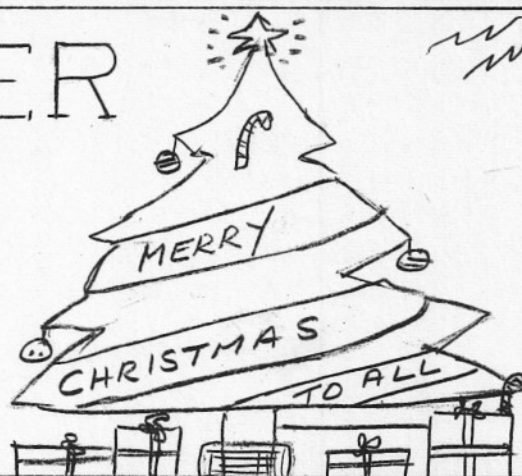


# RAMBLER

AMATEUR RADIO



Vol 11 No 12 OTTAWA VALLEY MOBILE RADIO CLUB, INCORPORATED, Ottawa, Ont. Dec. 68

Editor: Ed Morgan, VE3GX, 755 Hamlet Road, Ottawa 8, Ontario.

## 1968 EXECUTIVE

President: Ted Duncan, VE3GGQ, Tel. 729-6067  
Vice Pres: Dick Gamlin, K7LRV/VE3 Tel. 828-1821  
Tech Adviser: Mike Patriarche, VE3DNJ, 224-4979  
Secretary: Harry Hayes, VE3BEB, Tel. 733-5904  
Treasurer: Ron Hutchinson, VE3GFL, Tel. 749-2948  
Publicity: Gord Hamilton, VE3GAH, Tel. 828-4019  
Past Pres: Ed Morgan, VE3GX, Tel. 733-1721  
Past V Pres: Bernie Best, VE3SH, Tel. 745-3151

POT HOLE NET: Official Club NET. Meets every Saturday and Sunday at 10 AM local time on 3760 kHz. On Saturdays only, the Club Sponsored SWAP NET conducted by VE3YC follows immediately after roll call. All amateurs are welcome to participate.

MONITORING FACILITY: VE3CGO monitors 3760 kHz SSB and 146.940 MHz FM daily from approx 8 AM to 6.30 PM for mobile or out of town traffic. Call VE3CGO if you have traffic for Ottawa, require assistance, telephone calls etc.

## NOTICE OF MONTHLY MEETING

PLACE: NRC Sussex Street, Room 3039

TIME & DATE: 8.00 PM THURSDAY 12 December 68

### PROGRAM

#### BUSINESS

ELECTION OF 1969 EXECUTIVE: (To be conducted by K7LRV)

FREE PRIZE DRAW: Only 1968 membership cards are eligible. (Don't forget yours) Lots of prizes!

#### COFFEE AND COOKIES

#### RAG CHEW

### REPORT ON THE LAST MEETING

Mike VE3DNJ our Learned Technical Adviser gave a very interesting talk on digital integrated circuits. I am certain that he convinced us that they are here to stay and that they are now within pocket book range of the average radio amateur. He demonstrated a home brew keyer using these devices which had many desirable features including dot storage. Mike is a very enthusiastic solid state man as evidenced by his interesting series of articles in this publication. Check page 3 of this issue for the latest. Many thanks Mike for your excellent presentation.

(b) VE3DNJ's Notice of Motion to amend the constitution with respect to the limitation of expenditures was passed as stated in the November issue of the Rambler.

(c) VE3GFL's Notice of Motion also was passed but was amended at the meeting



to read as follows: "The Ottawa Valley Mobile Radio Club, Incorporated should be officially represented by the President or someone personally delegated by him at all Ontario Provincial and National Conventions of interest to the Club. The official delegate may be granted token financial assistance at the discretion of the membership. The official delegate shall submit a written report on his return for the Club records."

CHILDRENS CHRISTMAS PARTY - Sunday 15 December 68

As announced in the last issue of the Rambler, this popular event will be held at the same place as last year i.e. in the basement of Mount Calvary Lutheran Church, 933 Smyth Road near the Elmvale Shopping Centre. All members have been canvassed to ascertain the ages names etc. of all children within the age group of 0 -12 years. The Club will provide a present for every child attending as well as the usual ice-cream, cartoons etc. There will also be refreshments for the adults. Each family (regardless of the number of children) will be assessed \$1.00 at the door and have been requested to bring half a loaf of sandwiches and in some cases, cookies as well. Time will be from 2 PM until approx 5 PM.

REPORT ON THE DINNER

An unqualified success! 29 Members, XYLs, YLs attended. The food was excellent and the Club provided some wine to complement the meal. After the last fingers had been licked, about 20 of the gourmets completed the evening with a trip to the Jazz Club to listen and dance to the strains of traditional New Orleans and Chicago style jazz. A most enjoyable evening was had by all !

BUDGET 1969

RAMBLER PRINTING EXPENSES	\$30.00	INCORPORATION FEES	1.00
STATION LICENCE VE3RAM	10.00	P.O. BOX 6161	6.00
MONITOR STATION REPAIRS	10.00	ENVELOPES STAMPED	75.00
2 METER RPTR LINE RENTAL	12.00	FIELD DAY	15.00
CHILDRENS XMAS PARTY	75.00	COFFEE CUPS	12.00
ANNUAL PICNIC	15.00	COFFEE, CREAM, SUGAR COOKIES	30.00

GRAND TOTAL \$291.00

ELECTION 1969

As per the last bulletin, the following have indicated to the Nominating Committee their willingness to serve in the capacities indicated:

- President: Mike Patriarche, VE3DNJ
- V Pres: Gord Beaman, VE3DMU
- Tech. Adviser: Jack Stauffer, VE3DF
- Treasurer: Ron Hutchinson, VE3GFL
- Secretary: Gord Hamilton, VE3GAH
- Publicity: Ron Tughan, VE3FBT

The above does not preclude nominations from the floor. The President, V.Pres and Tech Adviser must be active mobilers. Please contact your man before the election to ascertain if he is willing to serve. An additional nomination from the membership will ensure an election. K7LRV will conduct the election assisted by VE3FXG and VE3CGO. DONT FORGET YOUR 1968 MEMBERSHIP CARDS WHICH WILL BE USED FOR THE MULTI PRIZE DRAW.

GREETINGS

Your Executive extends their very best wishes to you and yours for a very Merry Christmas !

RAMBLINGS

VE3GMN Nick is going on course to Florida 20 Dec 68 --after completing the course he will take up a new post in Nfld. The family will reside in N.S until Nick finishes the course---best of luck to you ! VE3DJT Al is now working and residing in Toronto. --- VE3DNJ and family are off to B.C. for Xmas and New Years ---a well earned rest from studies at Carleton ! VE3DWK Doug is to be congratulated for winning the PRD Electronics contest. Dougs entry was selected from a world wide group of entries from factory personnel and independent agencies around the world. His prize a new 25" colour TV. Congratulations Doug. --- VE3CJD Ed is off on a 2 months course at Borden --- VE3FXG Tony has a new job with Northern Radio -- congrats Tony --- 3CGD Art is busy building his home in the pines ! ---it is reported that the trees are thick enuff to conceal even the most elaborate antennas --- 3DQM Bill is still working every evening on the addition to his house --- VE3GGQ Ted is now a civilian and has a civy job to prove it ---congrats Ted and the best of luck to you on civy street 3VI Mac has a new color TV and he and Mary are enjoying it very much --- 3GFL Hutch has moved to a new aprtment QTH--please note the new telephone number in Executive listing --- -30- 73 & Happy Mobiling -MERRY XMAS



TECHNICAL TOPICS: Low Voltage Power Supply

One piece of equipment which is missing from the majority of ham shacks, and one which is a necessity for all solid-state circuits, is some type of regulated, ripple free, low voltage D.C. power supply. Those members of the O.V.M.R.C. who are also O.A.R.C. members will recall having seen such a supply (designed by VE3DF) in the November "Groundwave". It should be noted that the Groundwave power supply uses the rather old-fashioned concept of "discrete" components. In line with Mobile Club policy of maintaining a technological lead on the opposition, we are presenting this month an integrated circuit power supply whose specs exceed those of any power supply available for less than \$100. If all parts for this supply are purchased new, total cost would be under \$25, including cabinet etc.

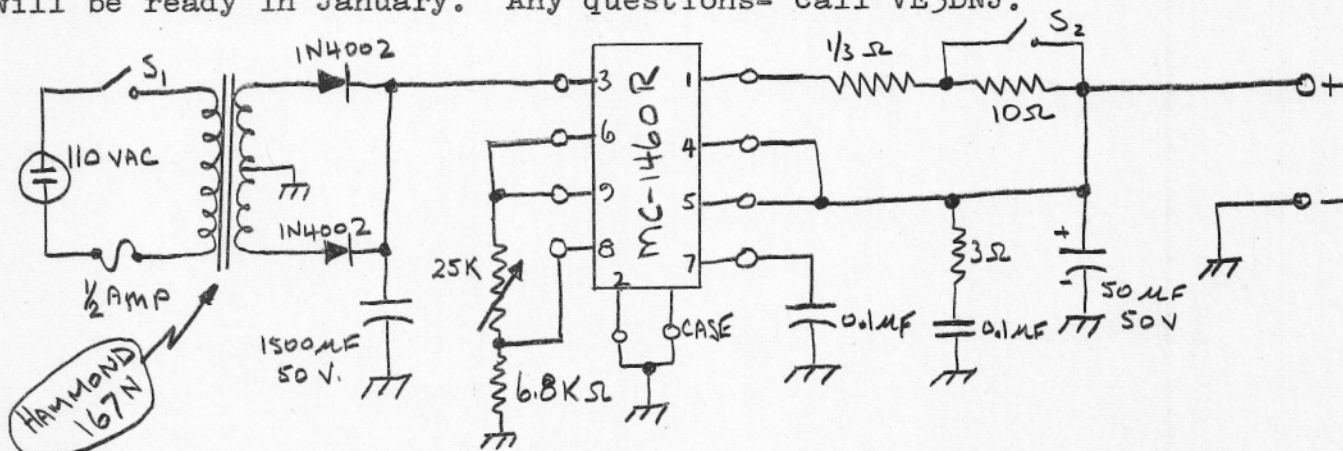
The heart of the supply is a new integrated circuit voltage regulator announced about one month ago by Motorola- the MC-1460 R, available through Cesco for about \$9.50. To put it crudely, you are getting twenty transistors, two zener diodes, 8 silicon diodes and eighteen resistors for your money; and you don't have to figure out how to hook them up!

In the circuit shown, the 25K pot will set the output voltage from 3.5 v. to 16 v. at up to 1/2 amp. There is built-in current limiting, controlled by S<sub>2</sub>. With S<sub>2</sub> closed, short circuit current is limited to about 500 ma to protect the supply. With S<sub>2</sub> open, short circuit current is about 65 ma to protect any new circuit which you are powering from the supply (the alternative to the smoke test, which is not recommended for solid-state circuits). The 1/3 ohm resistor which is associated with the current limiting switch can be made from about 8 feet of #26 enameled copper wire, the length of which should be adjusted to set short circuit current at 500 ma. The integrated circuit, in its TO-66 type can should be mounted directly on the chassis for good cooling.

The calculated performance of the power supply is as follows:

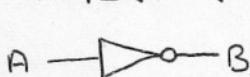
- (1) For 10 v. change in line voltage, output changes .00074 v.
- (2) From output current of 0 to 500 ma, output changes .01 v.
- (3) Ripple is less than .0004 v. RMS at full load.

It should be pointed out that the supply has not yet been built by the author, but the circuit is virtually guaranteed to function as advertised. For those that are faint of heart, an operating model of the power supply will be ready in January. Any questions- call VE3DNJ.



TRUTH TABLES (as promised at last meeting)

INVERTER



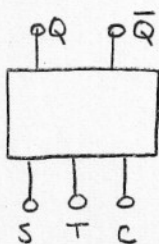
A	B
1	0
0	1

GATE



A	B	C
1	1	0
0	1	0
1	0	0
0	0	1

MC-790 JK FLIP-FLOP



- S = SET
- C = CLEAR
- T = TRIGGER
- Q<sub>1</sub> = Q BEFORE TRIGGER PULSE
- Q<sub>2</sub> = Q AFTER TRIGGER PULSE.

S	C	Q <sub>1</sub>	Q <sub>2</sub>
1	1	1	1
0	1	1	0
1	0	1	1
0	0	1	0
1	1	0	0
0	1	0	0
1	0	0	1
0	0	0	1

-VE3DNJ-