### CW OPERATING AWARD" ENTRY FORM FOR THE "ORDER OF THE GAVEL

own call sign and must contain the standard report i.e. NAME, below to compute your score. Please submit this form not later than the February 1992 RST, CALLSIGN and QTH. Fill in the application blanks inclusive. A valid QSO must be in the CW mode using your Include QSO's from 1 January 1991 to 31 December 1991 the March 1992 General Membership Meeting. The judges may want to see your logs before making their final decision. General Membership Meeting. The trophy will be awarded at

| A      | A. number of QSO's under 10 watts (non DX) X5 =  | X5=         | points        |
|--------|--|-------------|---------------|
| B.     | B. number of QSO's under 10 watts (DX) X5 X5 =   | X5X5=       | _ points      |
| Ü      | C. number of QSO's 10 to 200 watts (non DX)_   | X2=         | points        |
| Ö      | D. number of QSO's 10 to 200 watts (DX)  | X2 X2=      | _ points      |
| in     | E. number of QSO's over 200 watts (ALL)  | =points     | ıts           |
| נון    | F. Add lines $A+B+C+D+E = points$  |             |               |
| No     | Now use one of the following equalizers to obtain your score:  | your score: |               |
| ပ်     | G. Licensed 3 years or more, reduce F by 25%: F X .75 =  | X.75=       | points        |
| H.     | H. Licensed 2 to 3 years, reduce F by 15%: FX.85 = L. Licensed 1 to 2 years, reduce F by 10%: FX.9 = |             | points points |
| j.     | J. Licensed less than 1 year: F X 365/(no. days lic'd)=_   |             | points        |
| Dat    | f Licence(considered   | QSO on your | own call      |
| Addres | Address  | 118161      |               |
| SCC    | SCORE: points (one of G to I)  |             |               |

points (one of G to J)

### Hamilton

### Amateur

### January 1992

### (Established 1932)

### Weather Office e Hamilton

from an expert!

What goes into weather

recasting?

What information can con And of what use is it?

LATE CHANGE: PACKET Meeting: 15 January 1992 - 20:00 hrs Nash Auditorium - Hamiliton

## HARC EXECUTIVE FOR SEPTEMBER 1991/92:

| PRESIDENT: PAST PRESIDENT: VICE PRESIDENT: VICE PRESIDENT: SECRETARY: TREASURER: TREASURER: MEMBERSHIP:   |
|---|
| MWESA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA<br>MOSSA |
| Flore Manga<br>Jim Walsh<br>Fred Robinson<br>Everett Englert<br>Emeley Witched<br>Mark Gibeon<br>Paul Webb  |
| 578-1789<br>689-6839<br>575-5197<br>385-0829<br>627-0333<br>389-4308<br>574-0818  |

# HARC COMMITTEE CHAIRPERSONS FOR 1991/92:

| nick 383-7338<br>383-808<br>689-8839<br>by 527-7175<br>k 628-4131<br>left 385-0879<br>con 529-1603<br>con 575-5197<br>pon 575-5197<br>aid 388-8383<br>on 629-1603<br>mp 570-1960<br>560-1960<br>560-1960<br>560-1960<br>560-1960<br>560-1960 | George Clenick Dave Bruton Dave Bruton Jim Walsh Bernie Granby Shart Fedek Everett Englert Kelth Johnson Stan Bollbruch Fred Robinson Fred Robinson Fred Robinson Fred Robinson On Graziane Don Graziane Don Graziane Don Graziane Don Graziane Paul Hazen Penul Hazen Bernie Granby | SENACY<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON<br>VESSON | HISTORIAN: PROPERTY: BULLETIN EDITOR: BULLETIN EDITOR: EDUCATION: EMERGENCY COORD: FIELD DAY COORDINATOR FIELD DAY COORDINATOR FIELA MARKET: HEALTH & WELFARE: PROGRAMS: PUBLIC LIASON: HOSPITALITY COORD: CHRISTIMAS DINNER PLAN SWAP NET CONTROL: REPEATER: TECHNICAL: VESINCF LICENCEE: VESINCF LICENCEE: VESINCF LICENCEE: VESINCF LICENCEE: VESINCF LICENCEE: |
|--|--|--|--|
|--|--|--|--|

## ORDER OF THE GAVEL CW OPERATING AWARD

It's time again for the Order of the Gavel CW Operating LContest. If you are one of those who believes Morse Code sounds like music, dig out your logs for last year, fill out the entry form, and make sure the executive gets your entry before the February General Meeting.

### A. Purpose

To promote the use of CW and to stimulate an interest among the newer Hams to operate in the HF bands.

#### B. Rules

- 1. The event is open to all members of the Hamilton Amateur Radio Club.
- The award may only be won by a member once.
- 3. The contest will be an annual event.
- 4. Only the previous twelve months will be considered, from January 1st through December 31st. In the case of a Ham of less than twelve months, the score will be prorated by dividing 365 by the number of days licensed, times the score of points attained.
- 5. The following point system will be used to decide the winner:

200 watts or more input - 1 point per QSO 10 to 200 watts input - 2 points per QSO less than 10 watts input - 5 points per QSO

### Notes from ilAKC - 1

## THE PRESIDENT'S MESSAGE

As the holiday season comes to a close, I hope you have all had the best that the season can offer. I hope that 1992 will be a happy and prosperous year for every one of us.

I am happy of my position in the club, but sometimes I keep losing my best executive members. I doesn't mean they do not like what they do, they have just chosen another destination where the sun is brighter in the winter months. I wish all the best to VE3DNB and VE3RBH. They have done a great job for the club over many years. Unfortunately, when we lost a secretary, we also lost a treasurer because they are a husband and wife team. Many thanks and best wishes to Ron and Ruth in their new residence. Their positions were filled at the executive meeting held on December 20, 1991 and I believe our new secretary and treasurer will do their best for the rest of the running year.

Again, I have to congratulate Keith VE3DKJ for organizing a wonderful Christmas dinner held at Izzy's Restaurant on December 18, 1991. Keith reported that over 30 people were in attendance. We all enjoyed a good meal and excellent door prizes. To my best friend Jim VE3SON, he won a dinner for two and even if I drew my own ticket (it wasn't fixed - honest). The only complaint I have to make was that it was a very cold night, but what can you expect for December. Again, Keith my compliments on a great job - well done.

## MORE "ST. CATHARINES" FLEAMARKET DETAILS:

OPEN 8:00 AM TO 2:00 PM, TABLE SET-UP AT 6:30 AM

ENTRANCE FEE \$4.00, CHILDREN UNDER 12 FREE

TABLES: HAM TABLES \$9.00,

DEALER TABLES \$12.00, one entrance fee incl

Tables sold in advance, tables not set up by 8:00 am may be resold. Final cut-off date for tables 24 January 1992.

Address: N.P.A.R.C. Inc.

c/o Kevin Lemon VE3RRH

11 Bartlett St.

St. Catharines, Ont. L2M 5K8

416-934-5117

TWO GRAND PRIZE DRAWS!

YAESU FT-5200 DUAL BAND FM MOBILE YAESU FT-470 DUAL BAND FM PORTABLE

Grand Prizes supplied by RESONANT TECHNOLOGY INC.

**EVENING DINNER-DANCE 6:30 to?** 

TICKETS \$22.50 incl. chance for Grand Prizes

Our editor VE3SON is always looking for something to add to our bulletin, if you have any input for the bulletin, please contact Jim. Don't worry if you think it is not appropriate for the bulletin.

Since it is the beginning of the year, I have stretched my letter a little longer than usual, next month I will shorten it up. But, once again I would like to mention that the Red Cross is always looking for blood donors and the club is also looking for a group to go up and donate to the Red Cross. Remember, tomorrow we may need what we give today.

I would like to congratulate the executive committee persons for the great job and I hope that in 1992 we will double the harmonica's to each one of us.

If I have forgotten anyone, I apologize, but come to the meeting in January and tell me about it - I have coffee and donuts for you.

All the best for 1992!

VE3OQG Fiore Manga, President Hamilton Amateur Radio Club

VE3NYX RENZO, (416) 521-1064
1 SHOKTWAVE RECEIVER, ALLIED SX-190
GOOD CONDITION WITH MANUAL \$135
BARKER+WILLIAMSON VS300 ANT TUNER 300 WATTS \$70
TEKK SPKR MIC FOR YAESU+KNWD H.H., 2 PIN CONNECTOR \$25
VE3ANB RICH, AUTODIAL 103 KENWOOD PC1 PHONE PATCH, 4
PIN TYPE \$60

VE3IQL TERRY, (416) 765-5738

2 DRAKE L7 HF 2KW AMP. COVERS 10-160M, SEPARATE PWR SPLY, MANUAL \$1400

DRAKE MN2700 ANT. TUNER, HAS BALUN, COVERS 10-160M, HANDLES LEGAL LIMIT, MANUAL \$300

VE3RNK RICK, (416) 689-7294
2 YAESU FT101EX HF RIG, FAN, HAND MIC, NEW TUBES \$480
ATARI 800XL COMPUTER, 1 DISK DRIVE, 12 IN. TV, MODEM,
80 GAMES \$275
ALINCO DJ160 H.H. IN BOX, UNDER WARRANTY \$300

VE3MEF MIKE, (416) 829-0264 2 DRAKE TR4C HF RIG, RV4C VRO, P/S \$375

VE3UDX RAY, (416) 688-0130
3 20M MONOBAND BEAM 4ELE BY HC CUSTOM BEAMS \$200
10M MONOBAND BEAM 6ELE BY HC CUSTOM BEAMS \$150

VE3ZRB RICK, (416) 330-7064
3 ICOM 271A ALLMODE 2M RIG, AC/P, PREAMP, MAN \$850
ICOM 471A ALLMODE UHF RIG, TOWER MOUNTED PREAMP,
MAN \$850

VE3BNW BILL, (416) 544-6563

2 YAESU FT727 DUALBAND H.H., CTCSS TONE BD, EXT. MIC, SOFT CASE, DROPIN CHARGER, EXTRA BATTERY \$375

DIAMOND DUALBAND MOBILB MAGMOUNT ANT. \$85

Ev is also the Field Day 1992 Chairman. He informs us that the ROCK CHAPEL SANCTUARY site is available again this year for the June 27 and 28th event. The Executive is considering buying a NEW PORTABLE GENERATOR for Field Day and Emergency work.

Soon-to-be Floridians (Floridites?) VE3RBH Ruth and VE3DNB Ron intend to stay in touch (probably to tell us the weather). They will be on the 14.300 MHz Wednesday morning net and occasionally the 21.212 MHz Snowbird Net.

In her departing Treasurer's report, VE3RBH Ruth reported a BALANCE of \$6907.04.

Copies of the Club CONSTITUTION will be available at the January General Meeting. The Executive considered mailing out copies to all members, but decided the costs may not warrant the interest shown. If you want a copy and aren't a regular meeting-goer, call VE3SON Jim at 689 6839 or VE3DKJ Keith at 529 1603, and we will get it to you one way or another. Here's another reason to call Jim or Keith: let us know what you want to see more or less of in the BULLETIN. We may not be able to satisfy you, especially if what you want more of is what someone else wants less of.

connected between MT2 and L1 of the ac extension cord (the is passed to the load (full voltage). As resistance is increased variable resistance equal to 0, the capacitor charges and on with both negative and positive pulses to its gate. With the the diac to the gate and again the triac turns on. The triac turns when the diac's breakover value is reached it discharges via The capacitor then charges in the opposite direction and again capacitor discharges through the diac and gate of the triac until voltage of the diac is reached. The diac conducts and the charges through the variable resistor until the breakover gate receives a pulse from the trigger circuit. The capacitor wire of the extension cord). The triac will not conduct until the black wire) while MT1 is connected to the Neutral (the white Circuit operation is simple. The load (the soldering iron) is thereby causing the temperature of the iron to change with the resistor will vary the voltage between 0 and 120 volts RMS later in time passing a portion of the ac waveform. Adjusting the charging of the capacitor is delayed and the gate turns on discharges almost instantaneously and the whole ac waveform its minimum holding current level is reached and turns off.

# SWAP SHOP WILL BE BACK ON TRACK 7 JANUARY 91 DEC 18 1991

### FOR SALE

VE3JIS JACK, (416) 648-6443

3 KENWOOD TS120 HF RIG, MIC \$470

ALLIANCE U100 ROTOR AND CONTROL \$60

CHANNEL MASTER ROTOR AND CONTROL \$75

MC50 MIC \$60

HALLICRAFTERS SX99 SW RECEIVER \$135

WILL CONSIDER TRADING ITEMS FOR CB RADIOS WHICH CAN
BE MODLIFIED FOR 10M.

THE MENU WAS A BUFFET STYLE WITH BONELESS WHITE BREAST OF CHICKEN, ROAST BEEF AND CABBAGE ROLLS, SWEDISH MEAT BALLS, OVEN ROASTED POTATOES, STEAMED CARROTS, GREEN BEANS AND CAULIFLOWER, HOME-MADE BREAD, COFFEE, TEA, APPLE CRISP SERVED WITH WHIPPED CREAM.

THE CHRISTMAS DINNER HAD A VERY GOOD TURN OUT, THERE WERE 37 MEMBERS AND GUESTS. THE EVENING ENDED ABOUT 9:30 PM AND KEITH VE3DKJ ASKED OUR PRESIDENT FIORE MANGA VE3OQG TO DRAW A TICKET FOR THE DINNER FOR TWO. MUCH TO HIS SURPRISE, FIORE DREW HIS OWN TICKET!! FIORE DECLINED TO ACCEPT IT, AND DREW ANOTHER TICKET THIS TIME IT WAS JIM WALSH VE3SON WHO WON THE DINNER FOR TWO.

A GOOD TIME WAS HAD BY ALL. MANY THANKS TO KEITH JOHNSON VESDKJ FOR FINALIZING THIS YEAR'S CHRISTMAS DINNER.

MERRY CHRISTMAS AND A HAPPY NEW YEAR TO ALL FROM RON HAWKES VE3DNB AND RUTH HAWKES VE3RBH

SECRETARY RON HAWKES VE3DNB.

# HOW TO BUILD AN INEXPENSIVE SOLDERING STATION by DON KOURI VE3BZE

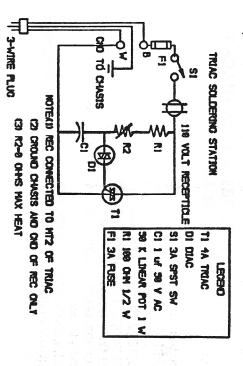
The uses for a soldering iron around the ham shack are varied and many. The same soldering iron is expected to perform all our soldering functions ranging from soldering applications on circuit boards, to the installation of coaxial connectors. In order to achieve a high quality job, heat control is of prime importance. Low heat on a connector installation will result in a cold solder joint while high heat can damage components and circuit boards. One answer to the solution would be the purchase of a number of soldering irons with impractical and inexpensive. A low cost answer to the problem would be the use of a high heat iron in conjunction with a variable ac supply voltage for heat control. The circuit in this month's column uses a triac for full-wave phase control of the 120 volt ac voltage from an electrical receptacle.

# The Bidirectional Triode Thyristor "TRIAC"

The triac is a bidirectional device which will pass both the positive and negative half cycle of an ac waveform when its gate is triggered. The three connection leads on a triac are called MT1, MT2, and gate. The gate is connected to an RC timing circuit via a diac (a bidirectional diode). The combination of the RC timing circuit and the diac form the triac's trigger circuit. The circuit presented is designed for use with resistive type loads such as irons which do not use induction for heating such as a soldering gun.

circuit as part of their studies in the area of phase shift circuits components required. My students built and tested the above standoff terminals inside the cabinet. The most expensive around the shack. The components can be easily mounted to enhanced appearance. Total cost of the project will vary from excellent addition to your shack. again) simply by plugging the lamp into the utility box receptacle. The circuit is fun to build and will make an voltage from 0 to 120 volts. The circuit also makes an excellent plug, switch and variable resistor. There are probably hams at parts are the cabinet, piece of extension cord with grounded zero to about \$35.00 depending on the amount of parts laying project can be easily fitted into a low cost utility box for The schematic drawing of the project is shown below. The The scope waveforms indicated full control of the output the next club meeting who would gladly give you some of the amp dimmer (never buy another expensive tri-light lamp

(ed. note: Don VE3BZE says diacs ARE available at Electrosonic and can steer you in the right direction for other parts, etc.



The 1992 FLEAMARKET will be BIGGER AND BETTER than ever. Mark down 12 September 1992 on your calendar. Admission is staying at \$4.00 children under 12 free. Location remains the ANCASTER FAIRGROUNDS.

Vendor's tables have not increased in price. But there will be TWO FULL ROOMS of vendors, we are going to try to get ORIGINAL EQUIPMENT MANUFACTURERS to display, and we are offering FREE LICENCE TESTING!

Thanks to Newmarket for the OEM idea and congratulations to them for their wildly successful 91 Fleamarket (1923 attendance and Net Profit \$11,400). We can only hope.

# THE HAMILTON AMATEUR RADIO CLUB CHRISTMAS DINNER AND GENERAL MEETING DEC. 18 1991

THE CHRISTMAS DINNER AND GENERAL MEETING WAS HELD AT IZZY'S RESTAURANT 354 MAIN ST WEST HAMILTON.

THE CHRISTMAS DINNER STARTED AT 7:30 PM WHERE KEITH JOHNSON VE3DKJ GAVE A SPEECH AND ADVISED US THAT THE OWNERS OF THE RESTAURANT DONATED A GIFT CERTIFICATE, THIS WAS DINNER FOR TWO VALUED AT \$30.00, WHICH WOULD BE DRAWN AT THE END OF THE EVENING.

### VE3TJB TED, (416) 578-9266

1 YAESU FT101ZD HF RIG, 500HZ CW FILTER, COOLING FAN, YAESU SP901 EXT. SPKR., SHURE 444 DESK MIC, MANUAL, BOXES, ALL MINT CONDITION \$625

### VE3PKY CHRIS, (416) 547-3169

1 DIAWA LA2035R 2M LINEAR AMP, 2W IN 20W OUT, GASFET PREAMP \$75

MAACO 12V 7A POWER SUPPLY \$35
4A HR NICAD BATTERY PACK HAS 10 4A D-CELL NICADS \$50
QUANTITY 12V GEL CEL CHARGERS \$10 EACH

VE3BEJ JIM, (416) 547-3358
1 DIAWA SWR/PWR METER, BRAND NEW, COVERS 140-525MHZ
\$100
TOKYO HI POWER 70CM AMP, 5W IN 40W OUT \$50 QUANTITY
40CH CB RADIOS \$30 EA.

### VE30ZY RICK, (416) 544-3253

2 YAESU FT101ZD MARK 2 HF RIG, CW 500HZ FILTER,
STOCK MIC, COOLING FAN, MANUAL \$650
YAESU FT101ZD SERVICE MANUAL \$25
DC TO DC CONVEKTER FOR 101ZD OR 901/902, WITH PWR CORD \$75
LEGEND 808 PRINTER IBM COMPATIBLE \$45

VE3TTH SCOTT, (416) 385-3014 1 ICOM 25AT 2M H.H., 50 CH MEM., 7.2V 1.AA HR BATTERY, CHARGER, MANUAL \$330

VE3OCY DON, (416) 560-1960
22-6146 A TUBES, 1-6CL6 DRIVER TUBE \$45
HEATHKIT TUBE TESTER \$50

VE3IJY SIL, (519) 948-5911 3 YAESU TA3 DC-DC CONVERTER FOR YAESU F1208 AND F1708 H.H. \$30

### BITS AND PIECES

Our CLUB'S SIXTIETH ANNIVERSARY is in good hands. VE3GCP Fred has been named Chairman of the Anniversary Committee. Fred has extensive contacts and experience for organizing special events, so 1992 promises to be very special. VE3TJB Ted (known to many as the Swap Shop Host) is designing a special club QSL CARD to commemorate the occasion.

You knew that our Treasurer VE3RBH Ruth and Secretary VE3DNB Ron are off to sunny Florida to live. The Executive has named their replacements. Taking on the job of TREASURER is VE3MWH Mark Gibson. Mark has volunteered on numerous club projects and events in the past. Most recently he was the Treasurer of the 1991 Fleamarket. Our new SECRETARY is VE3JAI Emsley Mitchell. Emsley, an advanced amateur, was licensed last spring and is a relative newcomer to the Club. He unsuccessfully ran for the Executive last fall. He has previous administrative experience through being on the Board of directors of his church. Both Mark and Emsley are valuable additions to the Board.

The Board has approved buying five copies of the CARF Study Guide to donate to the HAMILTON PUBLIC LIBRARY. We can't remember who suggested this excellent idea, but VE3OQX Everett is taking care of the details.

### DEC. 18 1991

#### WANTS

VE3IZY WAYNE, (519) 653-3759
2 4-10KV OR 20KV 500PF DOORKNOB CAPACITORS
4-EIMAC SOCKETS SK620A + CHIMNEYS SK626
NATIONAL VELVET VERNIER DIAL MECHANISM 2 INCH DIA
YAESU RECEIVER FR101D

VE3NCK BILL, (416) 545-3579 3 KENWOOD TR7950 2M RIG

VE3YR BILL, (416) 664-3350 OR 692-4998 EVENINGS 3 JOHNSON MATCHBOX TUNER

VE3ZRB RICK, (416) 330-7064 3 UHF MOBILE RIG 25W

VE3DEO MORRIS, (416) 633-1721 3 SWAN 270A OR 270B HF RIG WORKING OR NOT

VE3BNW BILL, (416) 544-6563 2 INEXPENSIVE PACKET TMC

VE3XCW AL, (416) 847-3173 2 KENWOOD TR2600 2M H.H.

**VE3ADU WES, (416) 937-0906**1 2M TRANSVERTER

VE3PKY CHRIS, (416) 547-3169

1 MANUAL OR COPY FOR HEATH HW20 2M AM RIG

VE3TJY MICHAEL, (519)893-8747
1 HE,VHF OR UHF BASE RIG FOR UNDER \$250 (FOR A NEW RADIO CLUB)

I would like to congratulate another member of the club VE3GCP, Fred Robinson, for being a great coordinator for guest speakers and all the other work he has done for the club. I wish him the best and hope his flu is gone.

Special thanks, also, to Larry Hotzheu from Union Gas. He had an interesting lecture on how to save us dollars with high efficiency furnaces at our November 1991 meeting.

Our treasurer had announced in December, a substantial amount of money in the club's bank account. Part of this money came from the fleamarket of 1991. Our purpose is to manage the club and now we must decide on how to share the money for the purposes of the club. Many proposals have been suggested and they all are noteworthy, but I would like to hear from the other members of the club at the January 1992 meeting. So let's get together in January or, if you wish, you can send me your suggestion.

1992 is the Hamilton Amateur Radio Club's jubilee year and again the executives will try to hold this event some time in the year. But we need, again, some input from you. I would like to see a really good and happy year for the club, with your help.

As president of the club I try to do the best possible job and I hope that in 1992 I will continue to do my duty even when sometimes I feel tired. Although, if you feel we need a change and you have what the club needs, tell me personally and I will guarantee you my chair.

# THE INTER-PROVINCIAL AMATEUR RADIO NETWORK

We were recently notified of a very interesting project. It is called IPARN Canada. The idea is to build a Canada-wide communications network, so that amateurs can communicate throughout the country using their handheld radios on their local repeater.

This is done by using a geo-stationary satellite to link existing repeater networks. The project has already linked repeaters in Alberta and British Columbia. Ontario is the next province slated for satellite connection. They plan to eventually connect all areas in the country served by repeater nets.

Apparently, this is a "first in the world" for Canadian Amateurs. IP ARN is selling memberships which include planned codes, a bulletin, and other perks. These memberships are necessary to expand the service.

For further information, write:

IPARN P.O. Box 3156 Langley, B.C. V3A 4R5

# THE HAMILTON AMATEUR RADIO CLUB

BOX 91215 Effort Square Postal Outlet, Hamilton Ontario Canada L8N 4G4

### CLUB MEETINGS

8:00pm on the 3rd Wednesday of each month except for July & August (special arrangements are often made for the December meeting as well), in the Nash Auditorium, Chedoke Hospital. Non-members & friends are welcome - coffee and donuts on the house!

#### EXECUTIVE:

Meets at 1930 on the fourth Wednesday of the month, except June & July, in the Radio Room, Red Cross, 400 King Street East.

An emergency radio station is maintained in the RED CROSS, HAMILTON BRANCH (400 STATION: King East).

### MEMBERSHIP:

\$25.00 per year with a common renewal date of September 1. Included is a subscription to the club bulletin. Additional Family Memberships (no bulletin) \$1.

#### EDUCATION:

Call Bernie (VB3EKY) or Stan (VE3GFE) for information on Amateur Radio training opportunities. Phone numbers are on the front cover, Licence testing on the 2nd Wednesday of the month (with appointment).

VE3NCF, Located on the Hamilton escarpment it is available for use by any amateur. Input: 146.16 Mhz. Output: 146.76 MHz. Part of the VE3RPT Link system. Contact a member of the Club Executive for information concerning Emergency use, Autopatch, Mail-boxes, Links etc.

#### FIELD-DAY:

HARC operates a multi-station site during Field- Day. Contact coordinator Ev Englert, VE3OQX, for information. His number can be found on the front page.

#### SWAP-NET:

Every Tuesday at 8.00 pm on VE3NCF (146.76/16) except July & August. Contact Ted, VE3TIB if you have items to buy or sell. Swap Shop listings are also available on the club's packet bulletin board station VE3DC operated by VE3JSJ on 145.590 FM.

### FLEA-MARKET:

Held during September each year at the Ancaster Fair Grounds. Note that the flea market has both indoor and outdoor sales facilities. Call to reserve tables/power.

#### BULLETIN:

"The Hamilton Amateur", the official news bulletin of the club, is published 10 times a year and sent to all full club members (family members share a bulletin) during the first 2 weeks of the month (except July and August)

- 6 considered DX if it is on the current A.R.R.L. DX Country relation to the power levels listed above. A contact is List. There will be no DX multiplier for the U.S.A DX multiplier of 1, 2, or 5 points per DX country in The total points calculated by rule 5 will be adjusted by a
- 7 A valid QSO will be NAME, RST and QTH

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account years licensed according to the following: The point total from rule 6 will be adjusted to take into licensed 1 to 2 years - subtract 10% from score more than 3 years licensed - subtract 25% from score licensed 2 to 3 years - subtract 15% from score icensed less than I year - full score