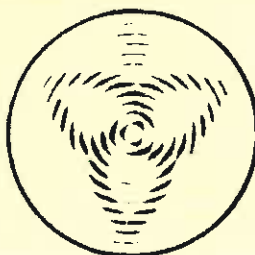
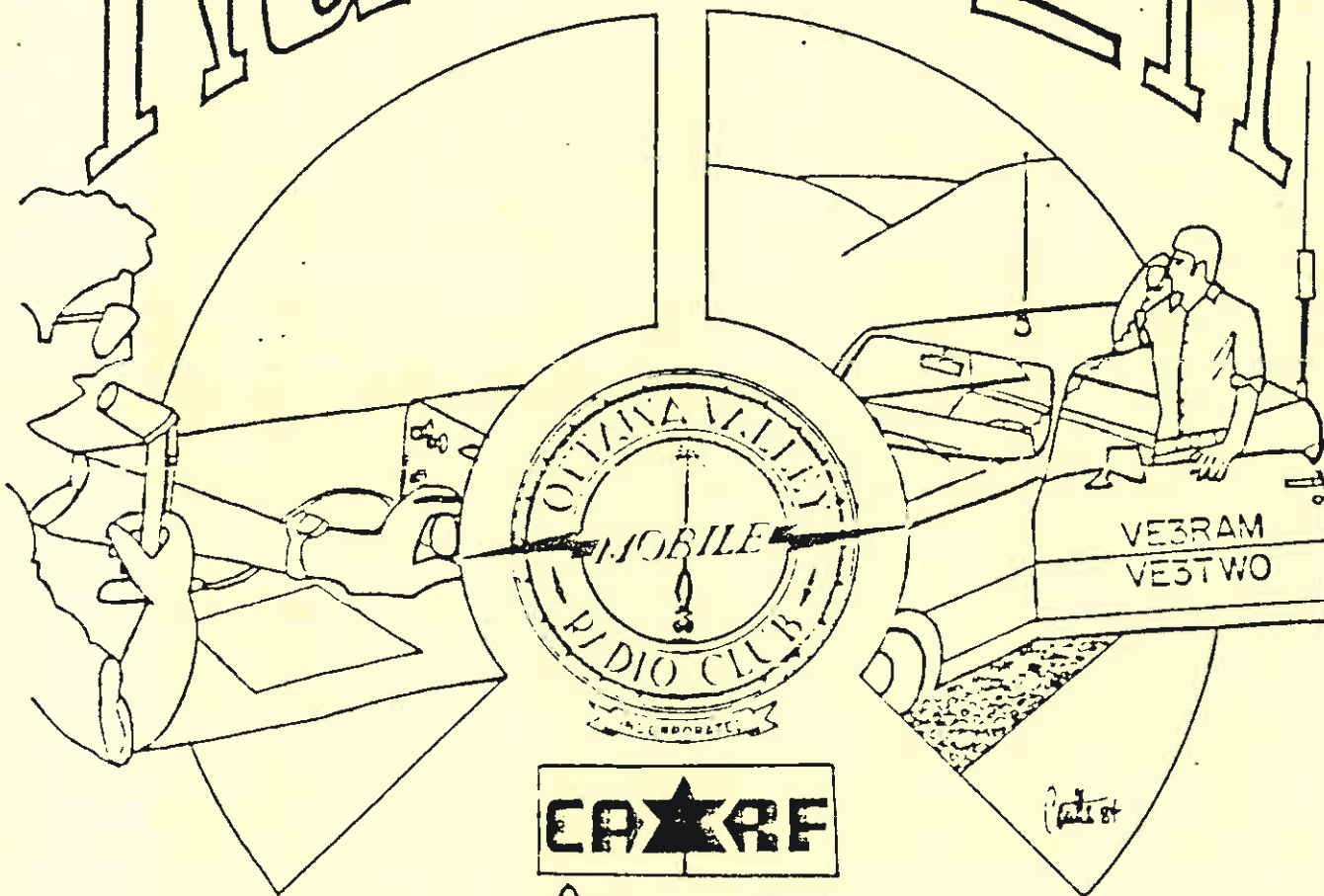


VOL 31 No. 4 April 1988

# RAMBLER



NEXT MEETING APRIL 21

THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED  
1987 - 1988 EXECUTIVE

PRESIDENT	BILL SEYLER	VE3OAI	836-5818
VICE-PRES	IAN MCINTYRE	VE3CZ	731-7617
SECRETARY	KRIS ANDERSON	VE3OWE	225-4152
TECH ADVISOR	ALAN BOYCE	VE3LNH	737-4937
PUBLIC REL	LEO DESJARDINS	VE3NVL	225-0902
TREASURER	HENRY GREENWAY	VE3OMU	729-3804
PAST PRES.	VANCE JOHNSON	VE3OAO	824-9555
EDITOR	JERRY WELLS	VE3CDS	225-7374
MEMBERSHIP	PAT BREWER	VE3KJQ	820-9309

CLUB SPONSORED ACTIVITIES

POT HOLE NET - OVMRC Net -  
Every Sunday, 1000 local time  
on 3760 kHz. SSB. All radio  
amateurs are welcome to  
participate.

THE WISE OWL NET - OVMRC Net -  
Ragchew net every Friday  
evening at 2000 local time on  
the club repeater VE3TWC -  
147.20/90 MHz.

VE3JW - Amateur radio station  
of the National Museum of  
Science and Technology. The  
OVMRC helps maintain the  
station and schedules  
operators for the station as  
part of an Amateur Radio  
public relations display.  
VE3JW operates on all HF  
Bands, both CW and phone.  
Slow scan TV is also  
demonstrated. For information  
or if you wish to operate the  
station, contact the Public  
Relations Coordinator.

LOCAL AMATEUR RADIO ACTIVITIES

POT LID NET - Sponsored by Ed  
VE3GX. An informal slow speed  
CW net meeting each Sunday  
(except July and August) at  
1100 hrs on 3620 kHz, to  
provide and stimulate interest  
and proficiency in CW  
procedures.

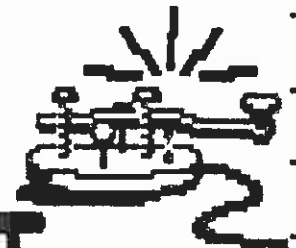
CAPITOL CITY FM NET -  
Sponsored by the Ottawa  
Amateur Radio Club Inc. every  
Monday evening at 2000 hrs  
local time. Conducted on  
VE3CRA repeater 146.94/146.34.

SWAP NET - Sponsored and  
conducted by Ed, VE3GX, each  
Sunday as part of the Pot Hole  
Net and each Monday as part of  
the Capitol City FM Net  
(except July and August). Ed  
may be reached at 733-1721 for  
listings and queries.

THE MILITARY NET - Sponsored  
and conducted by Frank,  
VE3MSC, Tuesday at 2000 hrs on  
VE3TWC 147.30/147.90 MHz.

Membership in the OVMRC is  
open to all those interested  
in Amateur Radio. Regular  
meetings are held on the third  
Thursday of each month (except  
July and August) at 2000 hrs  
unless otherwise posted.  
Meetings normally take place  
in the auditorium of the  
Museum of Technology on St.  
Laurent Blvd (south of the  
Queensway)

The OVMRC provides code  
practice 24 hours a day. Dial  
825-0786.



**OVUMAC  
FLEAMARKET  
APRIL 23, 1988**

**9:00 AM**

**CANTERBURY H.S.**

**RAFFLE PRIZE:**

**ICOM MICAO 2AT**

**FROM: ATLANTIC**

**HAM RADIO**

**AND ICOM**



free periods, the control stations welcome contacts with the rest of the world. A special certificate is available for those who confirm contact with 3 stations in the NWT, 3 stations in the USSR, 1 base camp station, 1 NCC station and 1 Moscow station between Feb 15/88 and June 15/88. Alan introduced Margaret Kennedy of the Museum staff who would like to enlist help from amateurs in plotting the route of the dki trek team on a map located at VE3JW in the museum. Alan generously offered the loan of a 2 meter scanner that will be used to provide the information from the OSCAR 11 satellite. The OSCAR 11 orbit times are available on packet radio bulletin boards such as VE3JF. Technical Director Alan VE3LNH mentioned that he has a sked on Saturday with VO1SA/UAO. Soviet officials will be present for the filming of the radio contact at VE3JW.

CARF representative Dan VE3EBI read the CARF bulletin and noted that copies of the repeater directory were available at the meeting. The CARF study guide based on the DOC question bank is available at \$15.00 plus \$1.00 postage. Ralph VE3BBM will report on the Ravenscroft case in the next two issues of TCA. Copies of the articles can be obtained by sending an 8 1/2 X 11 SASE to CARF. CARF has signed a reprint agreement with various organizations. There is a membership drive from March 15 to May 15 with rebates for renewals made through clubs. Bill VE3NR CARF/DOC liason, commented that amateurs wishing to operate HF packet may apply to the nearest DOC District Office and receive authorization under revised section 56 of the Radio Act. He also noted that the FCC is proposing to re-assign 220-222 MHz to primary use by land mobile service. ARRL is objecting to this. CARF is recommending to DOC that 220 to 225 MHz be retained for amateur use.

Vice President Ian VE3CZ put a motion that a Field Day committee be organized. This was seconded by Technical Director Alan VE3LNH. A show of hands indicated that the members present were about evenly divided on whether or not to have a Field Day. It was decided that the executive will contact the membership by phone to determine if there is enough interest to have a Field Day. If not it will be dropped.

Secretary Kris VE3OWE introduced the guest speaker Paul Cooper VE3 JLP who writes a DX column in TCA. Paul gave an excellent presentation on various aspects of DX operation. Essentially a DX contact is one that the operator has had to exercise good operating skills to achieve, whether it is done using a linear and beam to reach a remote corner of the globe or using QRP and cw to reach Europe. The essential requirements include:

A good DX operator, a good antenna and a good location and of course a good rig with adequate filter capability to separate desired signals from others etc.

He reminded everyone that VE3XDX at 145.110 (-) now provides DX information locally.

minutes continued on last page



## AMATEUR RADIO COURSE - 1987/88

We have completed the sixth Annual Amateur Radio Course, sponsored by the OVMRC, and the results are rather gratifying, with four new amateurs having joined our ranks. A tip of the hat to these gentlemen.

In addition, most of the eight students who wrote the exam on the 11 February passed at least a portion of the exam.

What did we change this year? Well really not a lot. With the DOC's new procedures, we were able to schedule the exam for the date we wanted, thus allowing us to stretch the course out a few weeks without the problem of having to stretch it out four months. Course content stayed more or less the same. A few areas were reduced in importance and some removed altogether, power supplies for an example. As there are no questions relating to power supplies on the exam it was therefore decided not to teach this, in favour of material that would be examined. I am not particularly pleased with this approach but it was necessary and it did seem to work.

As usual, the students complained bitterly ( snicker, snicker, chortle, suffer, ha-ha-ha ) about the amount of homework. Oh well, no one said it would be easy. We found that what the DOC emphasized on the exam did not fit well with what we considered the important material in past years. The students thus ended up with homework for one week that amounted to six questions whereas the next week there were some forty questions. I don't think this can be easily solved, without a major rework of the course, and anyway, it didn't really seem to cause much heartache.

The code portion of the course progressed as expected, with people at different speeds at different times in the class. I am convinced that if we had the ability to provide code practice at twenty different speeds, we would probably have students at twenty different speeds. It seems to me that the code portion is becoming easier as time progresses, between the overflowing exuberance, confidence, enthusiasm, encouragement, and lets not forget THREATS, provided by the team. The code-phone continues to work like a charm and the money and time spent producing the new setup was worth it.

What's in the works for next year, yes, there is going to be a next year Virginia. After this number of years, I think that brain damage really does begin to set in and you don't realise that the body could be doing something much more fun and useful. No, I guess that to be very honest, after six years, I am having just as much fun as the first year. Each year is a challenge and fun is where you find it.



Next year:

- a) more live demonstrations,
- b) hook up the keys we bought and start the students off with their sending much earlier in the course,
- c) tailor the course more to the DOC question bank ( that is always frightening as this type of action is an open invitation to the DOC to change things),
- d) recruit a few able bodied assistants ( the original Gang of Four is spreading across the country ), and
- e) put all the course materials into a single box, for easier transportation.

Lastly, a great vote of thanks to Pat VE3KJQ and Jim VE3AHN, without whos help the course could not have happened. Thanks to Bob VE3KLK for his excellent code sending presentation, always a job well done and appreciated. And maybe most of all, thanks to the students, who after all, made the course a success.

de Russ  
VE3FSN

#### OVMRC FLEAMARKET-RAFFLE

The annual OVMRC Fleamarket will be held on April 23rd at Canterbury High School. Admission is free. Doors will open at 8:00 AM for vendors and at 9:00 AM for buyers. Tables will rent for \$7.50 for non-commercial and \$12.00 or two for \$20.00 for commercial vendors. The Club has obtained a sales tax licence for the event and vendors will be given a form to fill out for sales tax purposes. Tax collected will be turned in to the Club who will in turn pass it on to the government.

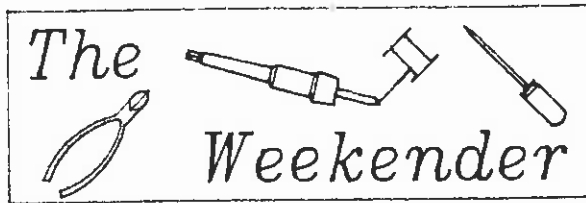
We will have refreshments in the form of coffee, softdrinks, and donuts available. There will be a club table and we hope that you can find something in your basement that you would donate to the club to sell.

As a new feature to this year's Fleamarket we will be having a raffle for a 2 metre hand held! The radio is a new Icom Micro 2AT supplied by Atlantic Ham Radio and Icom Canada. Tickets are only \$2.00 each or three for \$5.00 and will be available at the April and May club meetings as well as at the Fleamarket. Members of the executive will also have tickets. The winning ticket will be drawn at the May club meeting.

As with all club events, it takes volunteers to make things happen. If you would like to help out please give a member of the executive a call.

Pat Brewer  
VE3KJQ





Now that you have successfully passed the DOC exam and obtained a call sign, your major desire is to get on the air. Equipment costs tend to eat up the majority of funds allocated to setting up a station, leaving next to nothing for that nice tri-band beam you had planned on. While not the equal of a beam, the multi-band antenna presented in this month's Weekender works well and best of all, is extremely cheap to build.

### Theory

The basic antenna used in radio work is the dipole, this being little more than a half wave length of wire fed at the centre. While it works well, it is a single band antenna due to it's resonant nature. But, there is nothing that says we cannot parallel a number of dipoles, each cut to a different frequency and fed by the same piece of coaxial line. The radiators for the bands not being used represent an impedance of several hundred ohms, and do not affect the dipole being used.

The result is a multi-band antenna, with a feedpoint impedance approximately the same as for a single dipole, 50 to 75 ohms. It requires only one feedline and a minimum number of supports.

### Construction

The antenna elements are built out of a length of

either 5-conductor rotator cable ( Radio Shack #15-1201 ) or 3-conductor rotator cable (Radio Shack #15-1150). The individual dipole elements are not separated from the cable, only the excess is cut and removed.

The cable is not long enough for an 80 metre dipole and thus you use a length of scrap wire, left after cutting the 40 through 10 metre dipoles to length, to extend the 80 metre dipole to the required length. I suggest that you tape the end of each dipole element to prevent the individual elements from possibly separating from each other.

There are many ways that the dipole elements may be connected at the feed point. You may decide to use a connector mounted on a scrap piece of plastic, as I did, or simply solder the feeder to the elements. If you elect to solder the feeder to the elements, again use either a scrap piece of plastic or other insulator to break the two halves of the dipole. I suppose that in a real pinch you could buy a real insulator, but that costs real money! Whatever you chose, use plenty of silicone rubber, tape and acrylic spray to waterproof the assembly. It is vital that water not get into the coaxial cable in order to prevent deterioration of the cable.

Due to the frequency relationship between the 40 and 15 metre bands, it is not necessary to have a separate 15 metre dipole. The 40 metre dipole will act as a 3/2 wave antenna for 15 metres.



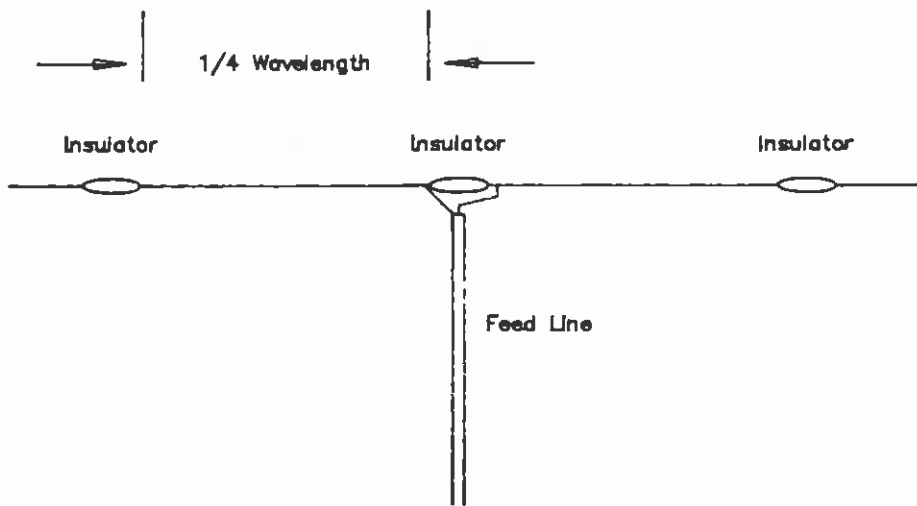


## Installation/Adjustment

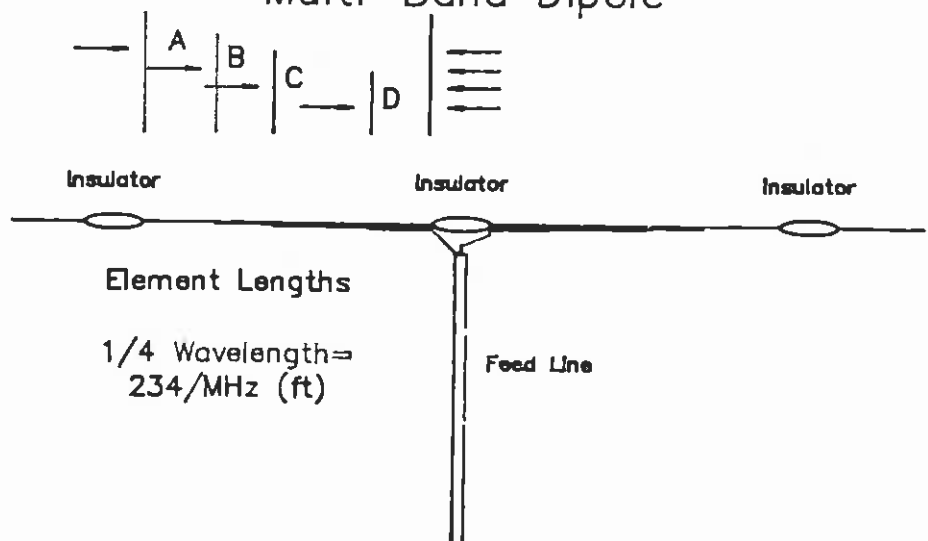
The antenna may be installed as either a horizontal dipole or as an inverted vee. The horizontal dipole tends to have better performance but requires three supports and is bidirectional in radiation pattern. The

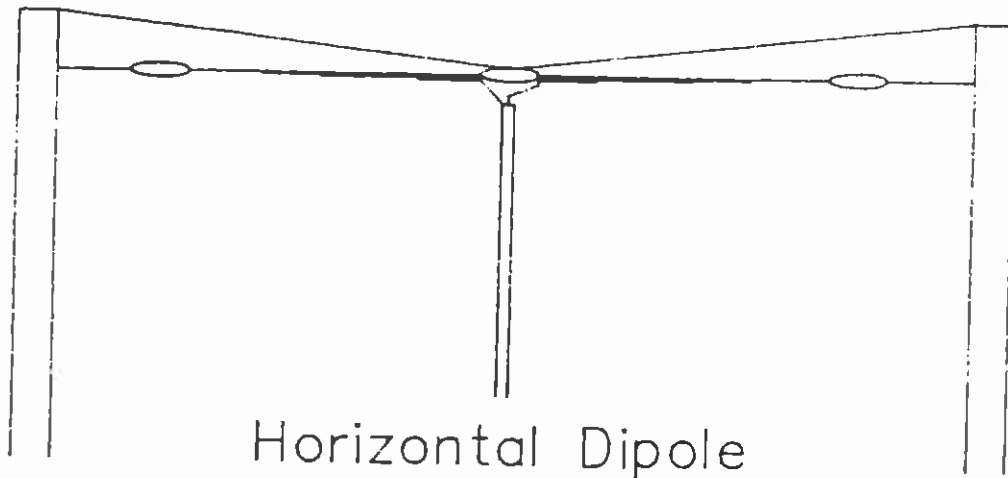
inverted vee requires only one tall support and tends to have an omni-directional radiation pattern. The exact choice is a personal one, dictated more by available real estate than anything. Do not try to get by without supporting the centre of the dipole. The combined weight of the antenna, feeder and extra loading caused by a layer of ice or snow will quickly bring the entire assembly to the ground.

## Basic Dipole

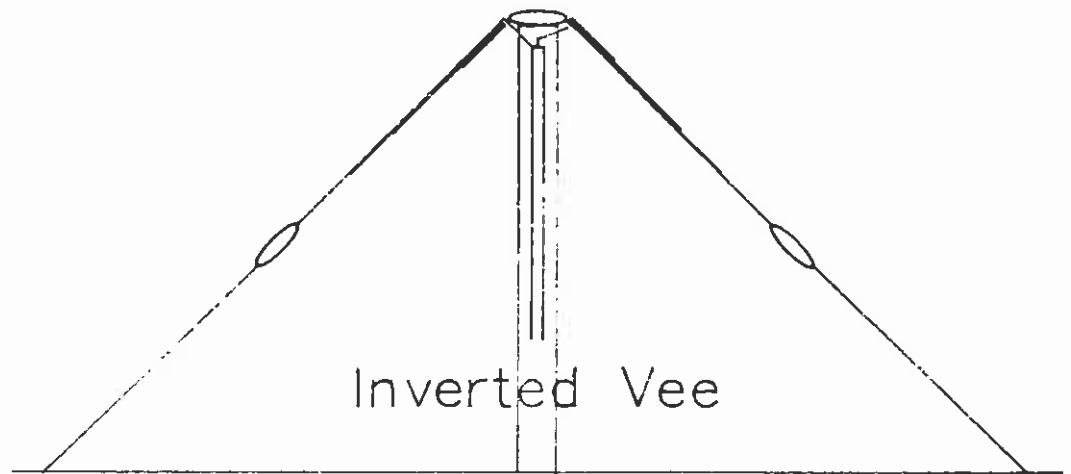


## Multi-Band Dipole





Horizontal Dipole



Inverted Vee

As the length of the elements is affected by antenna height above ground, whether the antenna is installed as a horizontal dipole or inverted vee, etc. it will necessary to install the antenna and then individually prune each element using your transmitter and an SWR bridge.

#### Conclusion

I hope that you try this antenna, it does work. I successfully used it for a number of years on top of the roof of 28 story apartment building and it never did come down.



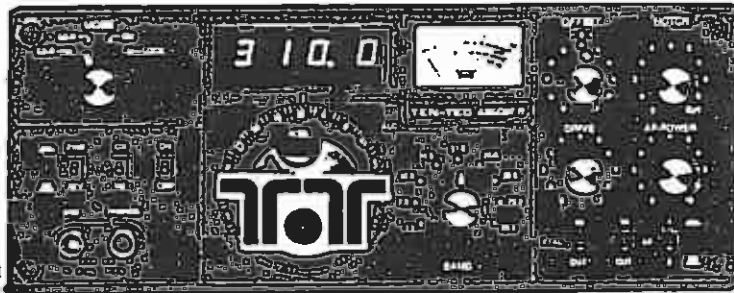
Model 229B SPECIAL \$449  
with Roller Inductor.

This tuner adds a lot of versatility to your station. For example, it solves the problem of operating an 80 meter dipole on 75 meters and still presenting your transmitter with an acceptable load impedance. Or if you want to explore the WARC bands and you haven't gotten around to installing resonant antennas for those bands, no problem. The 229B will load virtually any unbalanced load (coaxial or single wire) and do so at all the power the law allows from 1.8 through 30 MHz. The modified "L" network will tame an SWR of at least 10:1, any phase angle, without "false load" problems.

With the accessory balun, (installs easily inside the 229B cabinet) the same capability is available using balanced feedline antennas. Front panel switching selects any one of four antennas

ARGOSY II (5250) List Price \$7150  
SUPER SPECIAL CLEAROUT PRICE \$ 939

ARGOSY II. HF TRANSCEIVER, Model 5250



An admirable combination of small size, simplicity and low cost, the ARGOSY II has top quality "basics" usually found only in the most expensive rigs. PTO frequency control, a 100 watt input, no tune solid state final with an enviable history of reliability, rugged construction that survives the rigors of portable and mobile use, excellent SSB performance and Ten-Tec. QSK CW, of course.

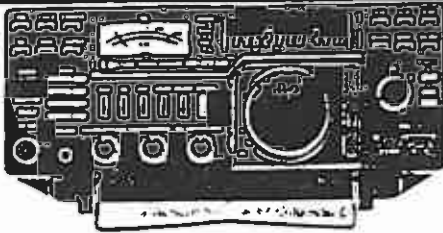
Operates 80, 40, 30, 20, 15 and 10 meters in 500 kHz segments with 40 kHz overshoot at segment edges. Primary power is 12 to 14 Vdc, 500 mA RX, 9 A TX. Front panel switch selects Hi (50 watts)/Lo (5 watts) RF power. Optional RX filters, 1.8 kHz, 500 Hz or 250 Hz. Receiver all-set tuning range is 6 kHz and the variable notch filter has better than 50 dB rejection.

The clutter-free front panel is especially appreciated by the mobile operator. After just a few hours of operation, you can control the rig without even looking at it, even with fat fingers!

**GENERAL SPECIFICATIONS**

Frequency Coverage: 3.5 - 4.0, 7.0 - 7.5, 10.0 - 10.5, 14.0 - 14.5, 21.0 - 21.5, 28.0 - 30.0 MHz with approximately 40 kHz overshoot at band edges.  
Operating Modes: LSB, USB and CW.  
Frequency Stability: Less than 20 Hz change per degree F averaged from 70 to 110 degrees F, after 30 minute warm-up.  
Tuning: Vermer drive, 18 kHz per turn.  
Frequency Display: Four digit, 0.3" LED numerals display kHz and 100 Hz. Accuracy is  $\pm 100$  Hz. Bandwidth displays MHz.  
Power Requirements: 12 - 14 Vdc regulated to 5% or better, 500 mA RX, 9 A maximum TX (can plug into cigar lighter, mode). Front panel on/off switch controls ac power supply or accessory circuit breaker for dc operation.  
Panel Meter: RX S-meter, reads forward power and SWR in TX.  
Semiconductors: 48 Transistors, 4 FETs, 18 ICs, 52 diodes, 4 PIN diodes, 2 LEDs.  
Dimensions: HWD 4" x 9.5" x 12" with bag, retracted. (10.2 x 24 x 30.5 cm).  
Weight: 8 lbs. (3.6 kg).

Compare IC-275Ag \$1849



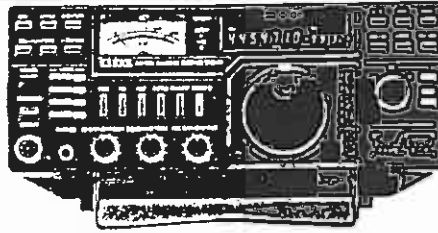
**IC-271** IC-271A 25 Watt

2 Meter/FM/CW/SSB Transceiver  
List \$1229 Clearout Special \$1099

The standard of comparison in all-mode VHF transceivers, and the OSCAR enthusiasts dream rig! This versatile all-mode unit includes 32 frequency/mode/offset/tone memories, 38 built-in subaudible tones scanning, adjustable tuning speeds, RIT, all-mode squelch and tone control, 12 volt DC operation. Optional internal or external AC supplies.

- 32 Memories/Frequency, Offset, Tone
- Scanning \$1099
- 38 Built-In Subaudible Tones
- IC-HM12 Mic Included

Compare IC-475H \$2395



**IC-471** 430-450 MHz IC-471M 75 Watt

440MHz/FM/CW/SSB/Transceiver  
List \$1769 Clearout Special \$1499

Truly the most desired UHF base station transceiver today, and the OSCAR mate to the IC-271. Its all-mode operation includes 38 frequency/offset memories, scanning, adjustable tuning speeds, 38 built-in subaudible tones all-mode squelch, and RIT. Variable output to 75 watts (IC-471M)

- 32 Memories/Frequency, Offset, Tone
- Scanning \$1499
- Adjustable Tuning Speed
- IC-HM12 Mic Included

**OVERSTOCK !**

HF-2V  
40/80M  
Vertical

SUPER  
SPECIAL !!  
\$169.00  
\$9 S&H

Model HF2V  
\*Designed for the standard 40 and 80 meter units for 140 and 30 m 20 meters.  
\*22 watt unit may be top loaded for additional performance.

**Butternut Verticals**

Butternut's HF verticals use highest-Q tuning circuits (not loose traps) to outperform all multiband designs of comparable size!

**NOW At CLOSE OUT Savings Limited Supply**

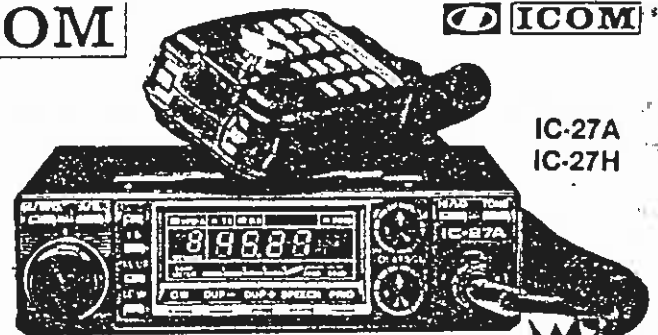
**IC-27** IC-27A 25 Watt  
IC-27H 45 Watt  
2 Meter/FM Mobile

Experience a complete new world of VHF/FM operating enjoyment with ICOM's no compromise and ultra compact IC-27. Its unlimited features include nine memories, MARS/CAP operation, four scanning modes, 38 built-in subaudible tones (USA), transmit check switch, internal speaker, and optional speech synthesizer. An IC-HM23 scanning DTMF mic (USA) is included with this 25 watt (IC-27A) or 45 watt (IC-27H) unit.

- 9 Memories/Frequency, Offset, Tone
- Slim Line
- Scanning
- Internal Speaker

Frequency Coverage	IC-27A/H: 140-149.995MHz IC-27H/H: 15kHz/5kHz with TS switch
Frequency Resolution	13.8V DC $\pm 15\%$ (negative ground), High (25W) Approx. 6.0A
Power Supply Req. / Current Drain (Transmit Only)	IC-27H: High (45W) Approx. 9.5A
Dimensions	1.57(140mm)H x 5.57(138mm)H x 7.07(177mm)D IC-27H is 8.9" (9.4")D
Output Power	IC-27A/E: 25W High, 5W Low; IC-27H: 45W High, 5W Low
Max. Freq. Deviation	$\pm 5$ kHz
Emission Modes	FM
Sensitivity	Less than 0.2 $\mu$ V for 12dB SINAD
Audio Output	More than 2W

**ICOM**



Compact 2 Meter FM Mobiles

**FREE UT-16 Voice Synthesizer**

**SUPER CLOSEOUT !!**

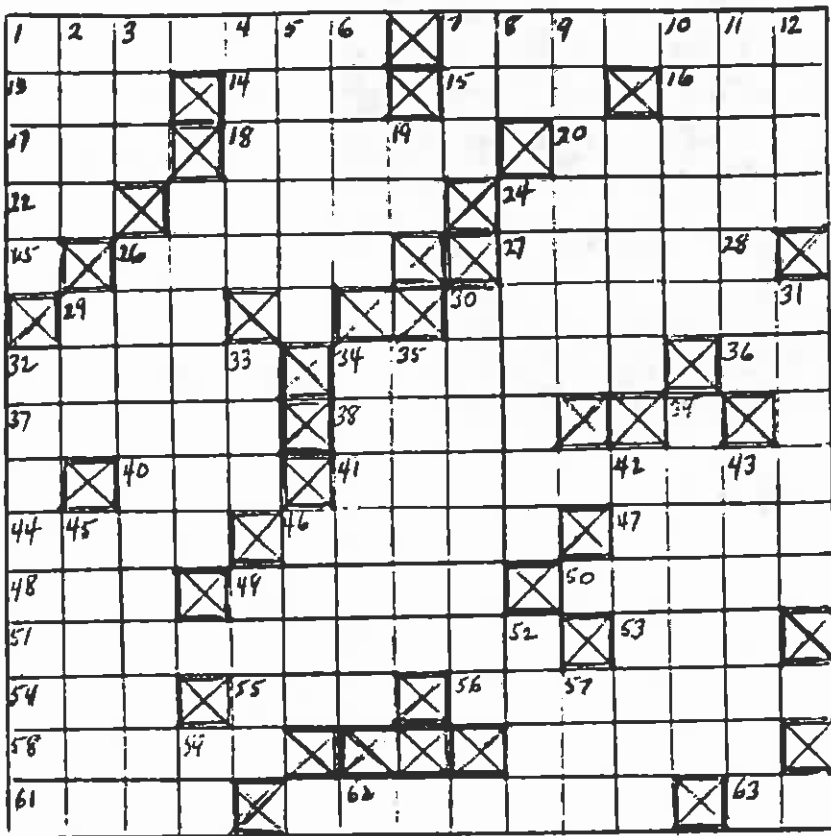
IC-27A-----\$ 499.00 Shipping Add  
IC-27H-----\$ 539.00 \$10

Both IC-27A & IC-27H include TouchTone® Mic and UT-16 Voice Synthesizer !!

**ATLANTIC HAM RADIO LTD.**

Tues.-Fri. 10 a.m.-6 p.m. 378 WILSON AVE.  
Saturdays 10 a.m.-2 p.m. DOWNSVIEW, ONT.  
After 7 p.m. Call (416) 222-2506 CANADA M3H 1S9  
For Orders. (416) 636-3636

## Amateur Crossword. by YE30MU



### Down

- 1 sparked
- 2 the usual
- 3 a human digit
- 4 type of battery
- 5 midday relaxer for some OM's
- 6 Argentine hills
- 7 call suffix - plural R's
- 8 US state
- 9 gabbing
- 10 Quebec call sign
- 11 aged
- 12 to send
- 19 and - in cw
- 21 USSR call ? with 3
- 23 medicos- some are hams
- 24 amateur radio should be this lasting
- 26 part of O.V.M.R.C.
- 28 some ant. load is put here
- 29 this is put into the ground for a gnd.
- 30 lacking parts
- 31 NY call with his reversed

- 32 this one is older than 1 across
- 33 overtakes the speed of sound
- 34 part of an army mess kit
- 35 those who hone
- 39 a must in push-pull
- 42 avoid this if operating /mm
- 43 more of 4 down (two a's)
- 45 a tri-element bottle
- 46 clip off
- 49 you too , you brute!
- 52 use this if out in the 'midday sun'
- 57 No - en francais
- 59 compass points @ 90 & 180 degrees

### Across

- 1 a radio relative
- 7 xmit level -see 1 across
- 13 an Aussie animal
- 14 a grid particle
- 15 radio co.
- 16 tree
- 17 part of crest
- 18 signal systems
- 20 Argentine call sign
- 22 printers measure
- 23 Scandinavian
- 24 just makes out
- 25 F.R.G. prefix letter
- 26 Tx or Rx methods
- 27 Costa Rica call (either way)
- 29 this bird fed elephants to it's young
- 30 helps old hams to buy ham
- 32 handles ( Bobs)
- 34 a good battery holds this
- 36 a mathematical pie
- 37 so long - in spanish
- 38 slang for 'speakers'.
- 40 lite rapid xit
- 41 trillion prov. citizens
- 44 an ending - native of
- 46 an ocean surge
- 47 letm for 152
- 48 NHL star defenseman
- 49 .....-nous
- 50 VE3FSN & KJQ do this
- 51 large, double l double s and k
- 53 British part of the Americas
- 54 another gnd.
- 55 tongo papa nov.
- 56 north W2 land Indian tribe
- 58 so-long (french)
- 60 studied diligently
- 61 cat's cry
- 63 spot for a mobile to stop
- 64 contains audio info.



SCHEDULE FOR VE3JW

Schedule for april 23 to may 15, 1988.

<u>Morning 9 AM - 1 PM</u>				<u>Afternoon 1 PM - 5 PM</u>	
Apr 23	Sat	Archie Alan	VE3NJY VE3EEC	OPEN	
Apr 24	Sun	Dan	VE3EBI	Bob Earl	VE3JBD VE3YOU
Apr 30	Sat	Chris	VE3PAE	OPEN	
May 1	Sun	Kris	VE3DWE	Jerry Pat	VE3CDS VE3KJQ
May 7	Sat	Ric Fred	VE3NJM VE3NJF	Ed Leo	VE1EJ VE3NVL
May 8	Sun	Mark Dave	VE3OWL VE3JTZ	Susan Joan	VE3OSP VE3OSE
May 14	Sat	Otto Gord	VE3HCD VE3OSM	OPEN	
May 15	Sun	Doug	VE3DMZ	Fred Jim	VE3BAJ VE3GJY

This is a list of operators who have express a desire to operate VE3JW, the amateur radio station at the Museum of Science and Technology. Anyone else interested to operate the station is welcome to call Leo, VE3NVL at 225-0902.

HELP FOR THE FLEA MARKET

In order to ensure that the flea market gets underway as smoothly as possible we need the help of 8 or 10 club members at the very start. Right at 8 oclock when we get into the school we have to set up the tables for the vendors. We also have to ensure that the commercial vendors we have invited are properly provided for. This whole activity takes about one-half hour. We will be running a refreshment stand with donuts, coffee and pop, we would like to see some participation on the part of members to help man the stand. If we can get enough volunteers it will be light work for everone. I look forward to hearing from you. Please call me at 225-7374 or call on the club repeater any evening after 7 pm.

Jerry VE3CDS



Vice President Ian VE3CZ thanked Paul for his excellent presentation.

Public Relations Coordinator Leo VE3NVL introduced Eric Blackwell VE3PLA who has just recently opened a business at Bells Corners. He carries the Ten-Tec equipment line and plans to offer servicing at a later date. The firm name is Canatron at 4-35 Stafford Rd. Nepean, Ont. K2H8V8 Tel. 726-1660. The members present wished him welcome with a round of applause.

The next general meeting will be 21 April. The executive meeting will be on 24 March at Secretary Kris VE3OWE QTH.

Kris Anderson VE3OWE  
Secretary

OVMRC  
P.O. Box 5530 STN F  
OTTAWA ONTARIO  
K2C 3M1



FIRST CLASS

FIRST CLASS

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2038 ARCH ST.  
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K1G 2H1