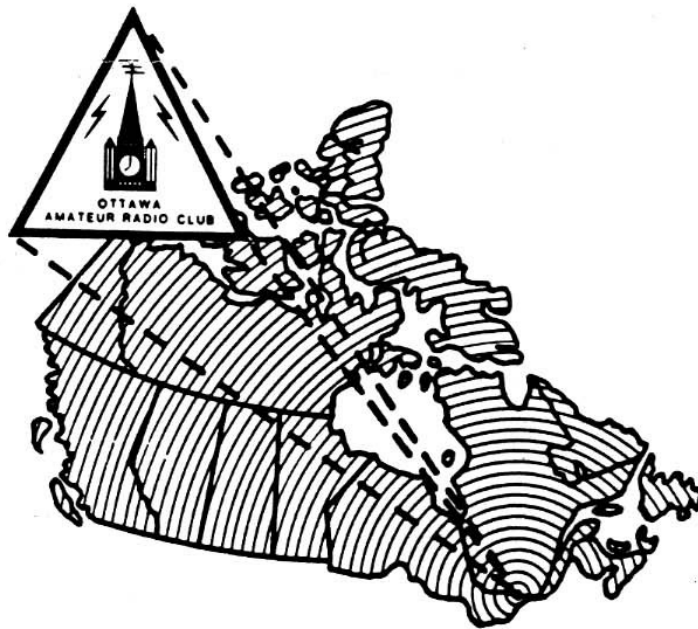


MAY 1997

THE GROUNDWAVE



NEXT MEETING WILL BE HELD
WEDNESDAY, MAY 7, 1997

Club Call VE3RC Repeater VE2CRA



The Ottawa Amateur Radio Club, Inc., Box 8873, Ottawa, Ont., K1G 3J2

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Vice-President	Ed Strange, VA3CEJ		
Acting Secretary	Rick Furniss, VE3IHI	224-2604	
	Greg Danylchenko, VE3YTZ	236-9291	997-6410
Treasurer	George Roach, VE3BNO	234-0885	738-2372
Past-President	Roger Swickis, VE3BZR	234-9836	228-6310
Directors	John Connor, VE3TG	727-5808	951-6202
	Rick Furniss, VE3IHI	224-2604	
	Dave Parkes, VE3AV	225-1206	993-7259
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Repeater Chair	Harrie Jones, VE3HYS	739-9365	738-2372
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Coffee Guy	Bob Lawson, VA3YLR	746-9886	830-6985
	Bryan Campbell, VE3ZRK	737-3933	

THE OTTAWA AMATEUR RADIO CLUB, INC. is an association of Radio Amateurs devoted to the promotion of interest in Amateur Radio communications in the National Capital Area; and to the advancement and achievement of club members.

REGULAR MEETINGS of the OARC, Inc., are held on the first Wednesday of each month (except July and August) in the Keefer Room (2nd floor of the Old Teacher's College) of the RMOC HQ complex on Lisgar St., Ottawa, at 1915 hours. Further details about each meeting is elsewhere in this publication.

THE OARC EXECUTIVE normally meets on the second Wednesday of each month at 1930 hours. Contact the President to confirm the date of the next meeting.

PACKET RADIO MEETINGS will be held at 7:30 p.m. on the last Thursday of every 2nd month, starting September 1993, at the Museum of Science and Technology. This is an OARC technical meeting open to all who have an interest in packet radio.

DEADLINE FOR COPY is the second Wednesday of each month. Make yourself better known to fellow members and other amateurs, too, by giving us an article, technical or otherwise, relative to our hobby.

MATERIAL PUBLISHED herein does not necessarily represent the official OARC viewpoint. Items may be reprinted by Amateur Radio or other publications provided that proper credit is given to the author and to the OARC, Inc.

JUNIOR MEMBERSHIPS - To encourage young people to join the club and to participate in amateur radio, the club is opening a junior class of membership. Dues will be at a 50% discount but the junior member must pick up his/her copy of the Groundwave (preferably at the meeting).

RADIO AMATEUR CALL BOOKS are available at many local libraries. Ask at the information desk.

SAFETY BELTS AND AN ENGRAVING PENCIL are available for loan to club members. The engraving pencil (to mark valuables for identification in case of loss or theft)

and the safety belts with pole straps are available to any members. For the belts, a refundable deposit consisting of a cheque equal to the replacement value of the belts is required. Contact the President for the engraving pencil; and Paul, VE3ICV, at 820-6643 (West End) for the belts.

THE CAPITAL CITY NET meets every Monday at 2000 hours on the Club Repeater VE2CRA (146.34/.94) to pass traffic and to make announcements of interest to amateurs in the National Capital Region.

PACKET RADIO VOICE NET meets following the Capital City Net on VE2CRA at 2040 hours. This is an informal net to answer questions about packet radio, pass along operating hints and provide information for future packet operators.

THE SWAP NET is a service provided and conducted by Dan Reardon, VE3GUU. This feature appears on the Capital City Net, noted in the foregoing paragraph. To list items and make inquiries, call Dan Reardon at 836-2633.

POT-HOLE NET is a SSB/HF net sponsored by the Ottawa Valley Mobile Radio Club, and conducted every Sunday at 1000 hours on 3.760 Mhz. All amateurs are welcome to check in. The Swap-Net is a regular feature.

POT-LID CW NET is an informal slow-speed CW net sponsored and conducted by Ed, VE3GX, and meeting every Sunday, except during July and August, at 1100 hours on 3.620 Mhz, to promote interest in CW and CW procedures.

REPEATERS

VE2CRA	Voice	146.94/34
		443.300/448.300
56 kbps	Packet	220.55/433.55

For further information, please contact repeater chairman.

OARC WWW Home Page:

<http://www.worldlink.ca/oarc>.

Thanks to Worldlink Internet Services Inc. for the home page space under the URL.

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UPCOMING MEETINGS

- May - Volunteer Recognition Night
- June - Elections

MINUTES OF OARC GENERAL MEETING
APRIL 2, 1997

The Meeting was called to order by the President, Richard (VE3UNW), at 7:40 p.m.

We had two guests this evening, Peter (VE3EPB) and an amateur from Romania (Y05BWO).

The members heard an update on the OARC door prize draw for the June meeting. Rick (VE3IHI) stated that approximately 50% of the available 150 tickets have been sold. The prize, a new superior quality Kenwood TM-V7A VHF-UHF mobile transceiver, was very generously donated to the Club by Bytown Marine. The draw will be held during the Club's June meeting.

Richard announced that the Club received the donation of a Yeasu FT-101 station which will be sold at the OVMRC flea market. The funds reverting to the club. The donor has been out of amateur radio for some time and made contact with us through the club's home page on the WWW.

It was announced that Paul Coverdale (VE3ICV) would once again be operating the Club's field day station this year. Paul also will be operating the ITU station in Geneva, Switzerland and he will be listening, starting mid April, on 14.140Mhz at approximately 7:00 am (1100 UTC) for any calls from any Ottawa amateurs.

It was announced that the St. Lawrence Repeater Council is to meet May 4, 1997 in Iroquois, Ontario at 1:30 p.m. at Baldies, a fine Iroquois restaurant.

Ed Strange (VA3MPY) advised the Membership that one of his students has improved on the computer program originally written by Richard that converts files into Morse Code in a range from 5- 20 words/minute. It is available for download from the Algonquin WEB site or shortly from the OARC site. A demonstration will be arranged for the May meeting. This software's claim to fame is that it runs in Windows yet still provides accurate code speed, try that with the others!

The Membership heartily congratulated Harrie (VE3HYS) for the excellent quality of the signal on the Club's repeater VE2CRA. Thanks Harrie, really sounds good!

Richard announced that Club member John Ellingham VE3GUM became a silent key on March 26, 1997. Our deep sympathies to the Ellingham family.

Home Brew Nite

The meeting turned to the highlight of the meeting - presentation of home brew projects. Members heard Mike (VE3FFK) describe his Morse Code decoder. This beautiful piece of work accepts an input of Morse Code of up to 40 wpm converting it into plain text and displaying it on a LCD screen. Highly tolerant of noise and frequency and tone adjustable, Mike's project was based on a design he had seen in 73 Magazine. Mike also showed off his

GPS antenna with mag mount for a car. Mike eventually plans to use the antenna for APRS.

Always a serious contender, Clare (VE3NPC) came to the meeting loaded for bear with 3 projects. The first, still in progress was a morse code key, rarely made at home, the paddles showed a high degree of craftsmanship. Clare also cleverly designed and built a low powered signal source for 2.4 GHz with a quarter wave antenna utilizing a 9 volt battery and based on a 24Mhz crystal. As his crowning achievement this year, Clare demonstrated his double antenna system built with Phase 3D in mind with 1.2Ghz uplink and 2.4Ghz downlink. This beauty was constructed with articles commonly found in the home, including an automobile windshield wiper motor, fencing, hose clamps, angle iron and uses a potentiometer to control azimuth and elevation.

While the judging committee, lead by Ed (VA3MPY) considered the projects, Jim Dean (VE3IQ) was invited to address the membership about his RAC activities. Jim reminded Members of the RAC Annual General Meeting to be held on April 20, 1997 at the downtown Ottawa Howard Johnson Hotel. Jim also spoke on the new revised Basic and Advanced exams that were requested by Industry Canada. The exams still based on RIC-24, were intended to re-balance the questions and were not intended to be any more difficult than current exams. On the delegation project, Jim emphasized that the effort was only temporarily put on hold and that discussions between Industry Canada and RAC are still continuing. In response to a question, Jim declared last year's membership drive very successful with a thousand new members, or a 12% increase. Richard thanked Jim on behalf of the Club for coming and talking to the Membership.

Ed (VA3MPY) on behalf of the judges, announced that Clare's antenna system was judged the best project. Ed observed

that all the projects were excellent and that making the decision was very difficult. Your minute taker looked at these babies after the meeting and boy, they were really good!

In wrapping up a very full meeting, Richard reminded Members that the May meeting would be recognizing volunteers and the June meeting would be devoted to elections. The meeting adjourned at approximately 9:30 pm.

Minutes thanks to Greg (VE3YTZ)

OARC FLEAMARKET

The OARC Fleamarket will be held on Sat. August 30, 1997. Watch future issues of the Groundwave for details. Call Jim Cummings, VE3XJ at 446-1225 for more information and to volunteer.

FCC LICENSING BEGINS

The FCC has announced a delay in the requirement that all computers used in conjunction with Amateur Radio must be licensed. A line in the Telecommunications Act of 1996 describing this mandate had gone unnoticed until recently. Accordingly, the Commission has delayed the date for required registration until 1 April 1998. Fees have been set at \$1 per megabyte of storage space, renewable annually.

de GEARVAK

mk's WORDS

Apr15/1997 - I'm disappointed.

I'm unhappy that there were only two people who had things to show us at homebrew night. (Though I was impressed by VE3NP's rotor system). I am disappointed about the fact that Phase 3D won't be in space until at least the fall, which puts it in service date some time after Halloween, I think. I actually had to pay store prices for some aluminum project boxes this winter because of the sorry state of my "junk box". Most of all, I guess I'm annoyed about the fact that it is half past April and there is white stuff falling out of the sky. Ok.. I feel better now that I'm done whining.

The good news is that I'm back on two wheels. Just a few more bugs to iron out, and I will be back on the air during my commute. A few bugs more, and I should be able to get back on H.F. from the bike. Its shakedown cruise was this past weekend during another bunny hunt. More on all that at the May meeting, with any luck. Then there are all the "thing a thons" and other excuses to play radio outside coming up, not to mention field day (or is it Field Day?). The sunspot cycle is coming back too.

It was nice to see the "retro" cover of the Groundwave, and interesting to see the logos of organizations that have come and gone during the time the OARC has been around. If nothing else, we're persistent. There have already been a few flea markets happening, with more of them in the works. Good thing.. the shopping list keeps on growing. Keep August 30 in mind for the OARC version of the flea market also, whether to buy, sell, or just help out (see VE3XJ about the latter).

Maybe things aren't so bad in radio land after all.

73.. Think Green - mk VE3FFK

NEW FROM KENWOOD

Kenwood's new TM-V7A has a voice synthesizer option (VS-3) that can be installed. The VS-3 allows voice feedback of the radio status. It can be programmed from the microphone or the front panel. This feature is very helpful for people who are visually impaired. The voice synthesizer allows the user to identify frequency, mode and offset without having to look at the actual radio display. You do not have to take your eyes off the road to look at the display for status confirmation. An excellent idea for more enjoyable use of your amateur radio and, more importantly, an assist for safer driving.

de The OVMRC Rambler

RAC BULLETIN1997 FIELD DAY PACKAGE

You can obtain the 1997 Field Day Package in either of two ways.

The Field Day Package is available in the 1997 Contest Yearbook which may be purchased at any time, or you can wait until May 1997 and send to ARRL HQ a 9 X 12 inch SASE with enough postage for 4 ounces of mail (\$1.01) and request a copy of the Field Day Package.

It is suggested that you pick up a copy of the 1997 ARRL Contest Yearbook. The 1997 Contest Yearbook is a brand new ARRL publication. It contains everything you need for Field Day and other ARRL sponsored contests. The Yearbook has the complete rules, entry sheets, dupe sheets, score records, Field Day Package, and more.

You can get your copy of this handy reference manual (order number 5994) for only \$5 from the ARRL Publication Sales Department at HQ.

Call 860-594-0200 to order your 1997 ARRL Contest Yearbook.

Thanks for your interest in the ARRL Contest Program. See you in the pileups!

P.S. The prices quoted above are in US\$.

CANADIAN AMATEUR RADIO HALL OF FAME AWARDS

The Canadian Amateur Radio Hall of Fame awards for 1996 were announced this week by Maurice Gladden, V01FG, Chairman of the Board of Trustees.

Frederick Oliver Hammond, VE3HC, was made a "Member of the RAC Hall of Fame" and Ernest Harold Savage, VE7FB, received the "RAC Award of Honour."

Both recipients are well known to the Amateur Radio community. The "Hammond Museum of Radio" in Guelph, ON, with its collection of equipment and tubes depicting over eighty years of wireless and radio progress has been a labour of love for Fred Hammond.

Ernie Savage, a patriarch of the amateur radio community in Western Canada served faithfully as Section Communications Manager and Section Manager for over 30 years.

The time and place of official presentation ceremonies will be announced shortly. A feature article, including pictures and a detailed account of the achievements of each of these distinguished radio amateurs, is in preparation for an upcoming edition of "The Canadian Amateur."

Congratulations and best wishes to Fred Hammond, VE3HC and Ernie Savage, VE7FB.

APRIL LEFTOVERS

BEING AN EVIL OVERLORD

Being an Evil Overlord seems to be a good career choice. It pays well, there are all sorts of perks and you can set your own hours. However every Evil Overlord I've read about in books or seen in movies invariably gets overthrown and destroyed in the end. I've noticed that no matter whether they are barbarian lords, deranged wizards, mad scientists or alien invaders, they always seem to make the same basic mistakes every single time. Therefore, if I ever happen to become an Evil Overlord:

1. My legions of terror will have helmets with clear plexiglass visors, not face-concealing ones.
2. My ventilation ducts will be too small to crawl through.
3. My noble half-brother whose throne I usurped will be killed, not kept anonymously imprisoned in a forgotten cell of my dungeon.
4. Shooting is not too good for my enemies.
5. The artifact which is the source of my power will not be kept on the Mountain of Despair beyond the River of Fire guarded by the Dragons of Eternity. It will be in my safe-deposit box.
6. I will not gloat over my enemies' predicament before killing them.
7. When the rebel leader challenges me to fight one-on-one and asks, "Or are you afraid without your armies to back you up?" My reply will be, "No, just sensible."
8. When I've captured my adversary and he says, "Look, before you kill me, will you at least tell me what this is all about?" I'll say, "No." and shoot him.

9. After I kidnap the beautiful princess, we will be married immediately in a quiet civil ceremony, not a lavish spectacle in three weeks' time during which the final phase of my plan will be carried out.
10. I will not include a self-destruct mechanism unless absolutely necessary. If it is necessary, it will not be a large red button labelled ``Danger: Do Not Push''.
11. I will not order my trusted lieutenant to kill the infant who is destined to overthrow me -- I'll do it myself.
12. I will not interrogate my enemies in the inner sanctum -- a small hotel well outside my borders will work just as well.
13. I will be secure in my superiority. Therefore, I will feel no need to prove it by leaving clues in the form of riddles or leaving my weaker enemies alive to show they pose no threat.
14. I will not waste time making my enemy's death look like an accident -- I'm not accountable to anyone and my other enemies wouldn't believe it.
15. I will make it clear that I do know the meaning of the word ``mercy''; simply choose not show them any.
16. One of my advisors will be an average five-year-old child. Any flaws in my plan that he is able to spot will be corrected before implementation.
17. All slain enemies will be cremated, not left for dead at the bottom of the cliff. The announcement of their deaths, as well as any accompanying celebration, will be deferred until after the aforementioned disposal.
18. My undercover agents will not have tattoos identifying them as members of my organization, nor will they be required to wear military boots or adhere to any other dress codes.
19. The hero is not entitled to a last kiss, a last cigarette, or any other form of last request.
20. I will never employ any device with a digital countdown. If I find that such a device is absolutely unavoidable, I will set it to activate when the counter reaches 117 and the hero is just putting his plan into operation.
21. I will design all doomsday machines myself. If I must hire a mad scientist to assist me, I will make sure that he is sufficiently twisted to never regret his evil ways and seek to undo the damage he's caused.
22. I will never utter the sentence ``But before I kill you, there's just one thing I want to know.''
23. When I employ people as advisors, I will occasionally listen to their advice.
24. I will not have a son. Although his laughably under-planned attempt to usurp power would easily fail, it would provide a fatal distraction at a crucial point in time.
25. I will not have a daughter. She would be as beautiful as she was evil, but one look at the hero's rugged countenance and she'd betray her own father.
26. Despite its proven stress-relieving effect, I will not indulge in maniacal laughter. When so occupied, it's too easy to miss unexpected developments that a more attentive individual could adjust to accordingly.
27. I will hire a talented fashion designer to create original uniforms for my legions of terror, as opposed to some cheap knock-offs that make them look like

Nazi storm troopers, Roman foot soldiers, or savage Mongol hordes. All were eventually defeated and I want my troops to have a more positive mind-set.

28. No matter how tempted I am with the prospect of unlimited power, I will not consume any energy field bigger than my head.

29. I will keep a special cache of low-tech weapons and train my troops in their use. That way -- even if the heroes manage to neutralize my power generator and/or render the standard-issue energy weapons useless -- my troops will not be overrun by a handful of savages armed with spears and rocks.

30. I will maintain a realistic assessment of my strengths and weaknesses. Even though this takes some of the fun out of the job, at least I will never utter the line "No, this cannot be! I AM INVINCIBLE!!!" (After that, death is usually instantaneous.)

31. No matter how well it would perform, I will never construct any sort of machinery which is completely indestructible except for one small and virtually inaccessible vulnerable spot.

32. If I am engaged in a duel to the death with the hero and I am fortunate enough to knock the weapon out of his hand, I will graciously allow him to retrieve it. This is not from a sense of fair play; rather, he will be so startled and confused that I will easily be able to dispatch him.

33. No matter how attractive certain members of the rebellion are, there is probably someone just as attractive who is not desperate to kill me. Therefore, I will think twice before ordering a prisoner sent to my bed chamber.

A NEW TORNADO SCALE...

(inspired by the movie TWISTER)

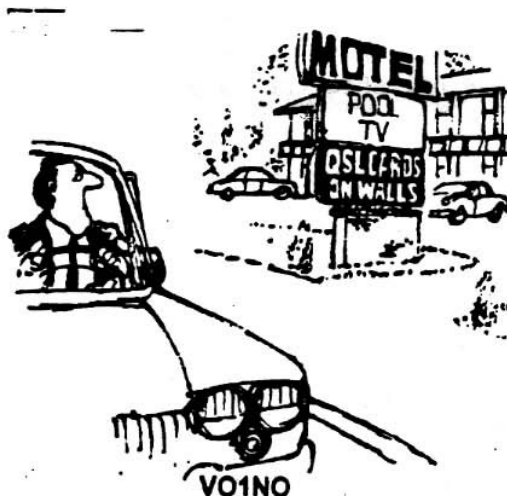
One of the ways Tornadoes are measured is the Fujita Scale, which categorizes tornado intensity based on the damage caused. The damage ranges from minimal, associated with weak F0 tornadoes, to total devastation with the F5 storm.

One of the memorable highlights of the movie "Twister" was the flying cow. That scene inspired a new scale for measuring tornadoes...The MOOjita Scale.

The MOOjita Scale...

- M0 tornado - cows in an open field, turn parallel to the wind and become mildly annoyed.
- M1 tornado - cows are tipped over and can't get up.
- M2 tornado - cows begin rolling in the wind.
- M3 tornado - cows tumble and bounce.
- M4 tornado - cows are airborne.
- M5 tornado - steak!

de "Keyed Up", The Newsletter of the London Amateur Radio Club



**CANADA CUSTOMS AND THE AMATEUR RADIO
OPERATOR**

by Larry Woram, VE3WLN

It is hard to believe but spring is just around the corner. Spring means treks south to hamfests like Dayton and Rochester. After a full week-end of visiting manufacturers' exhibits and all the flea market vendors, you usually wind up with a car loaded down with "must have" bargains headed for home and the border. For some people going through Customs is like a visit to the dentist. However, with a little help and some preventive measures it can almost be pleasant.

Before leaving Canada stop at Canada Customs and have any radio equipment identified on form Y-38 (the 3.5"x5" green card). It is also a good idea to have the "bill of sale" of your rig with you, you can keep it in the glove compartment of your car. This will make your return much easier should Customs questions where you acquired the item. I tape mine to the bottom of my mobile radio. This also applies to any other goods such as video cameras, jewellery, etc.

The following is a list of popular amateur radio items which amateurs tend to acquire while in the United States.

The Harmonized Tariff is as confusing to amateurs as most amateur radio equipment is to Customs officers. With this information you will know how much duty and taxes you will be paying as well as being able to assist the officer if required.

UST, or United States Tariff, applies to goods manufactured in the United States. MFN, or Most Favoured Nation, applies to goods manufactured in most other countries.

Besides the duty, if any, you will be required to pay the Goods and Services Tax (GST) of 7% on the duty paid value of the item. If you are returning to Canada after an absence of 48 hours or more use your personal exemption of \$150 for your items that attract the highest rates of duty. These include items such as offshore clothing and shoes (approximately 20-25% duty). The items below are only a small fraction of the 40,000 items in the Harmonized Tariff. Please call your local Customs office if you have a specific inquiry. In Ottawa the number is 993-0534 and after 4:30 p.m., weekends and holidays you may phone 998-3326.

de The OVMRC Rambler

(Note: This is a good article to take across the border with you.)

<u>Item</u>	<u>Tariff Item</u>	<u>UST</u>	<u>MFN</u>
Amateur radio transceivers	8525.20.10.	0%	0%
Amateur radio receivers	8527.39.10.00	0%	0%
Amplifiers, transverters, etc.	8525.20.10	0%	0%
Aerials and rotators	8529.10.99.19	0%	1.4%
Coax Cable (without connectors)	8544.20.00	1%	5%
Coax Cable (with connectors)	8544.41.00	1%	7.2%
Diodes, transistors, similar semiconductor devices	8541.	0%	0%
Receiver or amplifier valves and tubes	8540.81.80	.9%	4%
Power supplies	8504.40.99.20	0%	2.1%



BML Communications

(a division of Bytown Marine Limited)

5 Corvus Court, Nepean, ON K2E 7Z4

Tel: (613) 723-8424 Fax: (613) 723-0212

email: gwalker@bml.ca

Web Site: www.bml.ca

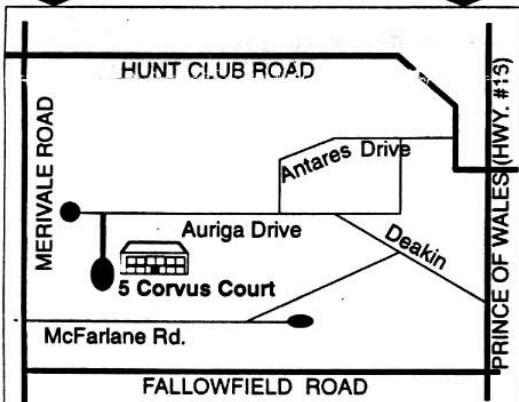
Transceivers and Receivers by:

DRAKE,
ICOM,
JRC,
KENWOOD,
LOWE,
RELM,
YAESU

Antennas and Accessories by:

AEA,
BARKER & WILLIAMSON,
CUSHCRAFT,
DAIWA,
DIAMOND,
LARSEN,
MFJ

Find Us Here



JUNE



KENWOOD

TH-235A 2m handheld transceiver "new"	\$ 269.00
TM-251A 2m transceiver w/dual band receive	389.00
TM-V7A dual band mobile with "cool blue" display	839.00
TH-22AT, 2m handheld	365.00

ICOM

IC-706, 160-10 m, 6 m & 2m, all mode transceiver	\$ 1,478.00 (after rebate)
IC-T2A "new" 2m handheld	275.00
IC-R10 "new" handheld receiver all mode .5 - 1300 MHz	785.00

CUSHCRAFT

A144-20T, 20EL beam	\$ 145.00
A147-20T, cross polarized 20 EL beam	130.00
A147-11, 11EL beam	100.00
A270-10S, dual band Yagi	125.00
A430-11, 11EL UHF beam	85.00

NEW! RELM COMMUNICATIONS

AH-50, 6m handheld transceiver	\$ 400.00
HS-200, multiband, handheld scanner, sub-audible, w/tones	500.00

UNIDEN DIRECT TV SYSTEMS

UDS-100 Digital Satellite Receiver, w/dish & mounting bracket	\$ 650.00
UDS-200 Same as above, more features & RF Remote	950.00

We also offer authorized factory service

Store Hours Monday to Friday 10.a.m. - 6.p.m. Saturday 9.a.m. - 1.p.m. excluding holidays