

JUN 1982 GBRAC FILE
COPY

Feed Back

VE3OSR

146.34 - 146.94



- | | |
|----------------------------|-------------------------------|
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| 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. N0H 2J 0

PRESIDENTS REPORT

I hope everyone had a great holiday season, and are looking forward to the new years activities.

For those with the new bands there may be some activities on the 10 MHZ band in the near future. Those with (SX - 190) receivers or the like can easily change them with crystals or just padding the crystal for 9.5 MHZ that is already in the set.

The QRP rigs built a few years ago "if anyone got them to go" could be changed from 7 or 14 MHZ to the 10 MHZ without much trouble.

SEE YOU ALL AT THE JAN 21 MEETING.

73's
Laverne

FINANCIAL REPORT

The Christmas Party was a great success. An overall profit of \$90.00 was realized. Quite a few dues came in during December and the balance of \$667.20 was in the account as of Dec 31, 1981. Many thanks to Harvey and Ted and the others who made the party a success.

Don VE3IDS

MEETING MINUTES

There are no minutes to report. Due to the Christmas holidays there was no meeting in December.

SIGNALS

VE3BFZ/W4 Bill Cowan - Sebring, Florida. Wishes all the best to all in this area. Bill has been heard on Snow-bird net 9:30 AM local 21.265 weekdays.

CG5MC Gene or CG5AE Norm - Special calls Moose Jaw Centennial 5 Jan 82 + 2 weeks heard around 14.190 - 14.195 evenings 03:00Z or weekends on 10 meters.

5NOWNL Nancy - Lagos Nigeria 28.465 1600Z weekends.

1982 GBARC MEMBERSHIP AS OF JAN. 6, 1982

1) VE3JUO	Don Finlayson	Box 1056 Meaford NOH1Y0
2) VE3MTV	Norm Biggar	246 13th St E Owen Sound
3) VE3MAE	Iain Harris	237 10th St Hanover N4N1P1
4) VE3AEO	Ted Scarrow	308 12th St W Owen Sound N4K3V4
5) SWL	Arnold Flanagan	RR2 Wiarton
6) VE3CXN	Hank Nuhn	176 7th Ave E Owen Sound N4K2W7
7) SWL	Stan Guzonas	Box 11 Flesherton NOC1L0
8) VE3CRV	Jim Vamplew	664 3rd Ave E Owen Sound N4K2K1
9) VE3MAI	Rahn McNally	660 Eugenie St Port Elgin NOH2C0
10) VE3LPG	Malford Holmes	Box 151 RR6 Markdale NOC1H0
11) VE3MTI	Ernest Madlener	Gen Del Kimberley NOC1G0
12) VE3LCZ	Andy Kalnins	Box 1177 Port Elgin NOH2C0
13) VE3BIS	Dick Shave	Box 351 Southampton NOH2L0
14) VE3LPT	Moe Hurlbut	Gen Del Leith NOH1V0
15) VE3LZX	Don Rowe	1304 4th Ave E Owen Sound N4K2P7
16) VE3NEM	Tom Merner	RR 5 Owen Sound N4K5N7
17) VE3CAC	Jerry Dantzer	308 Craford St Port Elgin NOH2C0
18) VE3LPC	Ray Webber	412 Scott St. Box 1063 Walkerton NOG2V0
19) VE3WF	Fred Koepke	593 23rd St W Owen Sound N4K4H1
20) VE3LPD	Laverne Wyville	Box 365 Meaford NOH1Y0
21) VE3HXW	Ted Brown	Box 816 Owen Sound N4K5W9
22) VE3DXO	Dave Dixon	Box 265 Markdale NOH1H0
23) VE3JFX	Alf Dale	Box 901 Seaforth NOK1W0
24) VE3NEG	Bill Kohlman	Box 2079 Port Elgin NOH2C0
25) VE3BFV	Jim Harron	RR 2 Kemble NOH1S0
26) VE3AAF	Roy Miller	RR 4 Uxbridge LOC1K0
27) VE3DTS	Jack Avis	Box 455 Wiarton NOH2T0
28) VE3IDS	Don Richards	Box 44 Hepworth NOH1P0
29) VE3HXV	Jerry Bradley	Box 40 211 Aiken St Meaford NOH1Y0
30) VE3HXX	Ian Sutherland	RR 5 Owen Sound N4K5N7
31) VE3CTQ	Cam Thomas	Box 1583 Kincardine NOG2G0
32) VE3DKF	Jim Foote	Box 340 Paisley NOG2N0

Any errors or omissions can be sent to
VE3IDS by January 31 by mail or on the
Sunday morning net.

73's
Don VE3IDS

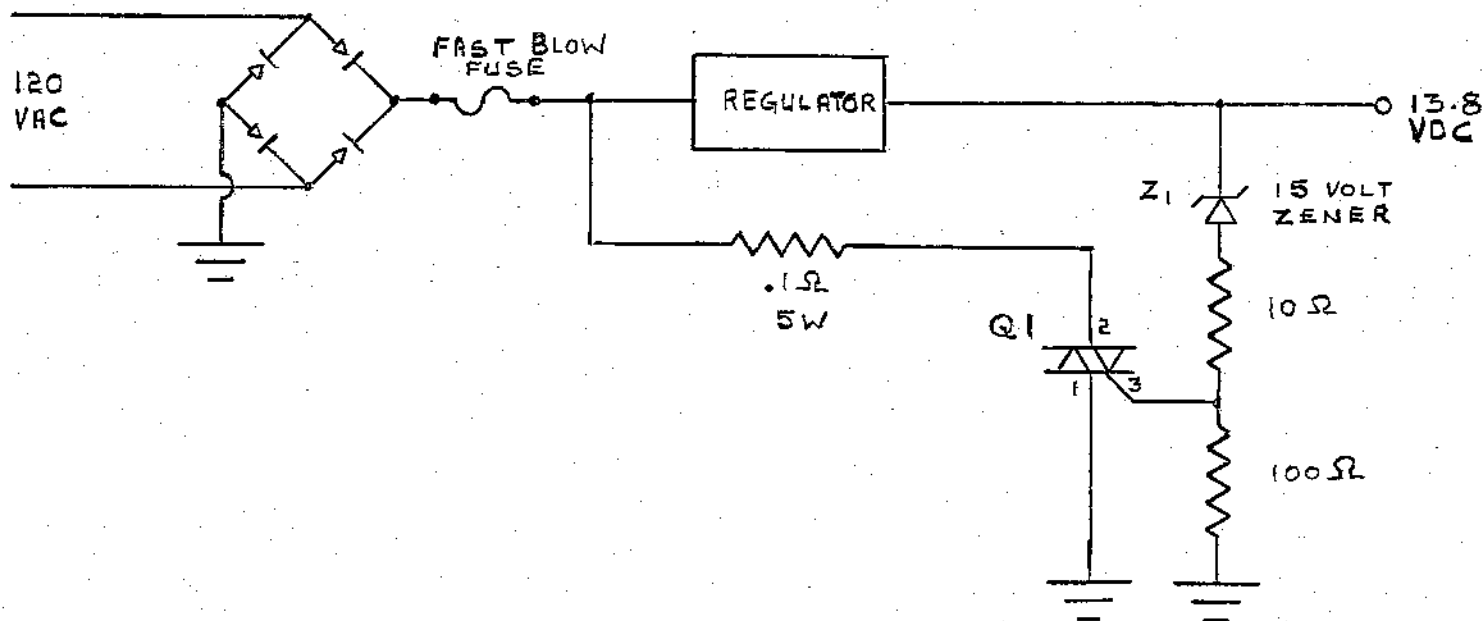
P. S.

For those who haven't paid yet, late dues are \$12.00.
Feedback will be sent to current members only after Jan 31.

TECH SECTION

CROWBAR CIRCUIT

A simple crowbar circuit to protect your rig from high voltage.



Q1 is a triac (MAC 11-3) transistor. I never tried an SCR but it should work as well. What ever you use, it must have sufficient current handling capacity to be able to blow the fuse and not destroy itself.

Z1 is chosen for the level of voltage protection wanted. I choose a 15 volt zener for a 13.8 supply.

Once Z1 conducts Q1 is turned on and shorts out the rectified voltage, thereby shutting everything down, protecting your rig and possible further component damage in your regulator.

Bill VE3NEG

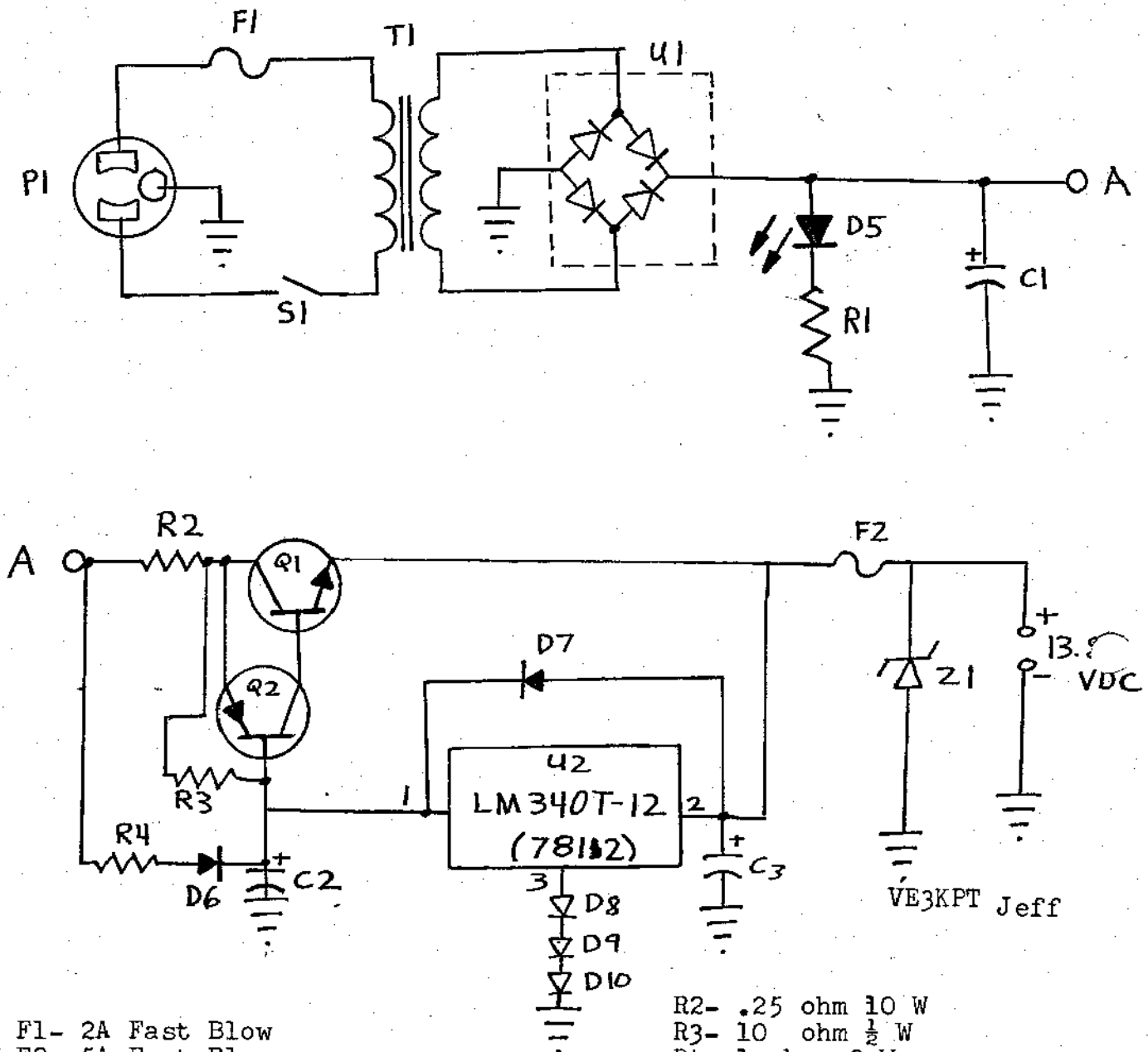
CORRECTION

Correction for parts list in Tech Section of December issue of Feed Back for Circuit.

- | | |
|---------------------------------------|------------------------------|
| Z1 - 12V Zener $\frac{1}{2}$ or 1W | Q1 - 2N2222 or Equiv. |
| R1, R3, R5, R6 - 10K $\frac{1}{2}$ W | Q2 - 2N3906 or Equiv. |
| R2, R4 - 820 OHM $\frac{1}{2}$ W | Q3 - MJE 3055 or Equiv. |
| C1 - 100 uf /4V Electrolytic Tantalum | X - 24VDC Relay SPDT or DPDT |
| C2 - .1 uf Disc Ceramin | |

Five Ampere Power Supply Ideal For 2M Transceivers

* Modified from circuit by AE8Q & WAØUZO

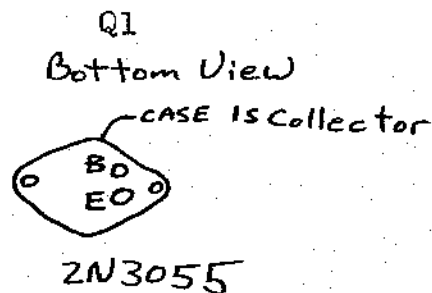
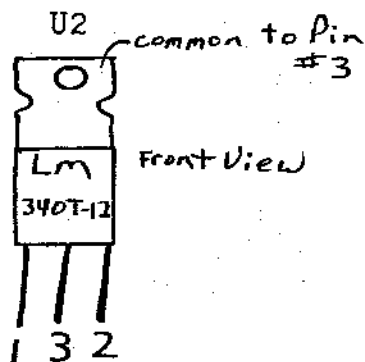


- F1- 2A Fast Blow
- F2- 5A Fast Blow
- S1- Spst switch
- P1- 3 conductor AC plug
- T1- 17 to 30 V Capable 5A
- U1- 25 A Bridge 50 PIV Min.
- D5- LED (276-1632)
- R1- Experiment with a 1K pot to obtain desired brilliance then use proper fixed value resistor.
- C1- 15,000 Mfd. or greater

- R2- .25 ohm 10 W
- R3- 10 ohm 1/2 W
- R4- 1 ohm 2 W
- D6- 1N4719 (any 3A Silicon)
- D7 to D10- Any 1N4000 series
- Q1- 2N3055
- Q2- 2N4037
- U2- LM340T-12 Regulator
- C2- 1 Mfd. Tantalum 35V
- C3- 10 Mfd. Tantalum 35V
- Z1- 15 V 5% Zener 5 Watt

I very recently built this circuit and am very happy with its performance. With a 3 amp load, I got only a 2 millivolt ripple on the oscilloscope.

A few construction pointers: D5 and R1 may be omitted as they are only an on-off indicating circuit. C2 and C3 can be mounted no farther than 3 inches from the regulator chip. Mount u1 and u2 on suitable heat sinks. CAUTION** The metal back of U2 is common with its Pin 3. Q1 should be mounted on a heat sink with the proper hardware--the case of this transistor is common with the collector. The output can be varied by adding or removing diodes on pin 3 of U2. The addition of a diode adds .6V to the output and the removal of a diode lowers the output by .6V. If a 5 watt Zener (Z1) is not available, put 5 of the 1 watt type in parallel. If 15V 5% zeners are not available, go to 16V 10% type. Z1 acts as a crude crowbar circuit that will protect your rig from over-voltage in the event that an earlier component fails and puts the full transformer voltage on the output. D7 protects the regulator chip from reverse voltage breakdown.



I will be more than glad to pick up any components that the members may need for any project at the suppliers in Toronto.

Jeff Marklevitz VE3KPT

An Energy Alternative of the 80s:

Long before nuclear fission, tidal power, solar energy or Quebec heaters fired the imagination of mankind, common alley cats became the energy focal point for science.

YE OLDE CAT POWER MACHINE

About 100 years ago, an anonymous reseacher invented a cat-power machine. In newspapers of that era he advertised his invention as "the energy/alternative of the 1880s."

Writing in an obscure journal, the scientist described his machine as "a curious combination of large and small flywheels, great balance-wheels, bright steel rods, and an almost innumerable number of coils of copper wire all joined to a brightly polished cylinder of brass, one end of which projects into a wire cage filled with ordinary cats."

Our scientist, a master of understatement, relates that "its operation is very simple, but surprising in its results.

"A slight pull on a small nickelplated lever starts the machine. Then, like lightning, from out of the end of the cylinder projecting into the cage there shoots a long steel arm and hand, grabbing one of the cats by the nape of the neck and yanking it into a cylinder, where it disappears with a yowl of more than feline terror.

"In a moment," the professor advised, "the flywheels, the great balance-wheels, and all of the complicated machinery begins to move, at first slowly, but soon with startling rapidity.

"At the proper moment, which is indicated by a small, clock-like attachment, the operator pulls another lever, when from out of the other end of the cylinder, with hair and tail erect, scintillating eyes, and a caterwaul dislocating to one's spinal column, the cat is projected into a tub of cold water prepared for its reception."

This simple operation, surprising as it may seem, extracts from the cat, assures the professor, "electricity equivalent to the power represented by ten horses, working for one hour, and this power can be stored in the cylinder until needed."

No Persians, Please

Because a cat can be processed through the mechanism every three minutes (allowing for drying time, assuming we are not employing fine-haired Persians), and allowing accumulated electricity to be stored, "the power of the machine is practically limitless," says the professor.

"The same cat can be used once every ten hours without in the least impairing its health and general usefulness," he attests.

And Now

If this equipment were to be operated in the 1980's, an around-the-clock-cat-machine would require something in the neighborhood of 200 cats, along with trained personnel for sorting and sometimes guiding by hand into the cylinder those cats not inclined to advance into the industrial age.

continued..

One would also need equipment for the care and feeding of 200 cats.

The cat's natural propensity for reproduction should keep cat power operating endlessly. An editor of a popular journal has, however, questioned the cats' ability to procreate under these unusual, stimulating conditions. To fully account for that disruption possibility, operators of the equipment would be well advised to apply for a research grant to investigate the effects of cat-power conditions on cats. A less expensive, but hardly scientific, alternative to this research study would be to obtain supplementary cats to retain the norm in production.

"Professor is Jubilant"

A science writer of the 1880s reported in an old science magazine that "the professor is jubilant over the success of his invention.

"He is satisfied that he has overcome every difficulty, and intends soon to put the machines upon the market."

Reflecting on the difficult early days of his invention, the field-testing and the delicate job of communicating with newly-formed groups of agitators who believe cats should not be employed in manual labour, the professor says: "I have long believed that the cat is nature's Leyden jar, charged with an enormous amount of electricity - but in such a manner as to require a peculiar process to extract it."

Another Dramatic Device

There is no way of knowing whether the cat-power device's originator was ever able to demonstrate the effectiveness of his equipment when coupled with a device developed by a contemporary, "a Leipsic inventor," as he was described by Frank Leslie's Popular Monthly (We have no traveling agents!) in 1887.

The Leipsic researcher created an extremely dramatic mode of execution for criminals. He, (the researcher) also claimed that it possessed the additional advantage of being painless.

In the July issue of the monthly the technique was described on Page 95:

"The machinery consists of a platform three metres square, approached by five steps. In the centre of the platform is a chair for the condemned man.

"Behind it stands a figure of Justice, holding a pair of scales in her left hand, the scales being movable."

In a collaboration with the cat-machine, a terminal under the platform would be connected to the power source.

To continue with Frank Leslie's magazine: "Wires pass through the legs of the chair into the seat and back, terminating in platinum plates.

Any Objections?

"If the patient objects to seating himself in the chair, he is simply tied in," advised the popular monthly magazine, described on its masthead as "The Cheapest Magazine Published in the World." "Then," continues the description, "after the sentence has been read, the execu-

tioner takes a stick, breaks it, and the place the pieces in one of Justice's scales."

This descends, puts the cat-machine into motion, and ends the matter.

"Death is instantaneous and painless," assures Frank Leslie's Popular Monthly. "The machine has been tried on animals in the presence of a large company of invited guests, and is pronounced a success."

Today, we know that both machines can be no more than minor foot-notes in the ledger of scientific progress. The cat-machine had technical imperfections. The electric chair never became popular outside of grade B Warner Brothers movies.

But both are testimonials to mankind's striving for efficiency, the practical employment of renewable energy resources, and to the eradication of pain.

To these selfless pioneers we say that their experimentations are indelibly imprinted upon the ever-rolling tide of scientific history. The names of the inventors are forever lost in the misty tides of time. It is to their memory we dedicate this record of achievement. It is to us they dedicated their effort.

CLUB ACTIVITIES

("SHOW AND SELL NIGHT")

While head scratching for some programs for this New Year, I received a few interesting suggestions from the membership and wish to implement them. Some ideas take a while to prepare for so for the Feb. meeting night I would like to propose the following.

The "sell" part of the night, say approximately half an hour, will be devoted to a flea market style, where anyone having some extra components can get an opportunity to get together with prospective builders therefore giving them a chance to fill their parts lists.

The "Show" part of the evening, say approximately half an hour, will be devoted to displaying members items such as:

- A) Any project that you have built.
(eg. Feedback Power Supply, Control CKT, Phone Patch, Anten. etc.)
- B) Any project that you are in process of building.
(eg. Breadboarded items, experiments etc.)
- C) Any new equipment that you have acquired and may be of interest to others. (eg. Keys, Keyers, Monitors, Portables etc.)
- D) Any Schematics, Articles etc. - That may be of interest to others.

In order to make this kind of a night a great success, we will need the participation effort from each and everyone of our members. So start scratching your heads or dig through your spare parts boxes and plan to bring something to this meeting as part of your contribution. One never knows, maybe this will turn out to be quite interesting and we could start a trend.

Think about the February meeting suggestion, let me know if there is something else we could incorporate.

73's
Andy VE3LCZ

ARTICLES FOR SALE

1	-	Multi 11 + 120 AC P/S + Mag Mount 5/8 Ant.	\$300.00
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 Couth
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 Mtr
--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 Element \$125.00
Wilson Handheld with 3 channels and battery charger(negotiate) \$250.00

Contact - Walter Stoyko
VE3FFN
519-923-3544

.....
GBARC Crests for your Jacket \$ 2.00

Contact - Fred VE3WF

.....
Oscilloscope Tektronix 533A DC-15MHZ - Excellent Condition \$290.00
Feedline Coax Switch 3 Pushbutton, 3 inputs, 1 output \$ 12.00

Contact - Jim Herron
VE3BFV
371-1209

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

Contact - Jeff Markevitz
VE3KPT

.....
RCA Black & White television camera, solid state
works on standard TV \$150.00

SX - 190 reciever - built in speaker - 15 + 10 meters added \$200.00
Yeasu FT-202-R Hand held 2 meter transeiver \$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
VE3LPD