# Newscaster

The Official Publication of the Winnipeg Amateur Radio Club
The Winnipeg Seniors Citizen's Radio Club

mailing address
Newsletter Editor
W.A.R.C.
C/O VE4WSC
598 St. Mary's Road
Winnipeg, MB
R2M 3L5

#### October 1994

Date: October 17, 1994

Time: 7:30 p.m.

Place: Sturgeon Creek Regional Secondary School

#### Other Important Dates:

WARC: WSC:

MRS: Oct 13 - Semi Annual Meeting
ARES: Oct 18, Nov 15, Dec 20 - Meetings
Other: October 16th - Flea Market

October 15th - WARP first general meeting Nov 18th - RAC Regional Elections - Please Vote

Warc: Executive for 1994/95

President: Barret Filbert - VE4ABA
Vice-Pres: Richard Kazuk - VE4KAZ
Secretary: Dick Maguire - VE4HK
Treasurer: Gary Smith - VE4YH
Past Pres: Dave Panting - VE4EF
Membership/Newscaster: Vacant

Program Chairman: Rob Kaufman - VE4GV

Flea Market: Vacant

Members at Large: Jeff Dovyak - VE4MBQ (Wpg EC)

#### Notes from your Editor: by Derek, VE4HAY

And another month approaches... I have plenty of time this month, so this copy of the Newscaster should be in better shape compared to last month. I apologise for the rush job last month, even after having the entire summer to get prepared, but I just got my computer running one day before deadline date. Speaking of deadlines, the deadline for any articles is 12 days prior to the general meeting. Also anyone interested in advertising in the newscaster, please contact any executive member about the rates. We have plenty of space available.

Shortly, if not already, anyone who is a RAC member will be receiving an election form for your Regional Director. Please read this very carefully and remember that this person will be your representative to our national Organization. Make sure you are voting for someone who will deal with the issues most important to you. Speaking of RAC, I called them the other day, asking if they would like to advertise in the Manitoba Call Book (Blue Book). Since they are looking hard for members, I thought this would be a great way to introduce the new ham to the National organization. At least give the new ham a mailing address to write to. I was quite shocked to have them plainly say no they would not advertise. I guess they are not looking for members after all. Once we have our new Regional Director, maybe this policy will change.

Is anyone interested in going in on a group purchase of antenna cable? (I'm not talking the Radio Shack stuff here.) I am thinking that maybe with all the new hams, it's time to make a group purchase of some good quality cable at a very discounted price. Maybe something like Belden 9913 or a compatible brand. Anyone interested, please see me at the meeting.

You can submit articles to me via the internet as derek@facs.mb.ca or derek@mbnet.mb.ca or via packet ve4hay@ve4kv.#wpg.mb.ca.noam. I can also be reached on MWCS or at my home number 257-1420.

# Words from the President of WARC: by Barret, VE4ABA

Hello everyone, it's good to be back. The 1994-95 season is here and I am pleased to be your president. I would like to say welcome to all the new hams, and I hope to see you at the meetings. This year I would like to see Rob (VE4GV) continue to conduct the interesting programs for the club. A job well done, Thanks Rob.

To kick things off, the club flea market will be held in tradition, and we hope to see a good turn out of attendee's. Nice prizes will be given away, and good 'junque' will be for sale. Let's have fun this year, get involved with the club and keep the membership growing. Thank you for your support and I look forward to see one & all of you at the next meeting and Flea Market.

# Winnipeg Senior Citizen's Radio Club. by Martin, VE4AKA President.

Fall finds us still hard at work and enjoying every minute of it. We now have two stations fully equipped for HF, VHF, and Packet operation. These are in separate rooms and have separate antenna systems, so we have full back-up should one go down. It is true that one antenna is a G5RV and therefore does not have the benefit of directional signal concentration, but we have had satisfactory contact with European stations on both phone and CW, so it should be fully acceptable on a Canadian national basis. Our third station, ( again in a separate room ) is in the main dedicated to satellite operation and has its own computer on site. Fast Scan TV is in place, and all we have left to do is learn how to use it. The Basic Theory and CW classes are in full swing and from what I hear on the sidelines, we have an enthusiastic and motivated group of students.

The Annual Picnic in St Vital Park was its usual big success and the weather couldn't have been better.

None of these activities could have come to pass without a great deal of willing and knowledgeable involvement on behalf of The Club by hard working members. We would like them to know that their efforts are greatly appreciated. Thank you from us all.

Sadly, we have to record the passing of Pat Pettapiece, VE4NQ. He will be remembered as a remarkable person, a great Amateur Radio Operator, and a good friend. We send our very sincere sympathy to Emily and to all his family. See you all at the Norlander Breakfast.

### ARES Committee Report by Jeff, VE4MBQ

Seventeen members assisted with communications at three 'Terry Fox' Runs held in Winnipeg, Sunday, 18 September. They were: VE4's AIR, AJG, AJR, AND, CDP, DAR, DJM, GLV, GWB, KAZ, KLM, MBQ, MHZ, PLG, SDW, SYG & WTS.

The operators working at the Terry Fox run who were wearing ARES vests were readily identified and easy to find in a crowd. I am taking another order for vest - the cost is \$25.00, preferably by cheque made payable to Winnipeg ARES.

Following VE4JR's presentation on message handling and some general discussions at our last meeting, VE4's DJM, HAY & WTS stayed behind to do some brain-storming on future topics for our meetings. Some of the ideas include 'Fleet Dispatch Techniques', the role of some of the other groups in disaster management (Salvation Army, Red Cross, City Social Services etc...) and a tour of the City E.O.C.

There will be some kind of a drill for Winnipeg ARES members held on **Saturday**, **15 October 1994** between the hours of 1000h - 1400h local time. The VE4WPG repeater will utilized, the back-up repeater will be VE4WNR. We have forty three members as of this writing. Our next meeting is 18 October 1994.

For your cellular & paging needs

Call Russ Schroeder

Cantel - 955-8723

### **MINUTES FOR W.A.R.C.** - **Sep 12, 1994**

Meeting began 7:38 pm, VE4EF presiding.
Introductions, including one guest VE2BVI, who accompanied VE4TV. Approximately 75 in attendance.
Minutes of June meeting were approved as read by VE4HK moved VE4MUD seconded VE4GV

CARRIED

There was no business arising.

VE4EF reported that Radio Amateurs of Canada station CI4RAC was on the air on Canada Day, from VE4EFs QTH. He logged 600 QSO's.

Correspondence - VE4HK sent a letter to VE4LA thanking him for his assistance with setting up VCRs etc for our programs. No other correspondence Question

from the floor: How do we get membership in RAC through WARC. Answer from VE4EF....See him after the meeting

Treasurer's Report - VE4YH announced that WARC had approximately \$4000.00 in the bank.

**Standing Committees** 

Flea Market - VE4PLG reported on the Flea Market. It will be held on Sunday October 16, at Waverley Heights Community Club. Selling from 9:00 to noon, setup 8:00 am to 9:00 am, with a total of 30 tables for rent. There are currently 7.5 tables left. VE4MP suggested that WARC hold an auction for "good" equipment. After some discussion, VE4EF decided that the executive will consider this idea. VE4RBL suggested moving the start time to 11:00 am, so that out of town hams could go, without staying overnight in Winnipeg. VE4SYG noted that he and VE4PLG were looking at renting West Kildonan Arena for the entire day, for the spring Flea Market.

Classes etc. - VE4OV began by announcing the giant garage sale of ham radio "stuff" at VE4JO's QTH, Saturday and Sunday, September 17 and 18. VE4OV announced that the Basic Class will begin September 29, and run for 10 weeks, at Sturgeon Creek High School. Cost \$190.00 VE4OV also announced that he will be commencing an HF Techniques class on Tuesday evenings. The location is to be determined, depending on how many amateurs wish to upgrade. It will probably be held at Sturgeon Creek High School. Cost \$180.00 complete. VE4OV reported that he had a very strong response.

Newscaster - VE4HAY apologized for a few errors in the Newscaster, such as an advertisement for Comtelco that came out black. VE4HAY also solicited articles for the paper, preferably on disc or on packet. He disclaimed any responsibility for mis-spelling etc if he is given printed or written copy. VE4HAY also solicited advertising for the Newscaster to help defray the costs.

# Comtelco Electronics 1456 Logan Avenue Winnipeg, MB, Canada R3E 1S1

Canada Wide Mail Orders

MFJ \* Chushcraft \* Alinco \* Kalor Sangean \* Aor \*Uniden \* Optoelectronics

Phone (204) 774-9313 Fax (204) 772 3550

ARES Report - VE4MBQ reported that the ARES pager telephone number in the Newscaster was incorrect. The right number is 955-8723.

Marathon - VEAEF noted that close to 60 hams participated in radio coverage of the Marathon. It was a marvelous day, very successful. He expressed his heartfelt thanks to each and every ham who took part.

Miscellaneous - VE4HK reported on happenings at the Barnstormers International Airshow (ARES event, not WARC), and the annual Birds Hill 20K run) VE4ZB asked if any amateur group received a donation (money) from the airshow. VE4MBQ stated that, since the airshow organizers claimed to have lost money, no volunteer organization received a penny.

**New Business** 

VE4EF announced that he had several spare copies of the Newscaster at the front. He also had renewal forms and copies of the letter soliciting MRS members to join WARC. VE4EF noted that MRS decided to discontinue our joint effort at publishing the Newscaster. He also advised that WARC published Manitoba Repeater Society information in the September issue as a good will gesture. The advantages of a reduced circulation are that our costs will be reduced. Additionally, it will take less time to fold and envelope the Newscaster. This move will have little financial effect.

VE4EF spoke about the flyer about the TH22AT included with the Newscaster. He noted that WARC has a significant bank account, so they can afford it. This will encourage people to join WARC, and should just about break even. VE4OV agreed, stating that WARC should have even bigger and better prizes for the raffle etc.

VEAEF stated that WARC executive is considering projects. He solicited suggestions from our members. Think about worthy projects where we can participate, such as mall displays.

VE4UB said that the Blue Book should be available for the Flea Market. Everyone can check with him during the coffee break. VE4UB stated unequivicably that every cent the Blue Book committee receives is re-invested in amateur radio projects in Manitoba.

Notices for the Good and Welfare of the Club

VE4KHS announced that the he had the latest WARP (Winnipeg Amateur Radio Packet) net book available at tonight's coffee break. It will also be available at the flea market.

VE4AKM noted that the Manitoba Amateur Radio Museum at Austin Manitoba will be holding a hamfest the second weekend of September 1995. He recently attended an organizational meeting.

VE4EAR spoke about a scanner and SWL net he was starting. The net will be on Wednesday evenings at 9:00 pm on VE4WPG. It will employ a call in format. Check ins can request information, give information, etc.

It will be informal for the first while. Contact VE4EAR for further information VE4WTS asked what sort of information would be made available. VE4EAR replied that it would be exact frequencies (which are in the public domain), modifications, and any other non confidential information.

VE4MHZ announced the great J Pole building bee, to be held on October 1, at the University of Manitoba, Room 566 Engineering Building. Cost \$15.00 for parts. VE4RY noted that an extended double Zepp antenna he was experimenting with had 4 dB gain over a regular Zepp.

VE4EF announced that he was running for Radio Amateurs of Canada Midwestern Director. Ballots and further details in early October for RAC members. VE4GV spoke about the RAC convention in Calgary the August long weekend. He noted that VE4EF made a very elonquent speech, amid the din and turmoil. VE4EF has good rapport with the Regional Director for RAC.

#### **NEW EXECUTIVE FOR 1994**

President Barrett Filbert VE4ABA
Vice President Richard VE4KAZ
Secretary Dick Maguire VE4HK
Treasurer Gary Smith VE4YH
Member at Large
Rob Kaufman VE4GV (program chairman)
Dan Michaels VE4SYG (membership)
Jeff Dovyak VE4MBQ (ARES liaison)

VE4ABA then took over chairing the meeting. VE4HK reminded everyone to purchase a ticket for the raffle. VE4SN moved a big round of applause for VE4EF, for an outstanding job as president for the last two years. VE4OV moved a round of applause for the rest of the executive. Adjournment of business meeting 8:20 pm VE4EN

Program began 8:50 PM - VE4GV showed a videocassette of a presentation at the RAC convention, concerning tower regulations. The sound quality was poor, so VE4GV took over, with many tips and suggestions (from personal experience!!) about do's and don'ts of erecting a tower in the City of Winnipeg. He strongly recommended purchasing a building permit, and getting a letter from neighbours stating that they do not object to a tower in your yard. He also recommended getting involved in public service work, both for personal satisfaction, and to "get in good" with politicians. Meeting adjourned 9:55 pm

# Hints & Kinks by Ralph, VE4RY

Don't throw away that scrap piece of stainless steel antenna whip - use it to make a 'pointy-tool' for your workbench or tool kit.

Grind one end of a six-inch piece of rod to a point and either bend the other end into a hook shape or grind it to a chisel point, whichever you prefer. Using vise-grips, wind a length of #14 gauge wire closely around the rod near the center to form a hand grip. (You can roughen the rod and apply some epoxy glue beforehand, which helps keep the coil in place. Trim both ends of the wire and flatten the ends.) As a finishing touch, cover the coil with heatshrink.

You will find many uses for these tools, both in the hamshack and around the car, and will likely end up making as many as your supply of whips will allow. Have I made my point? (hihi)

# Message Traffic By Derek, VE4HAY

On September 20th at the ARES meeting, VE4JR did a presentation on message handling and traffic procedures. While Bill was extremely proficient in his lecture, I decided to put the matter to a test. Hence I created my first piece of traffic. Nothing fancy just to the point.

#1 R QDX 16 Winnipeg 2100 Sep 20/94

to: VE5RGM

Just had a meeting on message handling. So I thought I would try it out

Derek Hay VE4HAY

I passed the message to Bill at the end of the meeting. Then I got this packet message on VE4KV.

From: VE4JR To: VE4HAY Type/status: PN Date/time: 21-Sep 16:38 Bid: 45666\_VE4KV

Message # : 111202

Title: your message to Saskatoon

Derek, your #1 was passed on the Day 10 traffic net this afternoon to VE5JRA at 18:49 Zulu. Jack VE5JRA advised that it was delivered by phone at 19:00 Zulu. How's that for service. 73...CUL8TR...Bill

----- End of message #111202 -----

Now how's that for service. While my parents are away on SnowBird time, I think I will stay in touch with them via this system.

#### **RAC News**

Extracted from RAC news Bulletin Sept/94

#### **HF Band Plan Committee**

Radio Amateurs of Canada is forming an HF Band Plan Committee. The committee will consist of a representative from each of the seven regional areas and the HF Band Plan Co-ordinator. If you are interested in being a regional representative on the HF Band Committee please contact your director (Robert, VE5FY, 1511 Spadina St. MooseJaw Sk, S6H 7E1) Include a resume of your ham activities and interests.

#### **Reciprocal Licensing Mgr Appointed**

Francis, VE3FRS has taken on the responsibility of reciprocal Licensing for RAC. Enquires from HAM operators regarding licensing information in other jurisdiction will be handled by Francis.

#### E-mail of RAC Bulletin

Anyone wishing to receive the complete RAC bulletin via E-mail, send your request to Steve Cutway at the following address: cutways@qucdn.queensu.ca

#### Flea Market By Dan, VE4SYG

It's Fall flea market time once again and plans are in progress for the semi annual event. WARC is holding the fall flea market on October 16, at Waverly Heights Community Club, located at 1885 Chancellor Drive. For those of you who don't know where that is; Chancellor Drive runs off of Pembina Highway near the Canadian Tire store. Doors open at 9:00 am for the public. Admission will be \$1.00 to everyone. We will be operating a canteen with coffee, drinks, donuts and hot dogs.

# Cushcraft AR270-10S Review by Derek, VE4HAY

For the past year I have been searching for plans for a dual band multi element beam. I asked a number of people who built antenna's if they have ever seen one of these before. The resounding answer is no. I kept up my search. Since television can have multi band receive antenna's, Why can't we have a multi band transmit antenna.

Well, finally I found what I was looking for. It was not a set of plans, but it was a commercial built 2 meter/70 cm yagi antenna made by Cushcraft. A quick call to a couple of dealers (to compare prices) and a week for shipping & customs clearance, I had my antenna.

Assembly, while not as fun as a homebrew design, was very easy. Total time was 30 minutes, and as simple

as building a plastic model car. There are only 6 simple steps. The installation of the antenna on a new tower & rotor (which were not purchased yet) was a little harder. Both a very worth while investment.

### The specifications of the antenna are as follows:

frequency 144-148 / 430-450 # elements 5/5
Forward Gain, dB 10/10
Front to back ratio, dB 20/18

SWR 1.2:1 typical

2:1 bandwidth Mhz >4/>10 Power rating, Watts pep 350/350

3dB beamwidth, degrees

E Plane 52/52 H Plane 60/60 Boom Length 1.9m Windload .725 sq ft Weight .81kg

The operation of the antenna is great as far as I am concerned. I routinely travel out to Eastern Manitoba, and like to stay in touch with my XYL. However I could rarely hold the repeaters in that area, yet alone have an intelligent QSO. With the new beam, I can travel up and down the TransCanada Highway, and always be in touch. With the dual band feature, I can set my radio to use a VHF repeater, and UHF simplex frequency. Then when ever I am out of range for a decent QSO on the VHF repeater, I simply push one button and switch to UHF simplex, and continue the rest of the drive this way.

While not having the proper equipment to measure the true signal compared to my old antenna. I can say that a signal from the distant repeater that I did receive with my old Cushcraft AR-270 vertical (3/5 dB gain) had a signal strength of 1-3 units. With the new A270-10S the signal is a solid 5-7 units. This reading was taken with-in minutes of the old antenna reading, and was verified a couple of days later again.

Cost was \$75.00 US + PST & GST from Canada Customs. No duty, as this item falls under the rating of Amateur transmitting \$8529.10.90

Hence, with this antenna I have now filled up the memory banks of my rig and can hit the out of town repeaters very strongly. (VE4GIM, VE4FAL, VE4EMB, VE4MIL, VE4SLK, VE4CDN) All in all I would recommend this Dual Band multi element yagi antenna to anyone. Simple to assemble and fun to use. As far as I know this is the first commercial built dual band beam on the market for Amateur Radio. (the author is in no way connected with, or has anything to do with the manufacturer, distributor, or any agents for this antenna. He just likes the product)

# History of Packet Radio by JERRY, VE4SVB.

Being an Amateur Radio Packet Operator, one must know its history or the event that brought Amateur Packet the way we have today. I took the liberty of putting together bits and pieces of information that I believe is worth remembering not only as an Amateur but a Canadian in general.

#### A glimpse at the Past of Amateur Packet Radio

...Packet Networking can be trace as far back in time as 1964, when the Rand Corporation initiated its studies and possibilities.

...the term "PACKET" was introduced by D.W. Davies of the British National Physics Laboratory in 1965.

...The United States Advance Research Project Agency (DARPA), started developing an actual packet switching in 1969. This network was named ARPANET, set up by Bolt, Beranek and Newman, Inc. The first Packet Switching Network were all inter-connected by cable, wherein all data pass through cables.

...The first large scale experiment of packet radio transmission over the air was conducted in the year 1970. The Largest and most significant packet radio network was the ALOHANET, based at the University of Hawaii.

...Department of Communication Canada announced its intention to allow packet operation on 220 Mhz was in April of 1978.

... The first Amateur Radio Packet Network was developed by the Montreal Amateur Radio Club of Canada and its first transmission was on May 31, 1978. It was called the MP-Net. It uses a combination protocol called Character Oriented Protocol (COP) and Bit Oriented protocol (BOP), running at 4800 baud FSK on 220 Mhz. It hold the distinction of the first Amateur Packet Radio System in the world.

...The second Canadian group to set up a another system is the Vancouver Amateur Digital Communication Group (VADCG), founded by Doug Lockhart, VE7APU in January 1979. VADCG system was called the Terminal Node Controller. He developed the V-1 protocol popularly known as VADCG protocol and later on the V-2 protocol. User with TNC's connect with the central device called the Station Node Controller (SNC) operating at 1200 baud on 144 Mhz. They were also the first to publish a newsletter called "The Packet".

...The third Canadian group to set-up an operational packet system was the Ottawa Group which started operating in 1980, it uses a polling protocol and first developed the concept of a digipeater. It was operating at 9600 baud using Frequency Shift Keying (FSK).

...A packet group in Hamilton, Ontario was working on developing a TNCs, and wanted a protocol that will allow them to connect from among themselves without a master station. Doug Lockhart, VE7APU accepted their request and provided them with a temporary modified VADCG protocol that came with the VADCG TNC kit and this eventually spread to the United States.

...After Canada initiated the first spark, FCC finally gave its authorization for ASCII transmission, it was March 17, 1980.

...the first packet radio system in the United States was activated in San Francisco on December 10, 1980 by Hank Magnuski, KA6M. He used a homebrew TNC and modified the VADCG protocol to suit his need and introduced "Digipeating" . He is known to put up the first all-digital simplex packet repeater (a Digipeater)

...the first amateur packet radio station in the East Coast was activated by Bill Moran, W4MIB on May 4, 1981 with a modified VADCG system.

...The first AMATEUR RADIO COMPUTER NETWORKING CONFERENCE was held at Gaithersburg, Maryland on October 16, 1981.

...Right after the first Amateur Radio Networking conference, Tucson Amateur Packet radio Corporation (TAPR) was born on November 6, 1981 with the commitment to developed a complete TNC with on-board modem and a power supply.

...TAPR first TNC was the Alpha TNC based on the 6502 microprocessor. It was tested on April 1982 and finally succeeded receiving packet transmission on June 18,1982. With the experience gained from the Alpha TNC, work for the second TNC called the Beta TNC soon started . Some TNC designer adapted the improved VADCG protocol, AMRAD and RATS adopted a protocol based on the CCITT X.25 while the TAPR group adopted their own called TAPR/DA (TAPR/Dynamic Adressing).

...with the upcoming launch of OSCAR 10 (Orbiting Satellite Carrying Amateur Radio) and the idea of wide-area packet communication between different system, Tom Clark, W3IWI initiated a meeting between the different packet group on agreeing a standard protocol. On that meeting October 1982, the new version

of AX.25 that supported digipeater became the standard protocol for Amateur Radio Packet Communication,

...TAPR immediately incorporated the New AX.25 protocol in their Beta TNC which is now based on the 6809 microprocessor and a High-Level Data Link Control (HDLC) system. They began distributing this TNC to different sites for testing on December 1982.

...with the growing success of TAPR TNC, another TNC came out in the open. It was the PK-1, introduced by GLB Electronics in August 1983. Initially a supporter of the VADCG protocol, but they were quick to incorporate the new AX.25 in their unit. The HDLC system is handled by software contrary to the TAPR TNC which is a hardware based system.

...The first Packet Bulletin Boards System (PBBS) was put on the air by Hank Oredson, W0RLI on February 1984. Consequently became the standard Packet Bulletin Board in the United States.

...Immediately, manufacturer big and small came marching in with their clone TAPR TNC that now flooded the market.

...At the Dayton Hamvention of 1984, TAPR President, Lyle Johnson was presented with the first Technical Achievement Award for his work on TAPR TNC. Later that year, Doug Lockhart, VE7APU received the CRRL Certificate of Merit in recognition of his pioneering work in Amateur Radio

...Today, Doug Lockhart, VE7APU is widely recognized as "the father of Amateur Packet Radio".

#### \*\*\* references \*\*\*

"The Radio Amateurs Digital Communication Handbook, J Mayo,KR3T from TAB Books "The ARRL Handbook", 1993 Edition Other support materials were from QST and CQ magazine.

### So long Winnipeg from Pat, VE4PLG &Dan, VE4SYG

In case everyone has not heard, I am being transferred to Kamloops B.C. I have to be in B.C. by October 30/94. I will miss everyone here, there is a wonderful ham community here in Winnipeg. It's been a great experience working for and with WARC and MRS. I hope to continue this type of work with the radio club in Kamloops. I will maintain my memberships to WARC and MRS so I'll be able to keep in touch. Since there is so little time between now and then, there will be a problem getting everything done before leaving. I would like very much to have someone step forward to take on the job of

running the flea market. If someone volunteers, I'll be able to help as much as possible before I leave. The new person could get a good feel for the flea market by helping me out at this fall's flea market. I'll still be here and am willing to help and so is Dan VE4SYG. Dan and myself may be leaving Winnipeg but we will not forget all the absolutely beautiful people here who by the way are all "Hams". Thanks to everyone who let us be a part of the radio community here. We will miss you all. Pat VE4PLG Dan VE4SYG

(ed: And with that, WARC is looking for someone who would like to be the membership co-ordinator, and Flea Market chairperson - Please contact Barret VE4ABA if you are interested)

### Contest Calendar/Operating events Oct/Nov submitted by Rob,VE4GV

Oct 15 36th Annual Boy Scout Jamboree on the Air (JOTA) Speak with WARC exec if you can help out with this one.

Oct 29/30 CQ WorldWide DX Phone Contest - THE BIGGIE. This is what many operators the world over gear up for. 0000 UTC Oct 29 to 2400 UTC Oct 30. 1.8 thru 28 MHz Several classes of operation including single/multi op all band and single band. High, Low and QRP power classes. Exchange Sig rprt and Zone # (We're in Zone 4) Score 2 pts for contacts with N. American stations and 3 points with all others.0 pts for VEs but can be worked for Country/Zone credit. Score calculated by QSO points times Multipliers ( ie/ Zones and Countries worked)( eg/ 300 qso points X { 10 zones+10 Countries 300 X 20 = 6000 pts) Use ARRL DXCC Countries list. Read Sept QST p126 for more details or call VE4GV. Incidentally, VE4VV Derrick and VEAGV Rob are planning a trip to superstation W0AIH for the contest. They have 25 + Towers erected and a MONSTER set of antennas. NO, the 25 + was NOT a misprint. I hope to have some video for you in upcoming programs....with BETTER audio, I promise.

Nov 5/6 ARRL Sweepstakes CW 2100 UTC Saturday to 0300 Monday. 24 hrs max operating time of the 30 hrs total. Single and Multiop categories. High, Low and QRP power categories. Look up the band for special Slower speed CW areas. 21.090-21.130 7.090-7.130 3.665-3.705 Exchange is a bit different than usual and is based upon tradition that this contest was used for traffic handling practice. Exchange: QSO Number, Power level, Call, year licensed and RAC/ARRL Section Eg/ VE4GV runs low power. His first contact

is with K1ZX. He sends 1 A (A is for low power) VE4GV 72 (year licensed) MB He gets 3 B (B is High power) K1ZX 67 S.Florida 2 pts for each completed QSO. 77 Multipliers -> ARRL Sections RAC Sections, Puerto Rico, Virgin Islands and Hawaii. Score is QSO points X Multiplier

Nov 17/18 ARRL Sweepstakes SSB Same rules except SSB. Nice Pins available from ARRL for those who make 100 qsos or more and submit proof. Separate pins available for each mode. (\$3 US each + postage) Really Nifty Coffee mugs available for those who perform a "Clean Sweep" - work all 77 sections in either contest. I have 3 of em and they are Really nice! (\$8 bucks US + postage) More Details on CQ World Wide CW portion next Bulletin Remember, even if you can get on for just a few contacts, it makes it that much more fun for all of us. C U on the bands

440 MHZ BANDPLAN by RADIO AMATEURS OF CANADA

Proposed January 1994

Bandplan Status: Secondary Band: 430 - 450 MHz.

#### FREQUENCY (MHz) UTILIZATION 430 - 431.25 digital modes 430.05 - 431.25 high rate data, $\geq 4800 b (1)$ weak signal/ narrow band am modes 431.25 - 432.75 bandwidth (<=2.5 khz) 432.0 moonbounce (international) 432.1 ssb/cw weak signal calling frequency 432.2 ssb calling frequency (local) 432.3 - 432.4 propagation beacons 432.4 - 432.75 mixed mode narrow experiment 433 - 434 digital exclusive (>= 4800 b) 434 - 434.5 digital exclusive (<= 2400 b) 434.5 - 434.8 narrow band repeater links & aux 435 - 438 satellite (international, exclusive) 438 - 444 national amateur fast scan tv \*\*\* 439.25 video carrier frequency 442 - 445 repeater outputs 445 - 447 fixed repeater links national fm calling frequency, simplex 446 447 - 450 repeater inputs (1) 100 khz channelling, 430.05 through 430.95 inclusive 430.05 - 430.45 cross band linked to 220.55 - 220.95 mhz and 430.55 - 430.95 cross band linked to 1299.05 - 1299.95 mhz.

Note that RAC is working with IC to keep at least two 100 KHz channels for Amateur operations in 220 - 222 MHz. Discussions are on going with IC and FCC.

This is in addition to a digital band in the 218 - 220 MHz range for Canada. 73 de Dana VE3DSS 1st VP RAC.

This space could be yours. Please contact The newscaster editor, or Any member of the executive

Ad's should be in either ascii (plain) text or most word prpcessor formats. Graphics should be in either PCX, TIF, EPS or any format that can be read/imported by Amipro

# RF POWER CONNECTORS FOR SALE

U300 PL-259 NICKEL	1.25
U301 PL-259 SILVER	1.75
B507 BNC RIGHT ANGLE ADAPT.	3.00
U310 UHF FEM.x UHF FEM.	2.00
U314 UHF RIGHT ANGLE ADAPT.	4.00
U315 SO-239	1.50
B517 BNC FEM. CHASSIS MOUNT	2.50
B513 BNC M. to UHF FEMALE	3.00
<b>R804 N MALE TO UHF FEMALE</b>	4.00
BULK PL-259 10 U300	12.00
10 U301	15.00
PATCH CORDS 1 METER LONG C/W 2 U300	
CONNECTORS ON RG-8/USUPERFLEX	
CABLE	7.50
U301 UPGRADE ADD	1.00
ALUMINUM ANTENNA COMPOUND, SUPER	
CONDUCTIVE, NO CORROSION! "THE	
MAGIC ELIXIR'' 2 OZ.	5.00
CONTACT GARY SMITH VE4YH	
661-4158	