FILE COPY
Feb 82

Feed Back

VE3OSR

146.34 - 146-94

President: Laverne Wyville VE3LPD
Vice. Pres: Moe Hurlbut VE3LPT
Sec.-Treas: Don Richards VE3IDS
Editor: Dick Shave VE3BIS
Technical Director: Don Rowe VE3LXZ

Send Feedback correspondence to- Dick Shave VE3BIS
Box 351,
SOUTHAMPTON. Ont. NOH 2LO

MEETING MINUTES JAN 82

Guests VE3KOI Paul & VE3MAF Drew.
VE3JUO moved that the Sec/Treas buy a brief-case that costs less than $25. Seconded by VE3LPK. VE3LCZ gave a talk on a Snowmobile rally in the Southampton area. VE3CRV reminded the group that a $15.00 donation to the repeater fund is customary for new members. This is not manditory and it is a "one Shot" donation. VE3LCZ gave a description of what the program will be for the February meeting. VE3LZX gave an interesting talk on his new ZX81 Sinclair computer.

Don VE3IDS

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FINANCIAL REPORT JAN 82

Previous balance	$667.20
Dues & reciepts	$ 20.00
Expenditures	Nil
Balance Jan 31/82	$687.20

Don VE3IDS

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1982 MEMBERSHIP ADDITIONS (as of FEB 2/82)

33)	VE3KPK	Fred Kuznicki	Box 694 Owen Sound N4K5R4
34)	VE3LPK	Terry Kalnins	347 Waterloo St.. Port Elgin NOH2CO
35)	VE3KOI	Paul Caccamo	Apt 307 1935-9th Ave E Owen Sound N4K6B
36)	VE3GVL	Ed Bilkey	RR 3 Markdale NOC1HO
37)	VE3AKC	Art Andrews	28 Day St. Galt-Cambridge NIS3P9
38)	VE3AUB	Jack Barrett	10 Painted Post Dr. Scarboro MIH1S9 After Feb 26/82 -RR2 Kemble NOH1S0

P.S. A new complete membership list will be printed in March Feed Back.

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RUMOURS

Jack VE3AUB of Scarboro is moving to RR2 Kemble in Feb. His new QTH is down the road from Ted's cottage. Welcome to the area, Jack.

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FEEDBACK

Despite rain, snow, sleet and the high cost of postage, feedback will be delivered. January feedback was delivered in Port Elgin hot off the press despite the horizontal snow via snow machine.

- -. -..- Andy

VE3MAI

CLUB ACTIVIYIES:

To say the least, it has been a hectic month with all the club related activities that seem to have surfaced.

First, I would like to say thanks to Don Rowe VE3LZX for stepping in at the last moment and giving us a very interesting demonstation on the abilities and capabilities of his new Sinclair ZX81 personal computer. Small package, small price and unlimited hours of enjoyment. The grapevine tells me there will be another amateur in the area equipped with the same unit and I am sure we will hear some interesting comparisons, so that anyone else contemplating such a purchase, will be able to get lots of info.

Secondly, February Meeting Program. I hope that ALL of you have gone through your shacks and gathered the extra components which you will be bringing out for the "Sell" portion of our program. Likewise, I hope that you have now made up your minds on which item you will be bringing out to display in our "show" portion. In order to make this kind of display a real success we need the participation of each and everyone of our club members. So, here's hoping this will turn out to be one of the highlights of 1982. (Lets make VE3BIS jealous. Hi Hi.)

Thirdly, with short notice, Southampton's 9th Annual Snowmobile Marathon, Saturday 30th Jan 1982 turned out to be quite a success. As usual for events of this kind, we ran into some anxious moments.

Out of 49 machines that started, we were able to keep track of 45 for most of the day. There were only 4 which gave us some trouble. Three machines had taken a wrong turn after checkpoint 2 but were finally located in Wiarton some miles off the circuit with slightly dry gas tanks.

Now the puzzle for this month and here is the background.

Machine #19 did real well till checkpoint #5, "Food Stop". After a long pause there, this unit was checked through the next check point at 2:30 PM. Next heard of at 7:30 PM safe and sound some miles off the trail. Still can't figure out why all the free food was bypassed at checkpoint #9.

Operator of Machine #19 .....??

All's well that ends well.

A hearty thanks to the following amateurs who donated their time, patience and equipment to make this exercise a great success under such short notice.

MARATHON

VE3CTQ	Cam Thomas	Checkpoint#1	VE3HIZ	Jim McTaggart	Headquarters
VE3KHQ	Fred Gibson	Checkpoint#2	VE3LPK	Terry Kalnins	Headquarters
VE3AEO	Ted Scarrow	Checkpoint#3	VE3CAC	Jerry Dantzer	Relay Base&Tel
VE3FOT	Harvey Smith	Checkpoint#4	VE3MAI	Rahn McNally	RelayBase&Tel&Mas
VE3BFV	Jim Harron	Checkpoint#5	VE3EFX	Bill Hardie	Loan of 5/8 ground plane
VE3KOI	Paul Caccamo	Checkpoint#6			
VE3DGP	Bill Palmer	Checkpoint#7	VE3LCZ	Andy Kalnins	?
VE3NEG	Bill Kohleman	Checkpoint#8			

ANTENNA PARTY

Terry Kalnins	VE3LPK	Brian Fletcher	Assistant
Andy Kalnins	VE3LCZ	Marlene Kalnins	XYL

Last but not least, thanks to Southampton Snowmobile club for the good food and an enjoyable day.

TECH DIRECTORS SCRAPBOOK

Surplus electronics equipment stores have a certain magnetic attraction to members of our hobby. The following is a list of surplus stores that I am aware of in Southern Ontario. The details are to the best of my sources. Happy browsing.

Hamilton:	Steel City Surplus, 212 King William St.(at Ferguson)	416-526-8551
Kitchener:	K-W Surplus Clearinghouse 327 Breithaupt St. Tues,Wed-10-6,Thu,Fri-10-8,Sat-9-5	519-745-2661
London:	Forest City Surplus Ltd. 781 Dundas St.(near fairgrounds)	519-438-0233
	R.J.Buckland Co. 123 St. George St.(block S of Oxford,block W of Richmond) Mon-Fri 10-5,Sat 10-12:30	519-672-8390 Free Cat.
Toronto:	Active Surplus Annex 345 Queen St. W.	416-368-7936
	Globe Electronics 1925 Avenue Rd.	416-783-1801

Here are three mail order stores whose free catalogues consist of,or include,surplus electronic parts.

Poly Paks,
P.O. Box 942
So. Lynnfield, Mass. 01940

Noramel,
2407 Ste-Catherine St. E.
Montreal, Que. H2K 2J7

Surplus Electro Quebec,
2264 Montee Gagnon
Blainville, Que. J7E 4H5

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SUGGESTIONS:

Longer calls would be appreciated by myself and other hams who operate 2 meters on scan. My scan takes approximately 5 seconds plus 5 seconds for each signal received. I know I am completely missing some calls.

VE3MAI

3.3. Nickel–Cadmium Batteries

The nickel–cadmium system has largely replaced nickel–iron as the standard form of alkaline accumulator (i.e. secondary battery with an alkaline electrolyte), where such cells are vented and construction is basically similar to that of the familiar lead–acid accumulator. It is also now widely employed in sealed cells, in both button and cylindrical configuration, as well as other shapes, so suit various space and capacity requirements. The former (button cells) first became familiar on the general market as DEAC cells (after the name of the company which developed them in Germany—Deutsche Edison-Akkumulatoren-Company), although similar configurations are now produced by a number of other companies.

The nickel–cadmium cell itself is one of the oldest known types. The problem associated with all secondary cells is 'gassing', particularly during charge, so that they have to be vented. The nickel–cadmium system is one in which gassing can be eliminated, and once this particular problem was solved it became possible to hermetically seal the casing, producing a rechargeable 'dry' cell. It is the only secondary (rechargeable) system with which this is practical.

The nickel–cadmium system offers further advantages:

(i) Deterioration of the constituents is virtually absent in either a charged or discharged state so that, unlike most secondary cells, no maintenance whatsoever is required.
(ii) The cells are particularly suited to high rates of discharge.
(iii) Cycle life is at least several hundred and may range up to thousands of charge/discharge cycles.
(iv) Discharge characteristics are substantially flat, i.e. the discharge voltage remains substantially constant under load.
(v) Shelf life is indefinite, stored in any state of charge. If stored in a fully charged condition, a loss of capacity of the order of 20 per cent per month can be anticipated, but the cell does not otherwise deteriorate.
(vi) Shockproof, leakproof construction, with the ability to operate over a wide temperature range (− 40°C to + 60°C), and in almost any environment (e.g. including a vacuum).

Nickel–cadmium sealed cells have only two particular disadvantages for general use. The first is that they are relatively expensive, although this refers only to initial cost. Their long cycle life, with recharging, can make their adoption more economic in the long run for many applications. The second is that the nominal cell voltage is only 1·2 V. A greater number of cells is, therefore, required to supply 'standard' voltages associated with zinc–carbon dry batteries, or lead–acid accumulators.

Internal construction of the familiar DEAC button type cell is shown in Fig. 24. The cell cup forms the positive pole and the cell cover the negative pole, both being of nickel plated steel. The electrodes consist of tablets wrapped in nickel wire gauze and separated by a fine pore separator. Sealing is produced by flanging over the rime of the cell cup together with a plastic washer, which also serves to insulate the cup from the cell cover. Solder lugs are spot welded to each end to provide terminal tags.

Construction of the recently introduced Ever Ready nickel–cadmium button cell is shown in Fig. 25, and differs in detail. This system is based on a micro porous pure nickel matrix which is formed about the perforated nickel or nickel plated mesh forming the electrodes. Connections to the electrode pack is by pure nickel strips welded to the outer casings. The top sealing grommet is of nylon.

Button type cells are produced in capacities ranging from less than 0·1 Ah up to about 1·75 Ah—see Table VI. Batteries, with corresponding capacities, can be made up by stacking the required number of cells in series—e.g. see Table VII. It is better to buy made-up batteries rather than attempt to build up individual cells in series since manufactured batteries have the separate cells welded together (ensuring perfect contact), the whole stack then being covered with shrunk-fit plastic tubing. It is not practical to solder individual cells together (in fact this can damage the cells); and about the only way to produce a 'home made' battery pack is by using a clamped or bolted assembly, like Fig. 26.

Larger capacities are best realised with cylindrical or rectangular cells, although the sizes available overlap—see Table VIII. Such types—and particularly the larger capacities—may be fitted with a resealing safety vent. Fig. 27 shows a typical cylindrical cell construction with such a vent, the materials being otherwise similar to those of Fig. 25. The reason for such a vent is that under conditions of extreme abuse, particularly continuous excessive overcharge, gassing can take place. A hermetically sealed cell can swell and suffer permanent damage under such conditions. A resealing vent enables a little gas to be released should excessive internal pressure built up, then resealing to enable the cell to function normally as a sealed type.

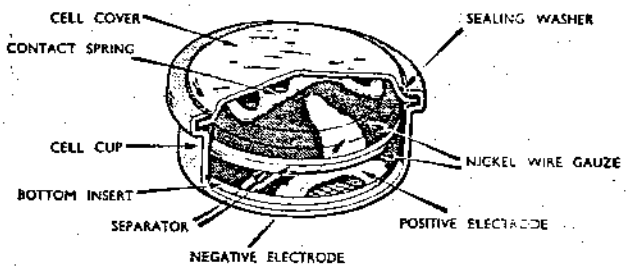


Fig. 24. Construction of a DEAC nickel-cadmium button cell.

TABLE V. LEAD–ACID ACCUMULATORS FOR MODELS AND SMALL SCALE APPLICATIONS

Make	Maker's Designation	Volts	Capacity (A h)	Size in inches Length × Width × Height	Weight (oz.)
Exide*	MFB 9	2	8·0	3·2 × 1·3 × 4·3	21
	BMFB 7	6	6·0	3·2 × 3·2 × 4·0	48
Dryfit†	G 3690	6	0·9	2·0 × 1·7 × 2·0	9·5
	G 3674	6	2·6	5·3 × 1·3 × 2·3	21
Varley‡	UPT 7/4	2	4·0	3·2 × 1·3 × 2·5	11·0
	UPT 7/7	2	7·0	3·2 × 1·3 × 3·5	16·5
	UPT 7/9	2	9·5	3·2 × 1·3 × 4·5	21·5
	RV 20	2	12·0	3·0 diameter × 4·6	44·0
	RV 40	2	25·0	3·0 diameter × 5·7	59·0
	V 613/12	6	12·0	4·9 × 2·4 × 5·2	80·0

* Unspillable. † Sealed. ‡ Dry type.

TABLE VI. BUTTON-TYPE NICKEL–CADMIUM CELLS (1·2 V per cell)

Type	Capacity A h	Diameter in.	Diameter mm	Thickness in.	Thickness mm	Weight oz.	Weight g
DEAC 225	0·225	1	25	0·36	9·0	0·5	14·25
500	0·50	1·35	34·4	0·39	9·7	1·0	28·5
Ever Ready NCB 9	0·09	0·9	22·7	0·21	5·2	0·23	6·5
NCB 20	0·20	1·0	24·8	0·29	7·4	0·39	11·0
NCB 28	0·28	1·35	34·4	0·21	5·3	0·58	16·5
NCB 55	0·55	1·35	34·4	0·37	9·45	1·00	28·5
NCB 90	0·90	2·0	50·5	0·33	8·3	2·26	64
NCB 175	1·75	2·0	50·7	0·59	14·9	3·53	100

TABLE VII. MADE UP NICKEL–CADMIUM BATTERIES

No. of cells	2	3	4	5	6	7	8	9	10
Voltage	2·4	3·6	4·8	6·0	7·2	8·4	9·6	10·8	12·0

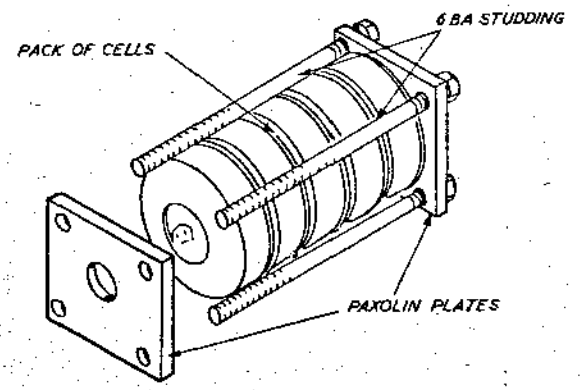


Fig. 26. Method of making up a battery from individual button cells.

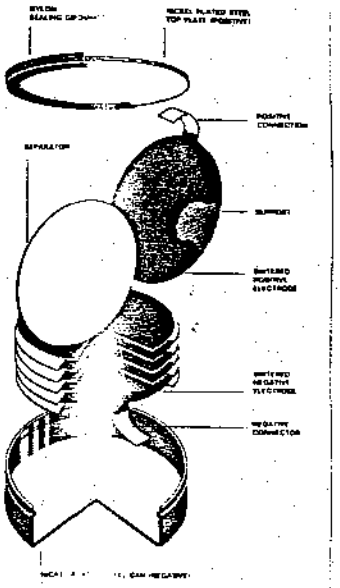


Fig. 25. Construction of an Ever Ready nickel-cadmium button cell.

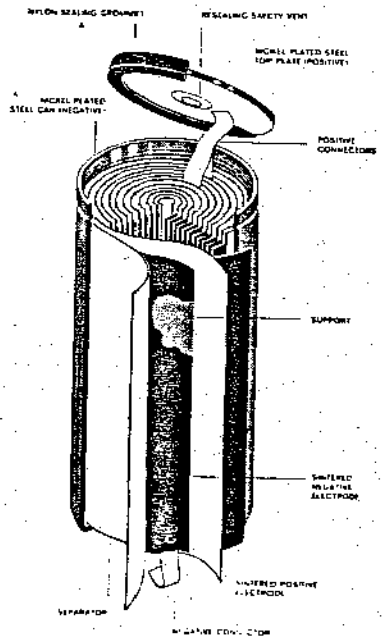
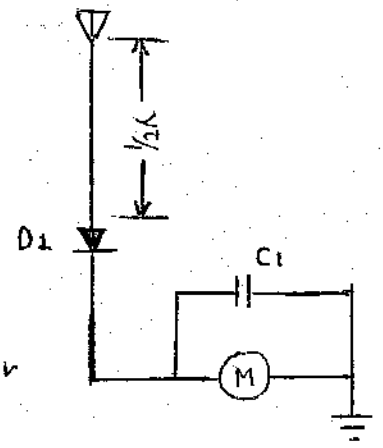


Fig. 27. Construction of an Ever Ready nickel-cadmium cylindrical cell.

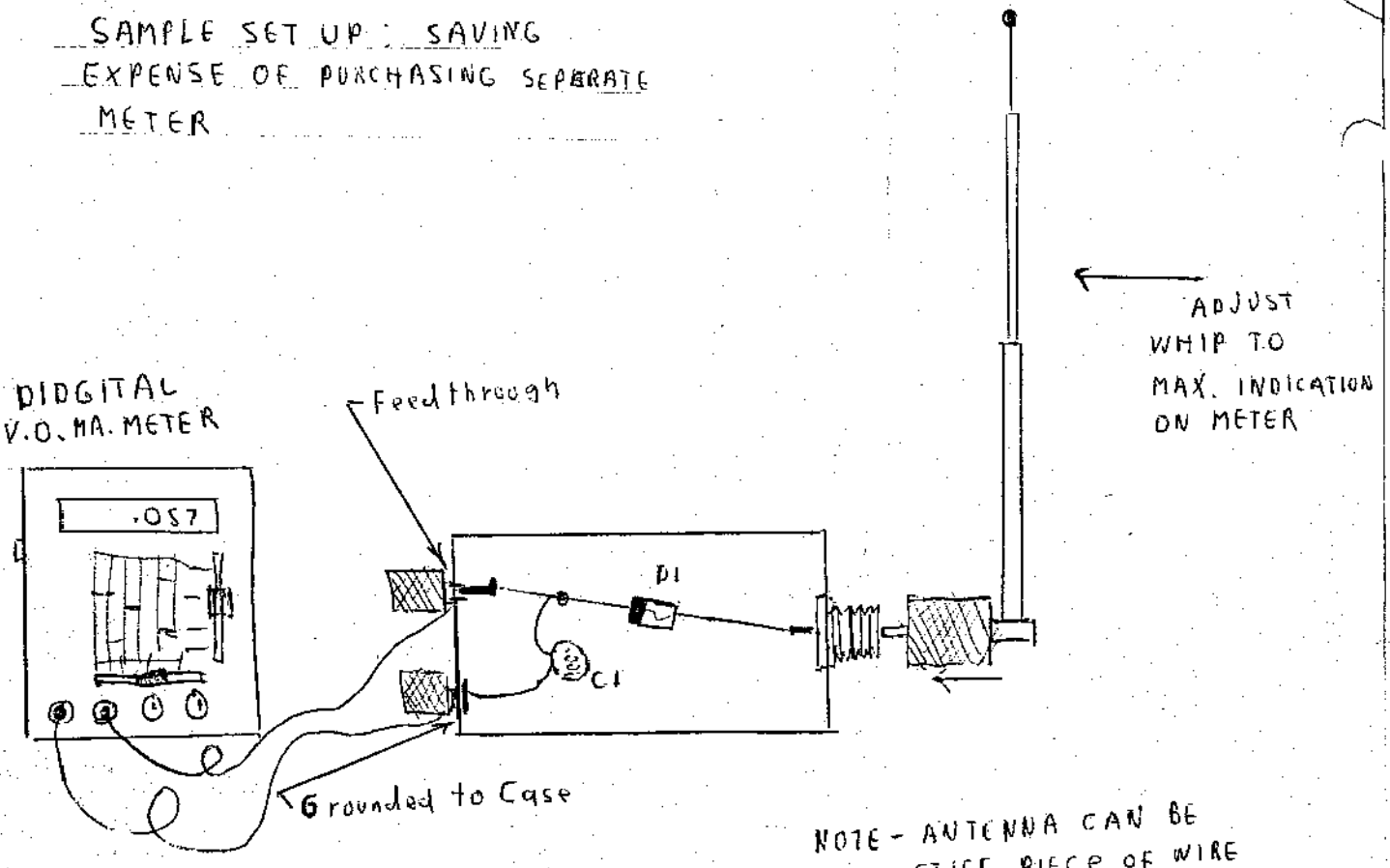
CONTINUED IN MARCH FEED BACK

A Simple Field-Strength Indicator For Adjusting Vertically Polarized VHF Antennas

D1 – IN34A or eq.
C1 – 1000 pf
M – MICROAMMETER or 0-1 MILLIAMMETER



SAMPLE SET UP ; SAVING EXPENSE OF PURCHASING SEPERATE METER



NOTE - ANTENNA CAN BE STIFF PIECE OF WIRE TRIMMED TO MAX. INDICATION & ATTACHED TO FEEDTROUGH TERMINAL OR USE COAX TO CONNECT TO MOBILE WHIP

FROM VE3MAE

KINCARDINE BOY SCOUTS "SNOW-BOUND"

It was the final week-end of the Owen Sound Winter Carnival and the Scout troops were present for the Winter campout at Harrison Park.

For the third week-end in a row the WX was far from perfect and all modes of precipitation were in the air. Snow turned to rain, then to freezing rain, and finally back to snow again. The Scouts were well prepared and had a terrific campout despite the elements.

Sunday afternoon when it was time to head home, Cam VE3CTQ was in contact with Fred VE3KHQ in Tiverton via repeater VE3OSR. Information was relayed back and forth re road conditions and the extra transportation vehicle from Kincardine. Conditions appeared to calm down for awhile so they decided to pack up and head home.

Soon after that decision the Bruce County winds started to blow and it was not long before Hwy 21 was officially closed to traffic. Cam decided to take the boys to a motel and wait till the storm was over.

In order to inform all the boys parents as to the situation, Fred VE3KHQ connected his phone patch to the 2 metre rig and started phoning. One at a time the Scouts took the mike from Cam and had a short reassuring chat with their parents via the 2 metre phone patch.

VE3CTQ ⟷ VE3OSR ⟷ VE3KHQ ⟷ Phone patch

After about 45 minutes all 17 boys had contacted their parents and were ready to head out for Chinese food. What a treat.

The speaker/phone patch at the QTH of VE3KHQ has not been used for many H.F. patches but it sure was useful during one of the many winter storms of 1982.

73 Fred VE3KHQ

WANTED

Crystals for GE Progline - Local Repeaters

Contact - Don Findlayson
VE3JUO

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Used Rotor for handling a Gem Quad. Must have sufficient brake torque to hold 4.2 square feet in our Huron winds.

Contact - Andy Kalnins
VE3LCZ
832-5868

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LOST IN THE WILDERNESS

Machine #19 in the Southampton Snow Machine Rally would be well advised to carry a hand held next year so we can keep better track of him.

The Southampton Base

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DID YOU KNOW

The drivers side windshield wiper always streaks and wears out first.

A road map always tells you everything except how to refold it.

It's not whether you win or lose, but how you place the blame.

If facts do not conform to the theory, they must be disposed of.

The most brilliantly dressed army will usually lose.

Everyone serves a purpose in life, even if it's to be a horrible example.

In order to get a loan, you must first prove you don't need it.

Life is something that happens to you while you're making other plans.

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HOLIDAY PORTABLE: VE3BIS/W4

Received letter from VE3BIS/W4. Ice and snow followed him all the way to Tifton, Georgia. VE3AAE Al, travelling same route, kept Dick out of trouble via 2 meters. Now,in Lakeland, enjoying 73 - 78° F temperatures. The only thing he apparently needs is a few alligators for the many lakes, Hi Hi. Have an enjoyable stay Helen & Dick.

73's from -14°c Port Elgin
VE3LCZ

ARTICLES FOR SALE

2	-	11 Element 2 MTR Beam With Stacking Kit	$100.00
1	-	4 Element 2 MTR 100 Ft. RG8 Ant Spec.	$ 65.00
1	-	FV101B VFO Filter	$125.00
1	-	MFJ Electronic Keyer	$ 85.00
1	-	Yaesu 601 Digital	$200.00
1	-	Dual Paddel "Ham Key"	$ 35.00
1	-	High Mound Straight Key	$15.00
1	-	SWR Field Strength Meter	$ 15.00
1	-	11 Meter Match Box	$ 15.00

Contact - Larry Coutch
1780 - 9 Ave E..,
Owen Sound, Ont.
371-0356

.....

Drake R4B T4XB P/S and Speaker (negotiate) $1000.00
Home Brew Electronic Keyer - Vibroplex Paddle $100.00
Heath HM15 S.W.R. Bridge $ 15.00
GE Pacer 2MTR Less Xtals - Needs two tubes Rig 15W $ 50.00
(assortment of Five) - Marconi - DT34 2 Mts
-- Solid state except 2 final tubes - DT75 2 Mtr $ 50.00
Shure 444 - Microphone - Desk Mic $50.00
Ten meter Mono band in carton - 3 Elements $100.00
15 Mtr Mono band in carton - 3 Elements $125.00
Wilson Handheld with 3 channels and battery charger(negotiate) $250.00

Contact - Walter Stoyko
VE3FFN
519-923-3544

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GBARC Crests for your Jacket $ 2.00

Contact - Fred VE3WF

.....

Realistic DX160 160 to 10 meters continuous
Solid State - like new $125.00

Contact - Jeff Markevitz
VE3KPT

.....

HW-8 QRP Transciever 80.40,20,15 Two Watts Gone over by
Heathkit $150.00
SX - 190 reciever - built in speaker - 15 + 10 meters added $200.00
Yeasu FT-202-R Hand held 2 meter transiever $175.00
Crystals for 1) 146.34-94-OSR 4) 146.19-79-MTR
2) 146.16-76-ARW 5) 146.25-85-LSR
3) 146.52-S- 6) 146.37-97-KSR

Contact - Laverne Wyville
VE3LPD 538-1888

.....

1 - Communications reciever Hammerlund SX42 $100.00
Continuous coverage .55 to 108 MHZ AM,FM and CW-Reconditioned-

Contact - Jim Herron VE3BFV
371-1209

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