with the late Bud Punchard VE3UD, who represented Canada's Amateurs at WARC-79, each could be trusted to act in a non-partisan manner.

CRRL refused to accept any of these ITU/WARC experienced professionals and acted unilaterally insisting to CARF and the DOC that their candidate VE3CDM was the only suitable person to represent Canada's Amateurs because of the IARU affiliation. It was "Agree with us or else!".

Without telling CARF, CRRL unilaterally nominated Mr. Atkins VE3CDM in a letter to the DOC. This was ratified by the CRRL Board the day before the historic joint merger meeting at Cobourg, Ontario. CARF was never notified. CRRL sat with us, talked with us, fashioned a merger agreement with us, lunched with us and never once mentioned their action to by-pass our right to share in a "joint" nomination to the DOC.

Next, CARF was informed by CRRL that the DARF Fund was created to send Mr. Atkins to WARC-92 as a resource person for the DOC. This was news to us! What happened to the idea that it was to fund the Amateur selected to serve? CARF was also informed by CRRL that if DOC chose a CARF supported person, then monies from the DARF Fund may be denied to that person. Not nice at all! CARF was a faithful supporter of the Fund but had no say in its creation or in its management. CRRL did!

The head of the Canadian government delegation to WARC-92 assured CARF that there were experienced and knowledgeable Amateurs on the delegation who would look after amateur radio interests at the WARC. While we appreciate the DOC's help and assurances, it left little comfort. Our need and our pride demanded a "jointly" selected Amateur for Canada's delegation.

CARF did try very hard for a reasonable compromise! In the end, VE3CDM went to WARC-92 with the IARU headquarters delegation anyway, and Canada's Amateurs were denied a WARC experienced career professional on their national delegation at the big event in Spain.

We must not end on a negative note! WARC-92 will soon be history. The creation of a single national organization is long overdue. We must devote all our energies to the problems of the real world and most certainly not spin our wheels over issues which could divide us for years to come.

QUINTE AMATEUR RADIO CLUB
" The First 45 Years "

At the meeting on March 5th, the Executive decided to support production and publishing of the above Club history. The project started from a request, by Bob Brain and his executive, that Harold Carruthers prepare a history of the " the beginning and early history of the Club and Executive's activities and projects".

The project never got started until last November because of a number of reasons. However, work has been under way for several months and Harold presented a few problems and choices to the Executive at the above meeting.

Either a simple typewritten account could be prepared for the first fifteen years, without group pictures, (which are available), without cover, and without cost. Alternatively with todays' technology, a book, properly bound, including approximately eight to ten pages of group pictures and snapshots and including the 45 year history of the Club could be prepared. All the work putting the document together would be done by volunteers and the cost is estimated to be between $8.00 and $10.00 per copy. This represents the cost of photo copying pictures, final printing and binding.

The Executive will be involved in the planning and final content and feels it should be a useful reference for the future.

Your contribution to this project will be appreciated.

Some of your collection of pictures of Amateur Radio Activities or Club events may be among those which should be included in this publication.

We are looking for pictures showing members of the Club involved in such activities as Field Day, annual picnics, or Club dinners, erecting antennas, equipment, etc. Please write names, date and location on the back (in pencil).

To obtain maximum use of the photo pages, it may be necessary to "crop" or cut the pictures chosen. If you have duplicates it would be helpful. We are also looking for Club group pictures, around the years 1970 and 1980. A list of all those members included in these pictures would be very, very helpful. Unfortunately, the number of pictures we can use is limited. The price of the book determines the number of pictures used.

We would like to hear about interesting incidents or experiences involving Amateur Radio, as a Club member or as an individual. Anything you feel should be recorded in the history of our Club's first 45 years will be considered.

We are looking for newspaper stories, citations or letters dealing with Amateurs service to the community, an individual or an organization.

It would be interesting to include photo copies of early documents concerning licensing requirements etc. or other DOT documents, either pre-war or early post-war. For example, we have a copy of a 1939 "Licence to use Radio".

We may have overlooked mentioning something. If you think you have a story or any item of general interest, please let us know.

Please phone Harold Carruthers 968-9607. He will be glad to hear from you and will be happy to pick up and return pictures or any other document you wish to loan for this project.

QUINTE AMATEUR RADIO CLUB
Income Statement
July 1, to March 3, 1992.

Income		Expenses	
Membership Fees	1022.00	Office Supplies	121.90
Directory Sales	53.00	Benevolence	281.40
Training Course	846.00	Door Prizes	112.98
Equipment Sales	583.25	Training Course	601.27
Bank Interest	17.38	Field Day	37.69
Equipment Rental	14.00	Misc.	411.67
50/50 Draw	25.50	Newsletter	491.77
Donations	25.00	Ham & Eggs	34.89
	-------	Guest Speakers	167.99
Total Income	2586.13	Insurance	270.00
		VE3BEL	205.00
		VE3KBR	22.00

		Total Expenses	2758.63

Net Income -172.50

Bank balance as of July 1, 1991	1851.08
Plus total Income	2586.13
Minus Total Expenses	2758.63
Equals bank balance as of Mar.3, 1992	1678.58
Balance in Awards Fund account is	284.87

PACKET IN THE QUINTE AREA by VE3OX

VE3BEL-14 (west to RTR) failed about the end of January. Ross (AUU) with Norm's (NFD) help got it back on, early in February, just in time to see VE3RTR-13 (east to BEL) go down. They got it back on for awhile but at this time RTR's nodes to Peterborough and Belleville are not working.

We all suffer from the problem of expecting old commercial XCVRS, designed for mobile use, to go 100% duty cycle on packet.

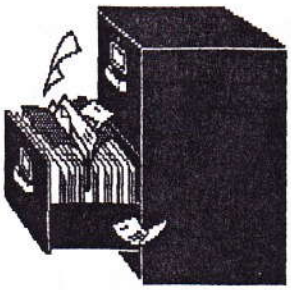
Ross and I have assembled 2 kits to convert the east and west links to 4800 baud (4 times the present rate). These will be installed at VE3BEL when RTR and KER upgrade to 4800 baud.

The main objective has been reached, that packeteers (about 30 around here) are having fun and we learn something new every day.

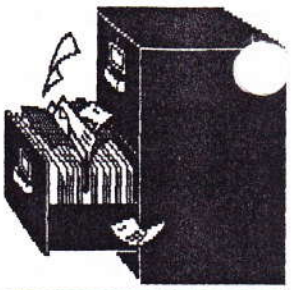
The bulletin will contain a Quinte Area Packet Map next month.

V H X B L F R E Q U E N C Y S L P R E X
C U T R A N S M I T T E R E E A N G D X
H O S C I L L A T O R F R G L C F D O Y
X E C N A T C A E R B U R D O N D I H
T R A N S F O R M E R B E G D L P I D R
R E M E C N A T I C A P A C A P I I Q E
P S P C Y V Y G R R E N J G P A I O D R
A I L P S B I A O A T X I R M D Q E C I
R S I L M H N T T E C A P A C I T O R W
A T F H H D S E N I Y S T S X R A Q M G
L A I H O I R N S G N E X X K A B I X N
L N E M S D A D C E U E V H Q O O I F O
E C R E C E I V E R B M V E R T I C A L
L E R R D O C F R R C A P A C I T O R I

CAPACITANCE
AMPLIFIER
RTICAL
DDLES
OSCILLATOR
REPEATER
DIODE
RESISTANCE
COIL
CAPACITOR
FREQUENCY
OHMS
RECEIVER
REACTANCE
COAX
LONGWIRE
RANDOM
TRANSFORMER
PARALLEL
RESISTOR
CAPACITOR
AMATEUR
BUG
ANTENNA
DIPOLE
TRANSMITTER



March, 1992



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 PERC 2 Meter Net 7:00 Pm. 146.730	4	5 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	6	7
8	9	10 PERC 2 Meter Net 7:00 Pm. 146.730	11	12 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	13	14
15	16	17 PERC 2 Meter Net 7:00 Pm. 146:730	18 QARC Club Meeting 7:30 Room P1 Pioneer Building Loyalist College	19 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	20	21
22	23	24 PERC 2 Meter Net 7:00 Pm. 146.730	25	26 QARC 2 Meter Net 7:00 Pm. Swap Net 7:30 Pm. 146.985	27	28
29	30	31 PERC 2 Meter Net 7:00 Pm. 146.730				