

Amateur Radio League of Manitoba

Incorporated



The Amateur Radio League of Manitoba Inc.

The object of the League is the advancement of Amateur Radio within the Province of Manitoba, Canada, by such means as may be appropriate, including the holding of conferences, exhibitions, hamfests, contests and the making of representations of behalf of the League and its members to government or other authorities, groups or individuals.



Editorial.



Would You Believe It!

Several weeks ago I was involved in a search with the Aircraft Museum group of Winnipeg for an aircraft which sank in a Northern lake in 1931. Because of my electronics experience I was to operate the magnetic detecting gear as we moved across the ice. Two days prior to departure I received the transmitter and receiver for checkout and upon opening the receiver discovered a row of six tubes; and would you believe it, all type 30 tubes! For those of you who don't know, the tubes (triodes of course) date back to the 1920's and have a 2V, 60 ma. filament and are virtually impossible to obtain now. After a short period to recover from my surprise I checked out the equipment and it seemed to operate properly. So we finally ended up on the ice of the lake, complete with "A" and "B" batteries to search for the aircraft. All this in our day of modern technology! Incidentally after two days of searching we believe we found the aircraft; in 40 meters (120 ft) of water.

Well the time has come to cast my eyes around for another editor for the Manitoba Amateur as my personal time is becoming very limited. There have been several fellow hams express an interest in this position over the last year but unfortunately I cannot recall who they are. If you are one please call me on the phone or on the air. 73's; John VE40L (832 6857)

Mrs. W. Horner, 6 Hart Avenue, Winnipeg.

Please refer to our earlier letter concerning the equipment disposal.

With this letter please find a further bank draft for \$150. which represents the sale of the HT-37, the V.T.V.M. and a small loudspeaker. This brings the total amount to \$1044.50 We were unable to dispose of the Heath Sixer and suggest that you permit us to put it in the auction to be held on the 27th of April, 1975. The money received will be remitted directly to you by the Winnipeg Amateur Radio Club at the conclusion of the Auction.

Trusting that this is satisfactory to you. Sincerely,

P.S. S.T. Chisholm, VE4AI., N.R. Hurst, VE4AQ.

Add \$10. to above for Heath Sixer since sold (VE4AI).

VE 4 LICENSE PLATES 1976

The list for 1976 VE4 plates has been submitted to the Motor Vehicle Branch for processing. All that remains now is to wait for a year till we can pick them up and proudly display them on our cars. As a reminder now, and one that I will be repeating as 1976 approaches, these plates can be obtained only from the Motor Vehicle Branch in Winnipeg. They are not sent out to the various branches around the Province. You can either mail in for them or pick them up in person. If you mail in for them don't forget the additional fee of \$15.00 for the special plate. A note of explanation would also help. Please, send no money to me. All fees are collected by the Province. If you have any enquires about plates, contact me I am the go between for the amateurs and the Province.

In October of 1975 I started mailing out applications to all present holders of VE4 license plates. As this was a Province wide project, the cost was funded equally by W.ARC & ARLM. The total cost was about \$30.00.

Listed below are some statistics:

Total applications mailed	261
Total Applications returned	222

Total applications received from all sources 286.

I made 29 phone calls in the city of Winnipeg as reminders to those who had not sent an application back.

I put out 17 pcs of formal traffic on the 80 mtr net to various parts of the province as reminders to those who had not sent an application back.

I have often been asked where do the plates go around the Province? Well, I sat down and figured it out, and listed below is what I came up with-

Alexander 1, Anola 1, Ashern 1, Binscarth 3, Beausejour 5, Brandon 27, Carmon 5, Cranberry Portage 2, Dauphin 5, Deleau 1, Deloraine 1, Flin Flon 4, Glenboro 2, Hamiota 1, Headingly 2, Kelwood 1, Kenton 1, Kemnay 1, Killarney 1, Lac Du Bonnet 2, Langruth 1, Lenore 1, Lundar 1, Margaret 2, Manitou 1, Miami 3, Minnedosa 1, Morris 2, Oak River 1, Petersfield 1, Pilot Mound 1, Pinawa 4, Pointe Du Bois 1, Portage La Prairie 1, Rossburn 1, Russell 1, Shilo 2, Steinbach 2, Ste. Rose 1, Selkirk 2, Stonewall 3, Thompson 1, Treherne 2, The Pas 1, Virden 2, Waskada 2, Winnipeg 179.

That's a total of 47 cities and towns around Manitoba where you are likely to run into maybe I should say meet, another VE4 license plate.

Tom Mills, VE4SE

IT'S NICE TO HEAR - The following excerpts are from a letter to a ham from an MP.

I am writing further to the letter of acknowledgment from my special assistant concerning the interference from your Amateur Radio Station with a neighbour's audio equipment.

I have now received a complete report from my colleague, the Minister of Communications, in response to my inquiries on your behalf. The following is quoted from Mr. Pelletier's letter:

In reply to your letter concerning interference to one of your constituents, the Regional Office of this Department has now completed an investigation to determine the nature and extent of the interference to X's audio equipment.

The interference has been defined as originating from an Amateur Radio Station. The interference, however, has not been attributed to any fault at the Amateur Station but rather the inability of the audio equipment.

I understand that the owner of the Amateur Station in question, appreciates the problem and has formally and verbally indicated a willingness to cooperate insofar as his operating schedules are concerned. Mr. X, however, is reluctant to agree to any concessions in this regard and wishes to operate his radio equipment at any time without restriction. The amateur operator has good radio equipment and has extensive experience as an Amateur Radio Operator.

"It is realized that sharing time is not an ideal solution for either. The most expeditious method of solving the problem would probably be for Mr X to contact directly the manufacturer of his equipment for their recommendations as to the best method of eliminating the interference.

In closing, I sincerely hope Mr. X will contact the manufacturer of his equipment to have the problem solved. Should any further assistance be required by Mr. X from our Toronto office, he should be advised not to hesitate to contact me again if I can be of assistance to you in any other matters.

WARC SPRING AUCTION! - Date: Sunday, April 27, 197 9:00 Am to 4:00 Pm.
RED RIVER COMMUNITY COLLEGE OLD GYM.

AUCTION RULES

1. Registration of lots will take place between 9:00AM and 11:30 AM. AUCTION STARTS 12:30
2. There shall be a non-refundable registration fee of 25¢ for each lot entered into the auction, TO BE PAID AT REGISTRATION.
3. All lots with a RESERVE BID shall be subject to a Further NON-REFUNDABLE fee equal to 5% of the reserve bid price (maximum \$2.50) This sum to form part of the 10% sales commission (maximum \$5.00.) Applicable to all lots sold at the auction.

As usual, the seller may or may not request a reserve bid be placed on his items. We're hoping to once again hear the silver-throated voices of VE4's MP and AI. Each sale is concluded immediately with the buyer paying the club treasurer.

Auction co-coordinators: Dave Johnson, VE4EW (334-0192) and Sid Lipkowitz, VE4ZS Park in the South Parking Lot. WARC is not responsible for the condition of any item sold at the auction nor for its safety at the auction.

SEE YOU ALL AT THE OLD GYM-RFD RIVER COMM. COLLEGE- APRIL 27 !!!

Teacher: "What was the Russian leader called?"

Billy: "The Czar."

Teacher: "His wife?"

Billy: "She was the Czarina."

When asked what their children were called, Billy answered: "Charlines."

THE AMERICAN RADIO RELAY LEAGUE, INC.



OFFICE OF THE
SECTION COMMUNICATIONS MANAGER

QST
OFFICIAL ORGAN

Here briefly are some news items from ARRL Headquarters of interest to Manitoba Amateurs:

1. The ARRL is currently compiling the results of a recent questionnaire sent to its U.S.A. membership regarding the FCC restructuring proposal. The Board of Directors has not taken any official position on the matter and will only so so upon completion of the questionnaire results. I believe most Canadians are aware of the proposal by FCC, and its various implications. to both Canadians and Americans.
2. A new DXCC Award, this one for CW only, has been introduced. Applications will be accepted after June 1, 1975, and contacts must have been made after January 1, 1975.
3. Field Day will be held the weekend of June 28-29 this year. A new rule to become effective this year is the raising of the value of CW contacts to two points in an attempt to encourage more participation on that mode. This will be a trial run and the rule will be reviewed by the Contest Advisor Committee after this Field Day.
4. The FCC has made available the following American prefixes to the Amateur Service: N1 through N0, AA1 through AL0, and NA1 through NZ0, and single-letter suffixes will also be assigned. For starters, FCC will use the AA- series for the 1976 Bicentennial. Similar to the optional use of 3C or 3B Canadian Amateurs used in our 1967 Centennial, next year any WA may use AA, WB may use AB, W may use AC, and K may use AD, with WN (novices) authorized the use of AK.
5. Effective July 1, 1975, there will be a change in computing month-end traffic counts. Instead of one point for each of the present Origination-Received-Relayed-Delivered categories, the term "origination" will now mean "message origination on behalf of a third party", the term "relayed" will be dropped, and the present "origination" and "relayed" will be combined under the heading "sent". The new point system will therefore be one point each for Origination-Sent-Received-Delivered. The change is to encourage input to the traffic system from third parties, and one may gain two points instead of one from a piece of traffic originated and transmitted on behalf of a third party, as opposed to on behalf of himself. CW and phone net members please note.

73, STEVE FINK, VE4FQ, SCM

New exam and code test in use in Winnipeg

The DOC Regional Office in Winnipeg has introduced the new multiple choice examination and recorded code test for Amateur Certificates of Proficiency.

With the increasing decentralization of the DOC, it is now up to the regions to introduce the new system as they see fit.

Those who experience the new tests and wish to comment on them should address their remarks to the Director-General, Regulatory Services, Dept. of Communications, Ottawa, or to the Federation, Box 356, Kingston, Ont. who will forward them to the DOC. The Federation's Regulations Committee would appreciate a copy of any remarks sent directly to the DOC.

CREDIT "THE CANADIAN AMATEUR".

Canadian Ladies' Amateur Radio Association

The Canadian Ladies' Amateur Radio Association (CLARA) is holding a convention in Calgary in conjunction with the ARRL Canadian Division Convention and the Calgary Centennial, August 1-3, 1975. VE4ST plans to attend. Domez, newly-elected president of CLARA, VE6YL, is chairman.

Plans are presently being considered for sponsoring a new award which would be based on working members of the same family. This would be in addition to the awards already sponsored by CLARA for working YL's in 100 different countries, and for working Canadian YL's.

The first Saturday in the month, VE4ST is net control for the Ontario Trillium 20 meter Net on 14.140 at 1700 GMT. All OM's and non-member YL's are welcome to check-in. Recent Saturdays have found YL's from nearly every call area in the country. Six TOT members will secure your TOT award.

(CREDIT:QUA) 73/88 Bubbles Timlick, VE4ST
VE4 CLARA Area Rep.

BRANDON AMATEUR RADIO CLUB

BRANDON, MANITOBA

Congratulations to Murray, VE4RE, on his recent acquisition of an XYL. As if he didn't have enough problems! Hi! May you and Carol have many many years of happiness.

On Apr. 1, BARC held a supper meeting to which all members and all XYL's were invited. 52 people turned out for a most enjoyable evening, especially due to the presence of a speaker, Tom Stacey, VE4JT. Tom entertained the group with reminiscences of his start in amateur radio and reminded us that BCI is not new. He also had words of wisdom and caution for the amateurs of today; in effect he asked us to reassess our roles as operators and to be more realistic in our expectations of our hobby. He also stated that he thought that Radio Clubs had to be strong to maintain the amateur's interest and "education". What an ovation he received, and even his "best friend", Humphrey, VE4AO, had to say something flattering. Tom has promised that he might become active again, much to Humph's "dismay".

Present at the do were the usual gang plus such notables as VE4AO, 4QK, 4RE's new XYL, 4LB, 4BD, 4KC, 4MR, and probably a few more. It was good to see you guys. We hope you come back.

RTTY is making a comeback in the area. VE4's QG, LM, JI, DO are currently active on 2m. and 4RD and 4MN are almost ready. If anyone else is interested, contact these boys and get the frequency.

Briefs:-Dewin, VE4EF and Shirley are back from a tour of North Africa and the Middle East (they missed the war!)

-Humphrey, VE4AO, is finally on two meters. With his mellifluous voice, he doesn't need a call sign.

-Ron, VE4UP and Fred, VE4U° are experimenting with low level 80M antennas. How's the icing problem in your area?

-Sonny VE4QI and Sandy, VE4SZ, along with some other guy in Shilo have an amateur radio class going and will soon have some mighty fine equipment to demonstrate.

-Brandon amateur radio classes have finished. One has passed so far-he's waiting for his call.

-Doug, VE4BX, is frantically making an 80-10m. rig out of his 80m rig! 73 from BARC.

VE4BM

SINGLE SIDE BAND . . .

To Jonn VE40L:

Box 192, Oakriver Man. ROK ITO
April 6 /75.

VE4YQ Ron at Oak River has been trying local 10 Meter contacts and to date we have successfully made contacts with VE4AU Les at Brandon, VE4IX Arnold at Virden and VE41a Les at Lenore. These contacts have all been made using vertical antennas. This seems to be the best way to extend the ground wave coverage on this bank. Anymore interested parties should get on 10 meters and give it a try. I think we should try and make local use of our 10 meterband and keep the air waves or should I say ground waves hopping .
RON VE4YQ.

(From the NARC Emitter) Great concern is now being shown in the USA for the future of the 220-225 MHz amateur band as the electronic manufacturers there were looking for new markets for CB equipment and you know what the CB frequencies are like now. They made a bid for the top part of the 220 MHz band; now they are asking for 2 MHz out of the center of the band. This would destroy it for our use and this move must be beaten! We feel that the mess in the 27 MHz region should be cleaned up before it is allowed to spread to other frequencies. We suggest that you subscribe to QST or CQ or any other ham mags for that matter, and keep up to date with what is going on. If you don't... you may find that some other bands that we consider to be ours may be going out the window in this fashion. Believe me--this is no joke.

"So you're getting discharged?!" the sergeant snarled. "And I suppose you get out you'll just be waiting for me to die so you can come and stamp on my grave?"

"Naw, sarge," said the private, "when I get out of this here Army I ain't ever going to stand in line again."

Matron: "Marie, have you given the goldfish fresh water today?"

Maid: "No, mum, they ain't finished the water I gave them yesterday yet."

*"Why are shower baths put in such small rooms?" one small boy asked the other.
"To make it harder to keep dry," said the second.*

Two butchers were out to dinner.

"This lamb is tough," said one.

"Oh," pooh-poohed the other, "let's not talk chop."

Have you heard about the parrot who could only talk in polly-syllables?



THE WINNIPEG DX CLUB

WINNIPEG, MANITOBA, CANADA



A big thrill for our club was to see our member's OSCAR antenna on the cover of QST. This is Al's (VE4AS) third QST article. We presented Al with a framed copy of the cover suitably inscribed. Pleased to say that his antenna does work--through OSCAR VII, he has QSO'd W, VE, G, F, DJ, PA, ON, & GW between his trips around the country.

VE4XJ is busy adding to his tower--88' is talked about...VE4MP has a new digital clock home-brewed by his son...VE4SL is sporting a new linear using a pair of 4-400's...VE4BJ has a new FT-501 digital transceiver... VE4AE has finally arrived on 2 meters with a Heath FM unit... VE4SD is retiring from CAE in February and will sign VE7 from Union Bay, near Comox. VE4SL is the President for 1975.

For those who need a Pacific (HL, 9M2, XU, XV, etc.), try W7PHO's net at 2330 on 14225 or as you want WAS, look for W40Q's 2-letter net on 3788 on Tuesday, Thursday, Friday, and Saturday.

Finally, we had a very successful Field Day at VE4MP's "Ponderosa" but someone forgot to send-in the logs.
74 es cul, Bill, VE4BJ (Credit QUA).

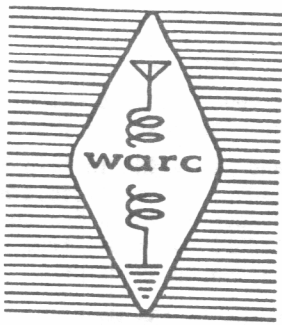
VE4AS, Al, who earned the 1974 Nov. QST award for best article in that issue has now worked many new countries in Europe through OSCAR VII...VE4XJ is still adding to his tower (must be cold out) ...VE4SL's new linear is working fine, but who made the best score in the ARRL contest, VE4SL, VE4RP or VE4JK ???...VE4SD, Sid, is now signing portable VE7 near Comox. The DX gang wined and dined Sid and his lovely wife Doris at the Stage Door just before they left. CAE also had a bang-up farewell...VE4SK returned from a month's vacation (?) in Vancouver... VE4AE, Jack, is planning an extensive tour of Europe and several weeks in Israel this summer. Jack hopes to get a 4X4 call so keep your ears open, fellas... bleep of the month re March QUA--the film shown at the Feb. meeting was not of DOC but the Telecommunications & Electronics Branch, Ministry of Transport (oops--thanx for the correction Bill--ed.)

73 3s cul, Bill, VE4BJ (Credit QUA).

Two monks set up a fish 'n' chip stand in front of the monastery during the tourist season.

*A woman asked one: "Are you the fish fryer?"
"No, ma'am," he replied, "I am the chip monk."*

In a POEM, Ode to Retirement, by Len Ingebrigtsen is this line: "The reason I know my youth is all spent? My get up and go has got up and went."



w i n n i p e g a m a t e u r r a d i o c l u b

A REPORT ON THE PINAWA TRIP

Approx. 35 eager VE4's and their wives gathered in the parking lot of the Great West Live Bldg. on March 16 as part of the WARC-sponsored trip to the Whiteshell Nuclear Research Establishment plant at Pinawa. We delayed departure 15 minutes in hopes that some of the pre-registrants who had not arrived would come. As expected, Walter boarded the bus at 12:15. The bus ride was quite enjoyable, but the tour of the WNRE was outstanding! Tour guides were Jim Barrie, VE4FK, Bunn Baxter, VE4DD, John Laporte, VE4ZP, Kent Truss, VE4BE and John Walker, VE4WX. A film preceded the tour, and then four groups were given a detailed description of the inner workings of the plant. Coincidentally, they were starting-up the reactor that day! Coffee and donuts followed, with a raffle--prizes donated by WES Limited were two radios and a mike. Of course, and true to form, Walter won one of the radios! Other winners were VE4's DD and JO. THANKS TO THE EXEC FOR ARRANGING THE TOUR--by the way the \$1 charge per person did not even come close to the covering the total cost; the rest of the charge for the bus, coffee, and donuts was subsidized by WARC. THANKS TO THE PINAWA GANG FOR A FB JOB! (CREDIT QUA)

W A R C A U C T I O N

SUNDAY APRIL 27 AT RRCC GYM

D O N T F O R G E T

A VISIT TO WINNIPEG BY THE ARRL CANADIAN DIRECTOR VE2MS

VE2MS visited Winnipeg on March 16 (the ARRL Canadian Director). He met with Ve4's FQ, MP, and a few others. George stressed the upcoming World Amateur Radio Conference in 1979. Whereas our North American Governments will support the amateur fraternity, we must remember that every IARU member country gets a vote at the conference--including merging African and Asian countries. If a strong block from these areas were to push for broadcast stations on 14 MHz, then this is what would happen. This is why the ARRL is currently holding discussions with amateur radio societies throughout the world in move to protect our frequencies. In addition, more frequencies may be requested, possibly 10.1, 18.1 and 24 MHz. What can we do ?? We can support our Local, National, and International amateur societies (CREDIT QUA)

Greetings from the North Country. Rec'd your of Dec 30/74 re EC endorsement. Incidentally Howard Henry VE4HH is assistant EC in Flin Flon and has been for past 2-3 yrs.

Some 2 meter activity up here VE4TM (Ken) at Cranberry Portage and Jim VE4NC in Flin Flon experimenting with contacts via mobile path of 40 miles with VE4QN. Ron participating. The boys would appreciate it if other 2 meter enthusiasts would keep a listen for them on 147.33 MHz when band conditions warrent. Len Creighton (exVE4SC) has moved from Flin Flon to Kelowna B.C. now operating as VE7DLX: working VE4QN, Ron on teletype. Bill Kirkwood VE4EQ has also moved to Kelowna B.C.

Howard Henry VE4HH looking at 2 meter rigs for local trips and trips to the West.

VE4NC Jim Nazur was disappointed with no delivery of tilting boom for his new tower before winter set in. Old quad was damaged in a windstorm last year. He has a new rig. VE4OB - John Kuhny still in Flin Flon/Crieghton (Sask) area but not active.

VE4NN - Working fixed portable from Cabinan Lake & Athapap on occasion-Expects to be mobile marine on 2 meters this summer.

* VE7B0Z/4 - Gordon Turner action in Flin Flon area from Apartment Bldg. using HW101 transceiver. Went ice-fishing last week caught a big trout and he darn near pulled me back down the hole in the ice. After a fierce struggle I lost him Darn it! Outside of that everything about the same up here. Hope to see some of the above items in the news especially the 2 meter operation on 147.33 Please pass on to the Manitoba Ham Bulletin. 73 Harry Easton VE4NW.

In North Bay - RADIO HOOK-UP MARKS MARCONI STAMP ISSUE

A one-hour live radio transmission from North Bay, Ontario to Signal Hill in St. John's Newfoundland highlighted events surrounding the first day sale of the Marconi eight-cent commemorative stamp in that northern Ontario city.

The North Bay Post Office went all out for the occasion, issuing a general invitation via the local newspaper for all to visit the Post Office on the day of November 15, 1974. Postal officials prepared a special program for the public. It included a display by the North Bay Amateur Radio Club; a telecommunication display by CFB 707 Communication Squadron; and a philatelic display by the Post Office.

More than 450 visitors viewed the displays. Many were especially attracted to the colourful philatelic display and the amateur radio operations. Seventeen amateur radio stations responded to calls transmitted by the North Bay operators - to from as far away West Africa. Others responded from points within Canada, and even Belgium and Baffin Island beamed in.

During the transmission between North Bay and Signal Hill, the Director, Northern Ont. Postal District exchanged greetings with the Director, Newfoundland; William Rompkey, a member of Parliament representing the Postmaster General; a director of Marconi Company; and the Mayor of St. John's. The Postmaster, North Bay, exchanged greetings with the Postmaster St. John's and several other communications were exchanged with people on Signal Hill. All communications were recorded on tape by the North Bay Amateur Radio Club. A copy was presented to Romeo Messier, Area Postmaster, North Bay, as a memento of the occasion.

Gross sales of \$600 were recorded, exceeding the day's target by \$100. This was all new business, as established customers' purchases were kept separate.

The Program received front page coverage in the North Bay Nugget of November 16, 1974. In addition, 127 guests signed a register, all commenting favourably on the event.

Among the visitors, 31 Grade Seven students from Cite des Jeunes held a 20-minute research project on Marconi in the Post Office lobby. The project was directly related to the school curriculum on communications.

Credit: COMMUNICATION 75 - January.

POOF! And big reflector forms in ionosphere. The Defence Dept. has revealed that scientists have for several years been creating instantaneous giant reflectors in the ionosphere that bounce radio signals to far more distance points on the earth's surface than the normal ionosphere does. And the reflector will also handle much higher frequencies.

Normally signals in the 30-to-600 MHz band are transmitted and received in a line-of-sight mode and have a range of between 50 and 100 miles. With the artificial reflector, however, signals can be propagated several thousand miles.

The "communications relay satellite" is an aurora that the scientists create by create by beaming f energy from a ground-based transmitter straight up to the ionosphere. They can dissolve the aurora instantly by turning the transmitter off. No trace of the phenomenon is left-no ecological pollution of any kind.

What happens is that the high-powered energy heats up the electrons in the ionosphere, creating scattering irregularities that are aligned with the geomagnetic field. The result is a reflector 100 miles in diameter and 10 miles thick. The enormous cloud can't be seen by the eye, but it can be photographed with an infrared camera.

The ground-based transmitter costs about \$2-million. It puts out 2 million W, which, with a high-gain antenna, has an effective radiated power of from 20 million to 30 million W. The transmitter station can be manned by three people.

Research has taken place at three sites, one, near Platteville, CO, is operated by the Institute for Telecommunications Sciences. Another is the 1000-foot dish at Arecibo, Puerto Rico, managed by Cornell University. A third is at Gorkie in the Soviet Union, about 400 km east of Moscow.

Studies on the feasibility of the system as a communications technique are being carried out by Stanford Research Institute, Menlo, Park, CA.

The work was originally funded by the Defense Dept.'s Advanced Research Project Agency. The agency was trying to find a way to louse up an enemy's ionospheric scatter communications and accidentally discovered that it was a good way to enhance one's own communications.

Credit: Electronic Design VIA VE4DD-Bun.

A man entered a cocktail bar and from each martini he extracted the olive and deposited it in a little bottle.

"What a nut," said another drinker to the bartender. "Really peculiar."

"What's peculiar about that," replied the bartender. "His wife sent him out for a bottle of olives."

And ...

Then there's the story of the bartender who invented the convention cocktail, called the delegate: take three and before you know it you're speaking from the floor.

The college freshman was hit by a car and thought he was mortally wounded. While awaiting the ambulance, he told his roommate: "Write to Myrtle. Give her my love and tell her my last thoughts were of her. Carbon copies to Peggy, Sally and Joan."

RED RIVER COMMUNITY COLLEGE

W A R C A U C T I O N

SUNDAY APRIL 27 AT RRCC GYM

D O N T F O R G E T

CALGARY CONVENTION INFORMATION

The year 1975 is the Centennial of the founding of the City of Calgary, and the Calgary Amateur Radio Assoc. is hosting a convention August 1, 2, & 3 with a full program of varied events. The Government of Canada has authorized the use of the special call-sign CY6 for all Calgary amateurs during 1975 and a number of operating events have been scheduled, all of which carry awards or prizes. Information on these events follows.

The Calgary Centennial Award - During 1975, Calgary stations are worth one point each towards the award, and the 2 club stations, CY6AO and CY6NQ are worth 2 points each. An Oscar contact is worth 4 points. Any band or mode, only one contact per station; stations outside of Calgary but within North America need to make 20 QSO's. Send LOG DATA (GMT time, date, freq., call and operator) to CC AWARD, Box 592, Calgary, Alberta, T2P 2J2.

Calgary Cent. Alberta QSO Party--Time: 0700GMT Apr. 1 to 0700GMT May 1, 1975. Calgary and Alb. Hams will work the rest of the world. Only one contact per band per mode permitted.

Stations outside Alberta score points as follows:

- 1 point for Alberta contact
- 2 points per Calgary contact with special prefix
- 5 points per club station QSO with CY6AO or CY6NQ
- 5 points per OSCAR contact.

Centennial Party awards will be given to highest Calgary score, highest Alberta score (outside Calgary), highest score in each VE province or Territory, highest in each US call district and highest in each country outside US and Canada.

Send LOG DATA (CY6 or VE6 station, operator, GMT time, date, freq), certified by another amateur to CC QSO PART, BOX 592, Calgary, Alberta, T2P 2J2. Logs must be postmarked no later than July 1, 1975.

Calgary Centennial--Calgary-to-Mobile Contest--This contest is to promote interest in the CC Convention; period starts 1700GMT, Sat., July 26, 1975 and ends 1700 GMT, Sat Aug 7, 1975. All QSO's must be made between CY stations (fixed or mobile) and Convention Guests who are not Calgary residents and who are operating mobile on their way to the Convention. Full info can be obtained by writing to the above address.

Sounds like a lot of fun--now here's the convention info:

The Calgary Convention will be held Aug. 1, 2, 3, 1975. It will mark the first meeting of the Canadian Div. of ARRL to be held in Western Canada. Pres., Harry Dannals, V2TUK and VP Noel Eaton, VE3CJ (also Pres. of IARU), Candn Div Director George Spencer, VE2MS, and others will be present. CARF reps will also be in attendance. The special guest speaker will be Dr. Owen Garriott, W5LFL, who you will remember as the Science Pilot on board NASA's SKYLAB 2 Mission which orbited the earth for 59 days during the summer of 1973. Included will be an exhibit from NASA and four movies. The Convention will be held at the Calgary INN. Swap and shop Aug. 1, a get-acquainted party Fri. night dinner-dance Sat. night, separate program for XYL's, full-time baby-sitting service, and children's program at a nearby ranch. For further info, write immediately to '75 Convention, Box 592, Calgary, Alberta, T2P 2J2.



Many inquiries are received about the services and administrative detail of your national Federation and we will attempt to answer the most frequently raised questions in this column.

1. "What is my membership number?" At the top of your mailing label, you will note that there is a legend, such as "G - 034 - DEC 75". The records of the Federation are kept on a computer program and that legend is the identifier for each membership. The "G - 034" is the membership number with the "g" denoting that the member is located in Ontario ("A" indicates Newfoundland, "P" the North West Territories and Yukon, etc.) and the "034" the number that the computer has assigned to that membership. The rest of the legend denotes that the last issue of the Canadian Amateur that will be forwarded on that membership is that of December 1975. All the staff members of your Federation will bless you when you use the membership number in making inquiries, supplying information etc.
2. "What is the CARF News Service?" The CARF News Service supplies the Editors of Provincial and club bulletins with news of the latest developments in Amateur radio. The basic idea behind the Service is that, if the Federation supplies these Editors with information, they will reciprocate and forward to the Editor of the Canadian Amateur items of news and comment of their area. Unfortunately this is sadly lacking, making our Editor rely on items contained in provincial and club bulletins that are received on the normal mailing list. By the time the item appears in the mentioned bulletins (publishing delays), and is received by Steve (postal delays), most of the items no longer have topical interest. Check with your Editor - if he is not on the Service's mailing list, get him to apply for same, and, if he is not forwarding items of interest directly to Box 356, Kingston, point out the many delays involved leading to a frequent lack of news items from your province or club area. If your club publishes a bulletin, please ensure that a copy is sent to CARF.
3. "When is CARF going to change to individual membership?" Our Legal Counsel, Mr. C. Grove, VE3CT, is hard at work preparing a submission to be put before the national Executive at their meeting in early April. This approved submission will then be forwarded to the Board of Directors and the Presidents of the provincial societies for ratification at the Annual Meeting in late May. When this is done, the amended By-Law must be approved by the Minister of Corporate Affairs before it can take effect. This procedure is necessary due to the federal corporate structure of the national body. When final approval is given, a date for initiation will be set (probably January 1, 1976) and the wheels will be set in motion to obtain nominations for Area Directors from the individual members and the elections of same to take place.

CREDIT "THE CANADIAN AMATEUR".

Driving in a dense fog, the motorist followed the tailight ahead and when the car came to a sudden stop, his car crashed into the rear of the other.

"Why don't you put out your hand when you stop!" the second driver screamed.

"What for?" was the reply. "In my own garage?"



CANADIAN AMATEUR RADIO FEDERATION INC.
FEDERATION DES RADIO AMATEURS DU CANADA INC.

CARF NATIONAL QSL BUREAU
P.O. BOX 66, ISLINGTON, ONTARIO
CANADA M9A 4X1

The enclosed comes to you, courtesy of this bureau,
to acquaint you with some important changes in C.A.R.F.

- 1) C.A.R.F. is converting from associate membership to direct--each member is to have a direct personal vote in the affairs of C.A.R.F.--background explanatory material is enclosed--it contains information of direct importance to you--
- 2) Effective now the QSL services of this bureau are expanded for C.A.R.F. members--
 - a) Cards for DX countries (other than U.S.A.) may be sent here in bulk--without charge they will be forwarded to the world bureaus--please arrange alphabetically when mailing to us--
 - b) VE's--W's--VP's-- may now exchange cards with each other inside Canada through this bureau--this service is without charge--but to receive cards back from the bureau include s.a.s.e. to be kept on file here--
 - c) This bureau will now accept s.a.s.e. for either DX or Canadian cards--
 - d) This bureau supplements but does not replace district ARRL bureaus for incoming DX cards--mateurs expecting DX cards are advised to also have s.a.s.e. on hand at those district bureaus--
 - e) The exchange of Canadian cards will take place through this address--
- 3) Watch 'The Canadian Amateur' tabloid newspaper for announcements of any further developments in the service of this bureau--
- 4) The printing of QSL cards is another service of C.A.R.F.-- a good variety of distinctly Canadian designs and color schemes is available-- can be printed in lots as low as 200--to obtain a package of samples, send twenty five cents to-- C.A.R.F. QSL Dep't, P.O.Box 356, Kingston Ont. K7L 4W2--
- 5) Now is a bargain time to join C.A.R.F. -- until constitution changes are made at the end of May/75 the existing category of associate member remains open for five dollars per year-- for that amount you get--
 - a) Voting rights added to your membership after May/75 for the remainder of the term without additional charge-- (applicable to licenced amateurs)
 - b) The above free services of the QSL Bureau--
 - c) One year subscription to the tabloid newspaper-- 'The Canadian Amateur'-- -- the only publication for amateurs circulated in Canada containing news of the state of the art in Canada-- while it is still news--

TO: C.A.R.F.-- P.O. Box 356--Kingston Ont. K7L 4W2

Enclosed is five dollars-- I understand this entitles me to--one year membership--the services of the QSL bureau--and one year subscription to 'The Canadian Amateur--

Name: _____ (Call: _____)
please print

Address: _____

Postal Code: _____

NATIONAL VOICE OF THE CANADIAN AMATEUR
VOIX NATIONALE D'AMATEUR CANADIEN

700-3-75



Interested Canadian amateurs have submitted these projects for consideration by C.A.R.F. as services they wish to suggest as helpful to them -- feasibility studies will be conducted on each -- licenced amateurs are earnestly invited to add to the list --

1. Continue to aid the activity of CRAG (Canadian Repeater Advisory Group)
2. Press along with development of CARES (Canadian Amateur Radio Emergency Service)
3. Expand QSL Bureau service to include outgoing DX cards and exchange of Canadian cards.
4. Provide Canadian material informing the public about amateur radio and how to go about joining the hobby -- distribution to take place through libraries, clubs etc.
5. Update the existing outmoded educational material leading to proficiency certificates.
6. Research updated technological aids for the teaching of C.W.
7. Compile a directory of clubs and societies and make regular releases to aid their publications
8. Explore advisability of revamping Canadian amateur licence categories
9. Foster increased Canadian participation in amateur satellite projects
10. Aid in developing a program similar to MARS (Military Amateur Radio Service) to facilitate traffic for personnel in armed force bases.
11. Foster increased interest in DX, to enhance Canadian image internationally
12. Develop a directory of nets, both local and cross country
13. C.A.R.F. owns the call VE3VCA (Voice of the Canadian Amateur). Schedule it as a regular bulletin service for local areas as well as nationally, to keep information flowing from C.A.R.F.
14. Needs of Canadian amateurs are outgrowing capacity of volunteers to cope in keeping them co-ordinated. Acquire some paid administrative staff to keep routines flowing.
15. Advanced technology has opened up new fields for amateur experimental challenge. Foster and encourage development in those areas.
16. Create a trust fund arrangement, whereby amateurs can make tax deductible contributions toward advancing the state of the art and skill in Canada.
17. Steadily monitor government legislation, either current or proposed related to amateur radio, so members can be kept up to date and alerted.
18. Develop a technical corner in 'The Canadian Amateur'
19. Develop a national technical library containing full information for conversions of gear for UHF/VHF spectrum.
20. Acquire test equipment for use in equipment clinics staged at conventions or hamfests.
21. Develop a panel of speakers for clubs conventions hamfests etc well qualified to transfer information or techniques, of interest to amateurs
22. Take an active part with any group planning a convention or hamfest etc.



Canadian Repeater Advisory Group

VE3CDC

Reports from Fredericton state that VE1GT now has an autopatch. New Brunswick Amateurs are warned by VE1IN in the LCARC bulletin that some stolen portable low-power 12 channel 2 meter rigs may be offered for sale in southern N.B. If offered such rigs from dubious sources check the serial numbers with the RCMP.

If you have purchased the "FM Repeater Atlas For The Entire World" from "73 Magazine" you can update the Canadian section from the following:

Add Shilo, Manitoba, 6.25-6.85 (call not known) sponsored by VE4OI; Bathurst, N.B., 6.22-6.82, owned by VE1PL, who is seeking an eventual site across the Bay of Chaleur in Ve2; Yarmouth, Ve1GM, 6.34-6.94; Brampton, VE3MHZ, 6.28-6.88; Ramore, VE3TIR, 6.46-7.06; Wawa, VE3WAW, 6.34-6.94; and Charlottetown, P.E.I., VE1AIC, 6.10-6.70. Change Ottawa-Hull to VE2CRA; Alma, VE2SP is 6.34-6.94; Chicoutimi, VE2IU, is 6.16-6.76; Kamloops call is now VE7KAR; Victoria VE7BEL is now 6.25-6.85.

News from Saskatchewan is that Prince Albert will have a machine on 6.46-7.06 this summer.

With the advent of more repeaters in a number of areas, the original Canadian plan of five primary repeater channels has to be expanded to suit conditions in congested areas and where wide area repeaters are being put on the air. The few replies to a CRAG query and a look at new repeaters seem to indicate that the following five repeater channels have found some favor as a second "set" of channels for the Canadian plan. These are:

6.01-6.61
6.04-6.64

6.37-6.97

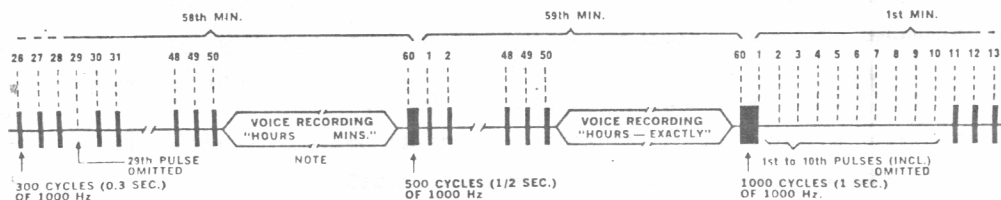
6.10-6.70
6.25-6.85

So far only VE1SMT is on 6.01-6.61. VE1LHR, also a wide area repeater is on 6.04-6.64, as is VE7CNR. Two Charlottetown stations, VE1ATN and VE1AIC input on 6.10 and the latter outputs on 6.70. For 6.25 and 6.85, there is VE3BOR and VE3OCR. On 6.37 and 6.97 are VE3KSR and VE3WXR.

The effect on repeater congestion of the recent FCC proposals for restructuring the U.S. rules and permitting non-code licensees on 2 metres and above has not yet been assessed but it will probably not improve the congestion in Canadian-U.S. border areas.

CHU: Canada's Time Service

CHU DATA TRANSMISSION SEQUENCE



NOTE: VOICE RECORDINGS ALTERNATE IN FRENCH AND ENGLISH:

"CHU CANADA, EASTERN STANDARD TIME	HOURS	MINUTES	HEURES	MINUTES" (EVEN MINUTES)
"CHU CANADA, HEURE NORMALE DE L'EST	HEURES	MINUTES	HOURS	MINUTES" (ODD MINUTES)
"CHU CANADA, EASTERN STANDARD TIME	HOURS EXACTLY"		HEURES PRÉCISES"	(ON THE HOUR)

The National Research Council of Canada radio time signals are broadcast over station CHU which is located on the south west outskirts of Ottawa at 45 degrees 17' 47" N, 75 degrees 45' 22" W.

Continuous transmission is made on three frequencies, 3330, 7335 and 14670 kHz. Transmitter power output is 3 kW on 3330 and 14670 kHz, and 10 kW on 7335 kHz. Vertical antenna systems are employed.

The three transmitter frequencies and time signals are derived from a cesium frequency standard which is referred daily to the Canadian cesium primary standard.

The seconds' pulses consist of 300 cycles of a 1000 Hz tone. The beginning of the pulse marks the exact second. The zero pulse of each minute is one-half second long, and the zero pulse of the hour is one second long. The pulses occur at the rate of one each second with the following exceptions:

1. The 29th pulse of each minute is omitted.
2. The 51st to 59th pulses inclusive of each minute are

omitted. During this interval station identification and time is announced by voice.

3. The 1st to 10th pulses inclusive are omitted on the first minute of each hour.

A voice recording of the time occurs each minute in the ten second gap between the 50th and 60th second. It refers to the beginning of the minute or hour pulse that follows. The announcement is on the 24 hour system, alternating in French and English.

The station supervisor is VE3BCL, Sid Sheard.

AVAILABLE FROM CARF

This service is open to all Amateurs. CARF members may have the emblem added at no extra cost.

Good variety of distinctly Canadian designs and color schemes.

Can be printed in lots from 200 up.

For package of samples, send 25 cents in stamps to: C.A.R.F. QSL DEPT., P.O. Box 356, Kingston, Ont. K7L 4W2

QSL
CARDS

Special meeting: CARF plans future

Your executive committee met on 1 February 1975, in Ottawa, for a special meeting, to discuss policy and future plans for your Federation.

The meeting had significance, in view of the proposed change to an individual form of membership, which was endorsed by all Federation Executive present.

A list of suggestions was tabled dealing with the needs of the individual Canadian Amateur and the means by which your National Federation can cope with Canadian Amateur problems and serve Canadian Grass Roots needs.

During discussions of the suggestions, it became evident that membership in the IARU was of minor importance to the individual Canadian Amateur, when compared with the many other activities requiring the Federation's attention. By comparison, relationships with the DOC, particularly as they affect the upcoming 1979 ITU Frequency Convention were of immeasurably greater importance than seeking membership in Region II IARU, as (ARRL approved) Canada's national amateur organization. It was realized that so long as the ARRL maintained an ambivalent stance on its recognition of your National Federation as Canada's national voice in IARU, considerable federation effort was being ineffectively expended in seeking IARU membership. In fact, such membership promised little, if any Canadian National status in the International Regulatory Body, ITU, for the main body of Canadian Amateur opinion. Consequently, your executive decided to relegate IARU membership to the lowest item on its priority list.

Those Federations' efforts which up to now had been heavily committed to this objective, would be diverted to more urgent grass roots objectives consistent with individual membership, and to support of our DOC in preparatory work for the 1979 ITU Frequency Conference.

At a meeting with ARRL Canadian Division

Representatives, later in the day, the Federation announced both its change in priorities regarding IARU and disengagement from the formalized and time consuming negotiations with the league in pursuit of this now deferred objective. The league officers were assured of the National Federation's good wishes in their stewardship of their Canadian members' interests. The National Federation will continue to cooperate with any organization or group of Canadian Amateurs, including the Canadian division, in any projects in the interests of all Canadian Amateurs.

With the league proper, the Federation will maintain a friendly, "hands across the border" relationship, as befits two neighbouring, but independent, National Amateur organizations.

It is hoped that this shift in priorities will enable your National Federation to knit together the talents of individual amateurs, local clubs, and provincial societies in a concerted drive for the protection and growth of Canadian Amateur Radio.

INDIVIDUAL MEMBERSHIP REQUESTED BY R.S.O.

At the Executive meeting of The Radio Society of Ontario, Inc., held in Toronto on Monday, 30 December 1974, the following motion was passed unanimously:

"The Canadian Amateur Radio Federation replace the present voting societies with individual voting members at the earliest opportune time."

This motion will be put before the provincial Delegates at the 1975 Annual meeting of your national Federation.

BCARA VOTES TO REJOIN CARF

The British Columbia Amateur Radio Association has voted to rejoin the Canadian Amateur Radio Federation at a general meeting held in Vancouver Feb. 16. Further details will appear in the March issue of The Canadian Amateur.

CANADIAN AMATEUR RADIO FEDERATION INC. BOARD OF DIRECTORS

President	A.E. (Art) Blick, VE3AHU
Secretary	K.E. (Ken) Rolison, VE3CRL
Atlantic Director	M. (Mike) Koval, VE1AJI
Ontario Director	L. (Lorne) Doreen, VE3SZ
Man/Sask Director	S.T. (Steve) Chisholm, VE4AI
Alberta Director	S. (Stella) Broughton, VE6VF
Director-at-Large	F. (Frank) Merritt, VE7AFJ

OFFICERS

President	A.E. Blick, VE3AHU
Vice President	D.R. (Doug) Burrill, VE3 CDC
Secretary	K.E. Rolison, VE3CRL
Treasurer	H.T. (Ed) Edworthy, VE3CLG

STANDING COMMITTEES

Auto Repeater Advisory	C. (Cary) Honeywell, VE3ARS
DOC Liaison	A.P. (Art) Stark, VE3ZS
Emergency Communications	R. (Ron) Belleville, VE3AUM
Membership	Dr. H. (Herb) Greenidge, VE3DWA
Publications	S. (Steve) Campbell
Manager National QSL Bureau	L. (Len) Sumner, VE3DOR
Honorary Legal Counsel	C.R. (Charlie) Grove, VE3CT

MEMBER SOCIETIES

Society of Newfoundland Radio Amateurs
Nova Scotia Amateur Radio Association
Amateur Radio League of Prince Edward Island
New Brunswick Amateur Radio Association
Radio Society of Ontario, Inc.
Amateur Radio League of Alberta
Amateur Radio League of Manitoba
Saskatchewan Amateur Radio League

CANADA'S OLDEST AMATEUR PASSES

Fred Bath, VE1LG, of Middleton, N.S., died early in January at the age of 99. Fred, who was known throughout the Maritimes on the air and off as "Mr. Bath" had been on the air since the thirties and continued as an active operator until just recently.

This page courtesy of The Canadian Amateur

HAMS DISTINGUISH THEMSELVES IN HONDURAS HURRICANE DISASTER.

Amateur radio operators in the U.S., Honduras, Canada and several Latin American nations jointly undertook the responsibility for providing emergency communication service in the wake of Hurricane Fifi, which devastated one third of Honduras. The day after Fifi struck; September 21, Dr. Enrique Avilar, Minister of Health in Paz, established communications coordinating committee headed by Honduras amateur operator Alhandro Talbott (HRIALT). An emergency base station, HR)CPEN, was set up at Tehusecalpa, and contact to organize amateur support efforts was made with Noel Eaton (VE3CJ), Waterdown, Canada, president of the International Amateur Radio Union, and Harry Dannals (W2TUK) president of ARRL, an organization of amateur radio operators.

With the assistance of the ARRL, and a group of Miami amateurs, four long-range, high frequency stations, 17 short-range, two-meter FM stations, and a repeater station were delivered to CPEN to fill an urgent need for equipment to provide communications both within Honduras and with the outside world. On September 21 and 22 more than 200 amateurs in the U.S. and a larger number in Central America handled emergency messages and requests for supplies relayed by Honduras-based amateurs. Most of the U.S. amateurs were members of the A.R.E.C. and other service organizations that operate long-established emergency amateur radio activity was centered in the Miami area. The week after Fifi struck, a team of bilingual amateurs from Miami's Sociedad Internationale de Radio Aficionados flew to Honduras to assist operations there.

Eighty-five percent of the communications in Honduras is now handled by amateur radio, and the activity is expected to continue until normal communications are fully restored.

Courtesy of the Halifax ARC Bulletin.

BRITISH COLUMBIA

AMATEUR RADIO ASSOCIATION VOTES TO RE-JOIN THE FEDERATION.

At a general meeting held in Vancouver on February 16, the BCARA Inc. voted overwhelmingly to rejoin the Canadian Amateur Radio Federation from which the previous executive had withdrawn.

President Floyd Beardsell VE7HI, says that the next step is to clear the re-affiliation with the BC government, which is required under the BC Societies Act.

Once this formality is through, the Association will take the necessary steps with the Federation to re-join.

CREDIT "THE CANADIAN AMATEUR."

FCC PROHIBITS MARKETING of single-band RF power amplifiers for use in the Citizens radio stations. The restriction applies to any external RF power amplifier capable of use with a transmitter operated between 24.0 and 35.0 MHz. The new rules, which amend Parts 2 and 95, exempt certain multiband RF power amplifiers for amateur use and permit amateurs to market, on a one-time basis to other amateur operators, single-band power amplifiers which they have constructed. The commission said the rule amendments were necessary since present enforcement procedures proved ineffective in eliminating the extensive use of RF power amplifiers which interfere with legitimate operations and with radio and television reception.

WANTED

BC453 Q5'er, modified or unmodified.

Call or write: Steve, VE4AI, 837 6558. 551 Bruce Ave., Wpg R3J-0W3.

CUSTOMS INFORMATION * CARF via LAKEHEAD ARC BULLETIN

I'm sure everyone is familiar with the age-old problem of seeing whether or not a piece of gear is less expensive by buying it in the U.S. or Canada. Much time has been spent comparing catalogues and price books from both countries, and hopefully with the chart below, it will be easier to tell how much extra you will have to pay. The tariff item are given to help eliminate long delays at the border, especially when the appraisal book is not on hand for the officer.

All duty is compounded, in other words, 15% duty plus 12% Federal Tax works out to 28.8% total. A word to the wise: If one is caught smuggling goods in his car, the fine is as follows: You get charged for the appraised value of the goods plus twice the duty and taxes one would normally pay, that is if the duty is over \$20. If it is below \$20., then you would probably be charged the normal duty with a strong warning.

<u>EQUIPMENT</u>	<u>TARIFF#</u>	<u>RATE OF DUTY</u>	<u>FEDERAL TAX</u>
Antennas	44533-1	15%	12%
Xmtrs, Rcvrs, Xcvrs	44533-1	15%	12%
Crystals	29706-1	10%	12%
Microphones & Stands	44536-1	7 1/2%	12%
Tubes	44542-1	15%	12%
Transistors	44544-1	15%	12%
VTVM, VOM, Scoles, Meters	44532-1	7 1/2%	12%
Antenna Rotators	42700-1	15%	12%
Transformers	44514-1	15%	12%
Speakers	44540-1	15%	12%
Batteries	44512-1	17 1/2%	12%
Antenna co-ax & Lead-in	44533-1	15%	12%
Earphones	44533-1	15%	12%

the secret of long life



ARLM MEMBERSHIP APPLICATION FORM ---

Detach and Mail with \$3.00 Fee to: ARLM, Box 475, WINNIPEG 1, Manitoba.R3C-2J3

Name: _____ VE4 _____

Address: _____

Area: Eastern _____, Western _____, Northern _____, (Check one)

\$3.00 Membership paid by: Cheque _____, Money Order _____, Cash _____,

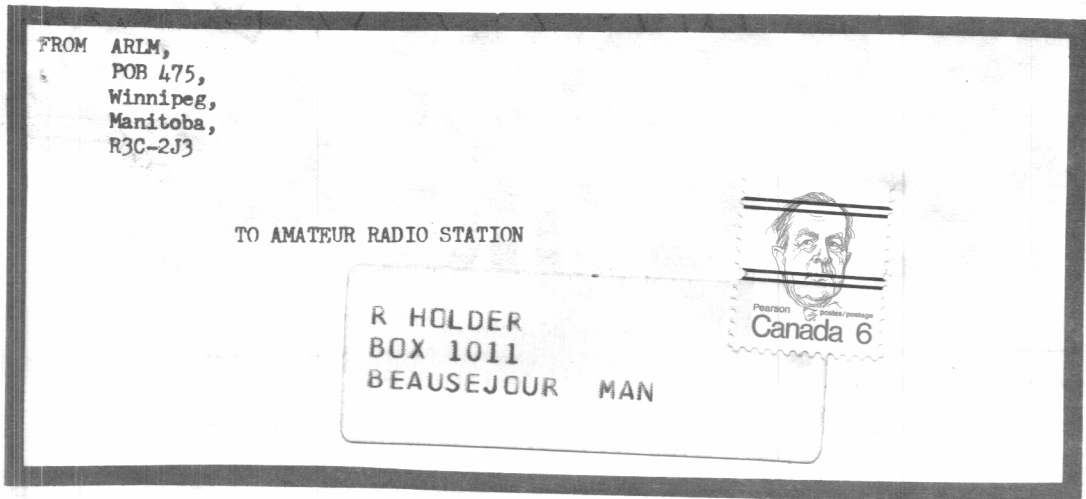
FOR SALE

- 1 - YAESU-FTDX 401 550 Watt transceiver, 1 yr old. Mint cond. in every way, no modifications or alterations \$625.
- 1-- HEATH HW 101 with Heath AC supply & matching speaker console. Perfect Con. \$450.
- 1 - JOHNSON MATCH BOX 275 W size. Will handle 1 Kw Pep. Like new. \$60.
- 1 - B&W 72 ohm Low Pass Filter \$25. Call Vic Rowe VE5VJ, Box 153, Watrous, S0K 4T0

W A R C A U C T I O N

SUNDAY APRIL 27 AT RRCC GYM

D O N T F O R G E T



- FOR SALE:
- 1- Crosby HBC SSB Receiver,
 - 1- Marconi DT-45 VHF Transceiver (for 2M-FM) not converted.

- 2- Crosby HBC SSB Transmitter
- 1- 500W AIR-DUX Pi-output coil.

Call Bill-VE4BT-Wpg 453 0477