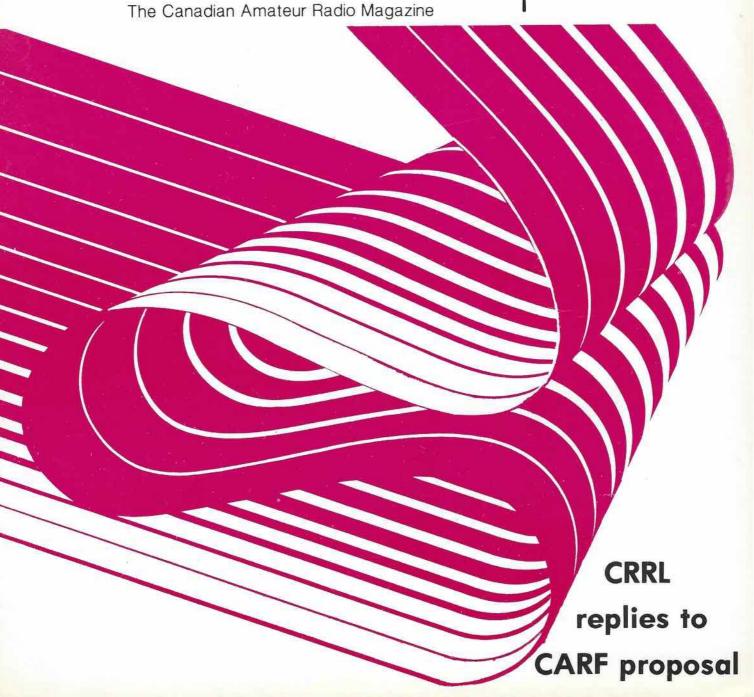
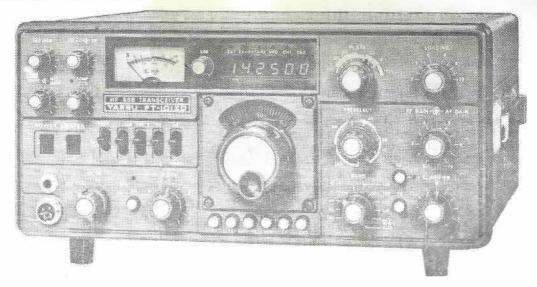
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November 1980

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Contents

Letters to the Editor
Call for Nominations
News Briefs
CRRL replies to CARF proposal18
Letter of resignation19
Ontario Summer Games20
Canada/US Reciprocal Operating21
RSO Convention23
The Contest Caper26
New TCA Editor27
National General Meeting Synopsis28
Canada Contest32
News Briefs32
NARC CW Net33
CI3LSS34
Notes for DX ops
Special Prefixes38
Canadian Amateur Research Club38
Swap Shop45
Infosection45
TECHNICAL SECTION:
LED-ing your Yaesu 207R39
Amateur Radio Desk Set41

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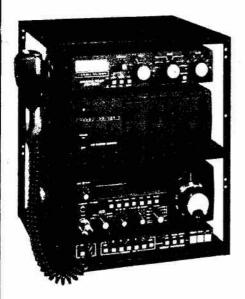
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RECEIVER

Sensitivity: SSB/CW 0.25 µV for 10 dB S/N, AM 1.0 µV for 10 dB S/N Selectivity: SSB 2.4 kHz (-6 dB), 4.0 kHz (-60 dB); CW* 0.6 kHz (-6 dB), 1.2 kHz (-60 dB); CW** 350 Hz (-6 dB), 1.2 kHz (-60 dB); AM 3.6 kHz (-6 dB), 6.8 kHz (-60 dB) Image rejection: 60 dB (80-12 m), 50 dB (10 m) Audio output impedance: 4-16 ohms Audio output: 3 watts @ 4 ohms @ 10% THD Variable bandwidth control: Continuous from 300 Hz to 2.4 kHz (SSB/CW modes only)

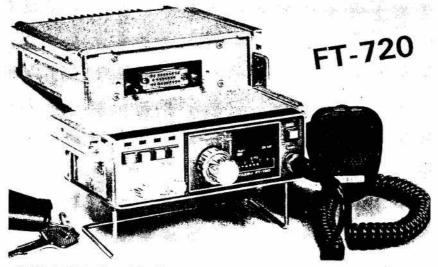
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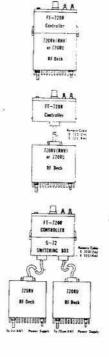
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Synthesizer steps Power output:

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Devision (max): Maximum bandwidth: Antenna connector Output impedance: Microphone impedance:

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Second IF: Sensitivity

Selectivity: Audio output:

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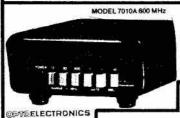
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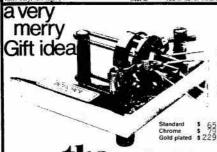
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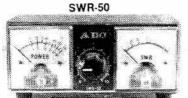


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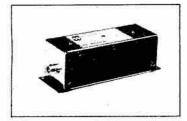


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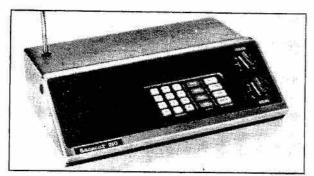
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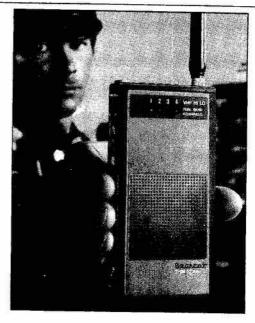
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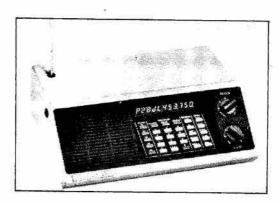






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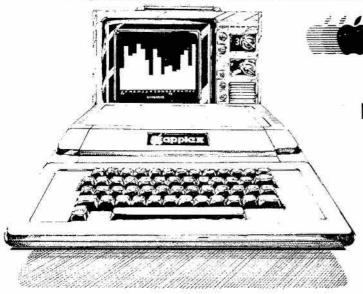
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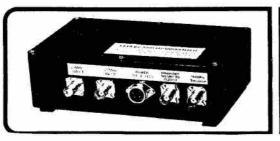
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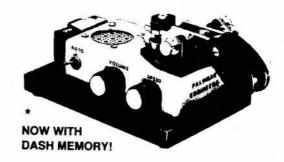
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Letters:

CAMP X

No doubt you have heard in articles appearing in the Toronto press about the training at Camp X during the war which included the activities of around 50 Canadian Amateurs. Most of the Amateurs, when qualified, had to put receiving stations in operation in several South American countries listening for enemy clandestine stations and reporting to the British Security Co-ordinator, New York, under Sir William Stephenson.

However, as we cannot keep up our publicity owing to funds being slow in coming in, our Editor, Mr. Alan Longfield was wondering if you could publish the odd article concerning Amateur operators under Camp X during the war in your own TCA magazine from time to time.

Bob Rowan VE3BPR Etobicoke, Ont.

I am sitting three feet off my chair with excitement and anticipation. By all means, Bob. This is what we are here for. This what we want. Articles about Canadian Amateurs; especially this type of article. You have my full support. Those of you who don't know what Camp X is should read "A Man Called Intrepid". Ed.

OVERMODULATION

I just became a member of CARF and an Amateur and I think your magazine is very good considering the amount of support it's getting. Also, I'm' trying to recruit new Amateurs and trying to get them to become CARF members because the more members, the bigger and better TCA will be.

My questions are; 1) What

kind of device(s) for indicating overmod. can you use other than an oscilloscope? 2) How do you explain to a simple minded person what Amateur radio is without giving him the wrong idea or a bias view about it?

> Alex Poulis VE2DKU Montreal Quebec

Most of the answers I could give you would be meaningless unless you were independently wealthy. Someone else could answer it better than I could. The second question is even more difficult to answer [and again] leave it to my readers to bail me out...ed.

DX SECTION

Excellent idea, the new DX Section. Congratulations. Keep up the good work.

Ari VE5AAO

Thanks Ari. As you no doubt noticed, the DX column has vanished from our pages. Garth Hamilton, VE3EUP moved and was unable to carry on the position. Perhaps someone else would like to take it on.

A BOUQUET FOR MARTY

I joined our only Canadian national radio back in 1973 when individual membership became possible and was proud to belong to it. However, due to a number of silly misunderstand-

TCA WELCOMES LETTERS
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ings I inadvertantly dropped out at a time when the Kamloops Amateur Radio Club affiliated with CARF. Somehow I got the idea that being a member of an affiliated club superceded individual membership, and ergo I was still a member... However, having been shown the light by friends, I hastened to repent and signed on the mystical dotted, and have returned to the family....

I am really writing this to ask you if you would allow me to offer a tribute to Marty, VE7AFY. What ever I wrote would never do justice to a remarkable man and his remarkable wife.

Some years ago when Marty took over the exacting position of the ARRL QSL Manager for British Columbia.... I decided to call on Marty, introduce myself and thank him for the efficient and expeditious way he handled my cards sent through the Bureau. Having worked him a couple of times on '75, and constantly hearing his friendly voice on the bands, I felt I would be welcome. My hopes were iustified and so began a friendship which has lasted since then, and one which I hope will continue for many more vears.

...The expedition and accuracy with which "Marty and Co. (Un)Ltd." performed their gladly accepted service has shown an example to all Amateurs everywhere. In these days of often crass behaviour on the air we can be solaced by Marty, both on and off the air, whose sanity, good-manners and unfailing courtesy embody the unfailing spirit of what Amateur

radio was, and hopefully, will continue to be.

John Bower VE7TL/ G3OSM/EI9AI Chilliwack, B.C.

Marty, whose QSL Bureau was the first to co-operate with the CARF National QSL Bureau, recently turned over this labour of love for fellow hobbyists to Dennis Perkul, Box 80555, Burnaby, B.C., according to CARF Bureau manager Jean Evans VE3DGG.

40 METRES

Upon reading your article "Our 40M Phone Band" by Bill Wilson VE3NR, Sept. 80 issue, I was very disappointed to learn that CARF sanctions the use of the newly-acquired phone portion of 40 metres for DX'ers, whenever they decide that propagation conditions are in their favour. If this occurs, I would strongly recommend that CARF instigate a 40 metre alert when DX conditions exist, so that the less-fortunate Amateurs with QRP or modest equipment, and our American counterparts, who are not receiving DX signals would know enough to leave the band to the big guns!

I believe the well-established Amateur who has become complacent with his sophisticated equipment forgets that 7.050-7.100 was the prime band for CW operators and newcomers being initiated into Amateur radio. There is no band equal to it for continuous, reliable radio contacts. DX'ers now have three bands for their worldwide contacts. Don't get me wrong. I am not pro- or con-DX operation, and do not object to them using 40 metres; but I do believe in a fair share of the pie.

> Les Fraser VE3ICL Kirkland Lake, Ont.

Thanks for your comments, Les. It is my own personal opinion that no one mode or operating activity should take exclusive rights over any other. However, there are good and bad arguments for both sides. Perhaps some of our readers have opinions on the subject that they would like to put forward.

NEW JOB FOR EX-EDITOR?

The following offer of a unique job was received by recently-retired TCA editor Doug Burrill VE3CDC:

The Reverend Elton 'Salvation' Jones The Rescue Mission 1529 Savior Avenue Courtney B.C.

Dear Mr. Burrill:

I understand that you have ceased by resignation, your position as Editor of TCA and that you might be interested in a position I have to offer.

Perhaps you have heard of me and my nationwide campaign in the cause of temperance. Each year in the past fourteen, I have made a tour of Alberta, Saskatchewan, Manitoba, Ontario, Quebec and B.C., not to forget the maritimes and the Northern Territories, delivering a series of lectures on the evils of Drink. On this tour I have been accompanied by my young friend and assistant Clyde Linton. Clyde came from a good family background; however, he is a pathetic example of a life ruined by excessive indulgence in whiskey and women.

Clyde would appear with me at the lectures and sit on the front of the platform – drunk, wheezing, staring at the audience through bleary and bloodshot eyes, sweating profusely, belching and making obscene gestures at ladies in the audience while I pointed out that he was an example of what overindulgence can do to a person.

This last summer, unfortunately, Clyde died. A mutual friend has been kind enough to give me your name and I wonder if you would be able to take

Clyde's place on my next lecture tour?

Yours in good faith,

The Reverend Elton F. Jones Doug replied: Dear Rev:

Many thanks for your intriguing job offer. I am afraid, however, that having forsaken Demon Run many years ago in deference to a tender digestive system I am now steady of hand and clear of eve and would look. at least from the audience, too healthy for your example. Then too, due to the civilizing influence of having settled in Ottawa and becoming a civil servant, those uncouth mannerisms of the past which would have admirably suited your purpose have, with the years and much effort, been overcome. While I could certainly still be interested in seeing just what response any gestures made in the direction of female listeners might bring, I must regretfully turn down your most interesting invitation.

Blessings on your Noble Task.

Doug, VE3CDC.

MICROWAVES m a new immigra

I am a new immigrant to Canada and would like to become a member of your radio society. My Dutch call sign is PAOKKZ and I am a member of the Dutch Radio Society, the VERON. I was very active on 10 GHz and 24 GHz and I want to start here again with microwaves; maybe I can write some articles for your magazine.

Kees Kaper Edson, Alberta

Please do! Send them to us and, when space permits, we will publish them.

PHILIPPINES ON 10 MHZ

Philippine Islands operators will probably be among the first to get on the new Amateur allocation on 10 MHz. Their administration has authorized operation on the new band as of January 1, 1982.

Call for Nominations

Your national Federation is guided by the Regional Directors that are nominated and elected by the individual Amateur members of each Region. These Directors form the Board of Directors and are responsible for over-all management of CARF activities and for policy making decisions.

The Regional Director serves as the voice of the Amateurs of the Region. has authority to appoint Regional Assistants to aid in the forwarding and gathering of news and comment, arranging for discussion groups (e.g. Regional Symposia) and receives budgetary financing to enable the furthering of the responsibilities of the position.

You, as a Full CARF member, have the responsibility of ensuring that you have effective representation through the office of your Director. Your nomination and election of Directors will materially aid in the development and growth of your national Amateur Radio society.

Regional Directors shall be a Full member of the Federation, resident in the Region for which elected, and are elected to hold office for a period of two years beginning at the commencement of the Board meeting held after the election process (May 1981).

The CARF Regions are:

Atlantic - Atlantic provinces Quebec - Province of Quebec Ontario - Province of Ontario (2 Directors)

Mid-West - Provinces of Manitoba, Saskatchewan, Alberta and N.W.T. Pacific - Province of British

Pacific - Province of British Columbia and Yukon Territory

Five or more Full members of CARF may nominate any other Full member in their Region for election as Regional Director by filling out a Notice of Nomination and sending it to: CARF Secretary, Box 356, Kingston, Ontario K7L 4W2, for arrival prior to December 15, 1980.

The Notice of Nomination shall contain the following statements:

'We, the undersigned, hereby nominate (Name, Call, Postal Address) for the position of Regional Director of the Canadian Amateur Radio Federation Inc.' (Add the signatures and calls of nominators below).

 sibilities of my office to the best of my abilities'. Signed (Name, Call, Date)

All nominees will receive CARF documentation to acquaint them with the functions of Regional Directors and to keep them abreast with CARF and Amateur Radio activities. Each nominee is requested to supply the CARF Office with a resume of Amateur and organizational background, interest in seeking office and any views they hold on the future development of CARF. Ballots will be mailed to Full members in all Regions holding elections in January 1981 for return by March 15, 1981.

-VE3AHU

News Briefs

PAY TV RECEPTION

A new law in California makes it a statutory offence to make, sell or distribute any device, plan or part to be used for the unauthorized reception of pay TV signals. Meanwhile, back at the ranch, according to a Globe and Mail story, the federal government, which to date has taken little or no action to stop such reception in Canada, is said to be considering just who it will prosecute for such activity.

For another angle on the legalities of radio comes a story from Russia, which might be an example for the FCC and the DOC in the area of enforcement. According to HR Report, a Moscow radio bootlegger was nabbed and got five years in the pen for his nefarious activities.

ILLEGAL CERTIFICATE

If candidates at the most recent set of examinations find that DOC is very careful in establishing the identity of those writing, the reason can probably be attributed to an incident in Kingston, Ontario, during the June exams.

It seems that an Ottawa operator gallantly undertook to write the exams on behalf of a certain young lady. Although the Department was initially hoodwinked by the caper, it became known, and the YLs short and illegal career as an Amateur came to a sudden end with her surrender of the ill-gotten certificate. The affair is still under investigation so no charges have yet been laid.

NATIONAL SYMPOSIUM

The printed report of the CARF National Symposium held in Montreal is now available in both English and French. Copies may be obtained from the CARF office, Box 356, Kingston, Ontario K7L 4W2.

CRRL replies to CARF proposal

Here is the official CRRL/Cdn Div ARRL reply to the recent CARF proposal that appeared in the October issue of **TCA**. For your information, we are also publishing the letter of resignation of the **founder** of CRRL.

To allow time for evaluation of all documents by CARF and the Amateurs of Canada, comment will not be published in this issue.

The Canadian Radio Relay League, Inc.

Mr. W.J. Wilson VE3NR President, The Canadian Amateur Radio Federation

Dear Bill.

I was most disappointed and discouraged, as a result of your letter of 1980 August 15.

Your proposal is based on an assumption that CRRL and the Canadian Division of ARRL are two separate entities. This is not the case. CRRL and Canadian Division of the League are one and the same. As part of the League, CRRL members share in the many fine traditions and services of the League: QST journal, W1AW, field organizations for public service, and vast technical resources. It should be stressed that CRRL is a very independent part of the League. It is incorporated in Canada, has elected board of own directors, and respresents its membership and indirectly, all Canadian amateurs - to DOC and other government agencies, and at meetings of the IARU - without recourse to Newington. These are functions over which your Federation would like to have exclusive control.

Since you suggest that CRRL and the Canadian Division of the League can be split, there seems to be little hope for your proposal. Nevertheless, I would like to share with you how I felt when I first read it. I think that I can do this by taking the eight points on page three of your letter, interchanging CARF and CRRL, and making suitable modifications to your wording. Let's begin...

This proposal would include the following items:

1. The merged organization would continue to be known as the Canadian Radio Relay League, Inc. (CRRL) and use the present constitution of CRRL as the basis for organization and administration.

- 2. That CRRL would be the Canadian national organization.
- That CRRL would continue to hold Canadian membership in IARU, as in the past.
- 4. That CRRL continue in its present role, as a division of ARRL, in order to continue to share in the traditions and services of the League.
- 5. That CRRL relations with ARRL, in matters concerning the well-being of Canadian radio amateurs, continue to be that of an independent radio society.
- 6. That the six incumbent members of the CARF board of directors would be offered the positions of directors-at-large in CRRL, to take office on the date of the merger and hold the same for the period of one term of office (two years) and then stand for further office according to the by-laws of CRRL.
- 7. That the president of CARF be offered a position as ex-officio member of the CRRL Executive, with the responsibili-

ties of providing a link between the former CARF organization and CRRL.

8. That other officials of CARF be offered positions in CRRL of similar stature to those held in CARF.

Let us clearly understand that the eight points above do not constitute a counter-proposal. They are merely presented to convey a feeling, the feeling I had when I read your letter. If the above were a proposal, and by some chance it was accepted, I think you can see what would

happen. There would be no merger. Instead, CARF would disappear. And of course, that's what would happen to CRRL, under the terms of your proposal.

Bill, we in CRRL are working very hard, to provide our members with services and representation. We feel that CRRL can do this very well. In addition, we have several exciting, new projects under way. We are not interested in disappearing from the Canadian amateur radio scene.

I have shared your proposal with a number of people, including former and present CARF officials. All were dismayed with what they read. While they felt that the general concept of CRRL-CARF cooperation might be desirable, they agreed that different starting points for any eventual discussion would have to be found.

73, Mitch Powell, VE3OT President, CRRL Canadian Director, ARRL

Letter of Resignation

The Canadian Radio Relay League, Inc.

TO: The ARRL & CRRL Board of Directors

Gentlemen:

During my two terms, as ARRL Canadian Division Director, I worked very hard and diligently to found and achieve the self-governing and administering democratic recognition of the Canadian Division into the formal incorporation of the CRRL. In point of fact, long before its formal incorporation. the CRRL literally became a self-governing organization and with all policies determined by its then informal Board of Directors and was, indeed, working well and efficiently, as an organization.

However, since the first of January, when the new Canadian Director and Vice Director took office, with a most apparent and total disregard, on their part, to the principles and intent on which the CRRL was founded, the CRRL, as a working organi-

zation, has become little more than a puppet with, apparently, the full support of the ARRL President and other ARRL officials.

I have been fighting this "cancer" from within, for the past five months and, unfortunately, with little apparent support from any quarter whatsoever. As the founding "father" of the CRRL, I can no longer tolerate the manner in which the entire intent of the CRRL, Inc., been warped beyond recognition, nor the puppet role in which it, as an organization. has been relegated. In all conscience, I simply cannot be a party to that which is clearly being dictated by those who. apparently, see their personal ambitions and autocratic authority being threatened.

With much regret and, unfortunately, much disillusionment with the present ARRL leadership, not to mention the supposed bi-national principles of the ARRL, I have no other alternative than to herewith submit my resignation, as CRRL President, effective immediately.

The many critics of the League operations in Canada. who have long alleged that the policies of the Canadian Division were led or otherwise dictated by those outside of our country were, I am now forced to conclude, to no small degree correct. During my two terms of office, I feel that I was quite successful in surmounting this "interference" in our strictly Canadian affairs; however, as a result, I know that I made many enemies who, in the end, did not get me... they simply shot the self-governing administration status of the CRRL right out of the saddle. I am afraid that Hiram Percy Maxim might be turning in his grave!

As ARRL Director Powell once stated, in a different context (in a personal attack on the intentions and actions of the writer):

"For all sad works of tongue and pen,

The saddest was these: It might have been."

73, Ron J. Hesler, VE1SH President

Ontario Summer Games

Amateur Radio played an important role during the recent O.S.G. held in Peterborough the weekend of Aug. 22-25th 1980. The "Games" involved approximately 2500 young athletes from all over the province competing in a total of 21 different sports.

From the very outset Amateur radio was prominent and a surprise most pleasant athletes and visiting friends who took advantage of the "send a message to your home town" booth being manned (hi!) by four Peterborough Amateur Radio Club YLs VE3JNG, IRK, KQH and Traffic was initially cleared through ONTARS and special SSB nets, then later through cw nets by VE3BZB and VE3KXB.

A "ceremonies net" was established on 146.55 on the Friday evening as the Olympic Torch, brought from Kingston, proceeded through the city with a stop at the Memorial Centre where the athletes had assembled for Opening Ceremonies. The Torch was later taken by a runner to a place of honour outside the City Hall. Amateurs at key points stood by ready to relay useful information and proved their worth more than once when commercial HTs (used by some officials) failed to work or span the distance needed. More than once "go with the hams!" was heard when important messages were not getting through. The resourcefulness of Amateurs also shone through quite clearly when they quickly solved an urgent lighting problem that had suddenly thrown officials into a near panic during the ceremonies.

The next three days saw a total of 35 P.A.R.C. members involved providing radio contacts for officials at sites both far and near.

The Scoring Centre located at Trent University maintained a ham radio link with about 10 different remote locations not equipped with telephone, for the primary purpose of receiving scores and dealing with medical emergencies. The call-in frequencies used were 146.52 and 75 metre phone; while problem solving, auto-patching and other communications were handled through the local repeater VE3PBO. In addition to the foregoing, "on-site" nets for sailing, kayaking, flat-water rowing, marathon canoeing and cycling were being run simultaneously on 146.46, .49, .55, .58, and 147.51. The co-operation of a repeater group 60 miles to the north made available VE3TBF as a back-up for communications out of the wild bush country the site of "orienteering" competition.

Despite months of intensive preparation many problems were still encountered but all solved in the usual were "ham-ingenuity" fashion. One of the more serious moments came only 10 minutes before the start of two events at one location when an unexpectedly high volume of traffic started to develop - forcing the immediate splitting of one net into two hence a new location, an additional net controller, and a new compatible frequency, etc... all to be set up within minutes! This was accomplished just in time to catch the starting gun. much to the amazement and satisfaction of the high ranking officials - (not to mention ourselves!!)

When the final results from the waterskiing event came in late on Monday evening a great many Amateurs heaved a sigh of relief as the biggest job ever taken on by this club was now ended. A lot of thanks goes out to the Amateurs who quite generously loaned and swapped equipment in order to make possible the forming of the many nets, the establishing of a radio communications centre, and the job of co-ordinating the whole programme a little easier.

John Gilbert VE3FDP President P.A.R.C. Amateur Radio Co-ordinator Ontario Summer Games

The Real Story

Both the International Amateur Radio Union and the American Radio Relay League might have done more homework before their recent excursion Canadian affairs. reported in a recent issue of ARRL's magazine, "QST". The two organizations want DOC to change what they mistakenly believe is a new restriction on reciprocal operating privileges which appeared in the amendmade to Canadian ments regulations last spring.

The published minutes of the ARRL Board meeting in July state that 48 member societies of IARU Region 1 and all of the League's directors want DOC to rescind what they said was an amendment which made Canada the only government which now requires foreign operators to both their own bv abide regulations and Canadian rules when operating here. (Oddly enough though, of the countries of Region 1, only about 15 have any reciprocal agreement with Canada.)

the office of Although president of IARU and vice-president of ARRL are held by a Canadian, neither organization seems to have been aware that the DOC rules amendment was only re-stating and bringing to wider attention the fact that for Canada and the U.S. this requirement is the result of a treaty between the two countries made in 1952 and still in force. Under its terms, licensees of one country may operate in the other using their home country call signs and abiding by the rules of both the host country and those which apply to their own level of licence.

The ARRL minutes do not mention the plus side of the DOC action, which now permits U.S. novice and technician classes to operate in Canada ... which they could not do before. Other than that there was no change, nor was there any change for nationals of other countries operating in Canada. Because Canada does not issue licences to aliens, they must use their own calls and abide by their own rules and the Canadian regulations as well. There was no change either, for a Canadian operating in a foreign country where they may issue licences to aliens. In such a case, the Canadian uses the foreign call sign and abides only by the rules of the host country.

THE LEGAL BASIS

Just to keep the record straight, the current arrangements between Canada and the United States stem from Article III of "Treaty Series 1952 No. 7, which was primarily intended to provide rules for mobile commercial, public safety and private aircraft stations but which included the following concerning Amateur radio:

"...the Amateur station shall be operated in accordance with the laws and regulations of the country in which the station is temporarily located".

The Canadian regulations (CRR Part II section 50) state

that a qualified alien "...shall use the call sign, radio frequencies, types of emission or modes of transmission he is authorized to use in his own country, if those frequencies, types of emission or modes of transmission are authorized by these Regulations".

The reciprocal U.S. rules are found in the FCC Rules and Regulations Part 97, section 97.311 which says that the qualified alien (e.g., a Canadian) in the U.S. must operate under terms of the bilateral rules U.S. agreement, the governing Amateurs (Part 97) and "...the operating terms and conditions of the license issued to the alien Amateur by his government".

HOW IT IS APPLIED

Since last spring U.S. Novice and Technician class operators have been permitted to operate in Canada. Although their morse code requirement is only five words per minute, for operating in Canada they have been equated with the Canadian Amateur class privileges insofar as their own rules permit. Other U.S. classes are equated with the Canadian Advanced certificate holders.

On the other hand, Canadians operating in the U.S. with Amateur tickets have U.S. Novice and Technician privileges, while Canadian Advanced Amateurs have U.S. Extra, Advanced and General operating privileges. Again, it should

be remembered that both the host country regulations and rules for the home country, such as frequency assignments, must be followed.

As an example, a Canadian in the U.S. may not operate

phone in the segment of 40 metres 7.050 to 7.100 megahertz, as he could in Canada. Conversely, a U.S. operator whose U.S. licence allows him to operate phone from 3.775 to 40 MHz at home may not operate

from 3.725 to 3.775 MHz in Canada. Although the Canadian Digital Operator certificate is technically a high level ticket it is not recognized in the U.S. for reciprocal privileges because it has no morse requirement.

More on Reciprocal Operating

Recently we have been hearing a number of comments and misunderstandings or misinterpretations concerning the rules for reciprocal operating privileges between Canada and the United States. The chief point of confusion appears to be which set of rules or regulations should be complied with when operating in the host country – ours or theirs. The answer is – both.

Let's do a bit of historical research. The current agreement between Canada and the U.S. is embodied in a bi-lateral document known as "Treaty Series 1952 No. 7" which came into force in May 1952, with a sub-title of "Convention between Canada and the United States of America relating to the Operation by Citizens of Either Country of Certain Radio Equipment or Stations in the Other Country."

The treaty was primarily intended to provide rules for the operation of radio in private aircraft and land mobiles in public safety vehicles (police, fire, ambulance, etc.) and other commercial vehicles using common carrier radio communication facilities. Amateur radio operations were also added and covered by Article III of the Treaty (see CARF Radio Regulations Handbook, Appendix A-9).

Now, how are these rules to be interpreted? First, you must remember that your station has been authorized by your own country's licence and therefore must be operated in accordance with your own country's regulations. But, the Treaty says you must operate "in accordance with the laws and regulations of the country in which the station is temporarily located".

So now you have two sets of rules with which to comply. If there is conflict you must comply with the more stringent.

It has been argued that Canada is the only country which places this interpretation on the words of Treaty. Not so: the U.S. does as well. Then there is the argument that other countries only require compliance with their own regulations and that you (a Canadian Amateur) do not have to comply with the Canadian regulations (e.g., frequency sub-bands, etc.). But, how is your operating authority granted? In most cases by the issuance of a licence by the host country. So you are then a licensed Amateur of that country with a call sign for that country - you do not use your Canadian call sign with the host country's suffix.

The contention that the DOC have changed the rules by the inclusion of a new section of the General Radio Regulations, Part II, is not correct. The section which reads —

"A person qualified pursuant to paragraph 48(c) or (d)

may operate his station or a station licensed by the Minister and such person shall use the call sign, radio frequencies, types of emission or modes of transmission he is authorized to use in his own country, if those frequencies, types of emission or modes of transmission are authorized by these Regulations."

may be new to the Regulations, but the rules have not been changed since the implementation of reciprocal licensing by the Treaty in 1952.

For clarification and consolidation purposes this point has now been incorporated into the regulations. There have been no changes in this matter.

The dropping of the requirement for written permission by the host country before operating there is only an administrative move to overcome manpower problems. The Treaty only says that "each visiting Amateur may be required to register and receive a permit...". The treaty route was taken, in 1952, to overcome the stringent rules of both countries concerning the licensing of aliens as well as the need for licensees to qualify for operating certificates in both countries.

Again there have been no changes in substance or interpretation since 1952 in so far as Canada is concerned.

VE3ZS

RSO Convention

The annual RSO convention took place Oct. 3,4 and 5 at the Prince Hotel in Toronto. This was a prime opportunity for Ontario Amateurs to question CARF officials on many aspects of our hobby including relations with other national organizations from the States and Europe.

For the most part, the answers were encouraging although there are some areas open to more active co-operation. The CARF/CRRL merger proposal was not discussed at that time, as details of the CARF proposal were not generally known.

Highlight of the convention was the 'Amateur Radio in the 80's' forum which featured Bob Jones VE3CTM and Art Corew of the DOC along with Bud Punchard VE3UD WARC Amateur Radio Advisor; Bill Wilson VE3NR, president CARF, Mitch Powill VE3OT, President CRRL and Noel Eaton VE3CJ, President IARU.

The main topic of discussion was allocation of frequencies in the 900 MHz band. Anything allocated to us in that band will be on a secondary basis as will be the allocation of the 10 MHz band. This means that we will not be permitted to interfere with services already using that portion of the spectrum.

For CARF, the convention was a success. New members were acquired and much information was given. Our booth operated Friday evening and all day Saturday with Bill VE3NR, Art VE3AHU, Don VE3BID, Nate VO1NP, Dave VE2DZE, Cary VE3ARS and Craig VE3HWN taking duties as representatives. We were aided

by Evelyn (see pictures) who was obtained through our advertising committee). Probably the best reason for the popularity of the booth, although not the only one).

Your editor was able to make the acquaintance of a number of our advertisers as well as touching base with many officials of other organizations. Discussions were held on a number of important issues including Traffic handling.

Due to the great number of seminars and forums held during the weekend, I was not able to obtain information sufficient to fully cover the convention. The concensus was, however, that although the numbers were smaller than hoped for, in all, the convention came off quite well.



Above: Our hosts. Below: Smiling faces at the CARF booth.



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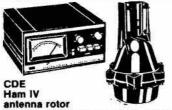
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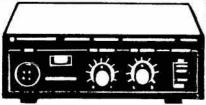
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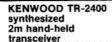




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The Contest Caper

By John Gilbert VE3CXL*

Few topics generate a greater divergence of opinion in Amateur radio than contests. To some, they are the scourge of the hobby; the one single activity that has led to the decline in operating courtesy, to the periodic overcrowding of already crowded prime spectrum and to the frustration of ragchewers, traffic handlers and DXers alike.

To others, contests are the lifeblood of Amateur radio, the ultimate test of operating efficiency; the big chance to prove that one's equipment and skill are a match for that blowhard down the street, or the chance to work on a multi-operator station with a team of other fine operators as wise as one's self.

The debate will continue, and so it should, as variety of interests is perhaps the greatest strength of our hobby. My own small contribution to the debate is to offer (at the risk of being branded as one of those \$#& *! contesters) a brief description of the various types of contest, and to identify some of the advantages to the hobby which make it worthwhile to accept the periodic invasion of the HF bands by several hundred Amateurs exchanging numbers with each other for hours on end. Since CW contests are the most fun, in my unbiased (?) view, my survey will include only CW, HF band contests.

Contests are by no means all alike. At the risk of oversimplifying, I have identified no fewer than four quite different types, each with its own loyal followers.

The first type, which is probably at the top of the list of those heartily disliked by non-contesters, are the **really big** World-Wide DX Contests. These are the all band DX contests like the CQ WW, the ARRL DX and the ITU contests. The rules differ from one to the next, but the objectives are pretty much the same -- to work as many stations as you can, worldwide, in a 48-hour period (or less in some cases).

The name of the game is big power, big antennas, lots of stamina and a spouse who will put up with one twitching nervously for at least a week after the last contact of the contest has been made.

These contests are enormously popular, providing truly worldwide interest and competition reminiscent of that in other areas, such as sports. In fact, the term for such competitions used in Europe is 'radiosport', and for the past three years, the IARU has sponsored a Radiosport Championship in July.

The worldwide DX contests are not the forum for exchanging pleasantries with old friends! Last year, we called one top

*The author suffers from a fatal flaw in contesting. He becomes mesmerized by the action and forgets to send! As a result, he can usually be found in last place on the list of contest results. contester five times due to an error in our check sheets and had the unique experience of witnessing the world's first attack of apoplexy on CW. For the big guns, it is very serious business indeed.

The second category of contests are those which I call the Regionals. Participation is limited to contacts between different specified parts of the world. Typical of these are the ARRL Sweepstakes, the Canadx CanAm contest, etc. which are limited to North America. Other parts of the world have their own regionals too.

There is nothing quite so frustrating as listening to VKs and ZLs working each other on 80 metres, blissfully unaware that there are VEs eavesdropping on the action.

The regionals are very competitive on a national level, and like the worldwide contests, not likely to be won by the casual participant who happens to turn on the rig in mid-contest for a dozen contacts or so.

The third class of contests are those which limit the field of battle to a select group of people, for instance to 'members only', such as QCWA, Telephone Pioneers, FOC, etc.

These are downright friendly events for the members -- but are often viewed as an intrusion into public spectrum by others. There is an almost unlimited number of variations on the 'members-only' contest theme, with almost any club, province,

state or country being able to sponsor a special event or award.

With a few exceptions, they are not normally highly competitive. Some, like the BERU British Commonwealth Contest, have been around for many years and provide a great opportunity to meet old friends.

The final category in my arbitrary classification of contests are the 'Specials' which have some gimmick or peculiarity in the rules which set them aside from the regular contests.

One example is the European DX Contest, held in August each year. It is sponsored by the DARC (Germany) and the gimmick is the inclusion of QTC Traffic. The general idea is that after a number of European stations have been worked, a list of these is reported back to another European station. Each QTC is a report of one previous contact. In effect, you send a record of your log to Europe -- a great idea for the folks who have to check the incoming contest entries. Surprisingly enough, it proves to be great fun and is also a good test of operating skills.

A second example of a 'special' is the North American Sprint held in February and sponsored by the National Contest Journal. In this one, stations calling CQ, QRZ or QRZ? must move 1 KHz after each contact before contacting another station, or at least 5 KHz before calling CQ again. In addition, the Sprint lasts only four hours -- and forget it if your code speed is a little rusty!

What is to be gained from these widely varied battles of the airwaves? First, most contesters suffer from a lazy streak which has led to the development of automatic keyers, computer logs and check sheets, highly efficient antennas and well integrated stations. In all seriousness, I will not be at all surprised to one day hear of a contest entry (probably a new world record) with no operators at all, but

completely automatically operated!

Some 'big time' contest enthusiasts with astonishing clair-voyance are even now able to preprint the RST on their QSL cards (599 of course) thus demonstrating an understanding of propagation prediction of truly great proportions. Furthermore, contesting develops one's oper-

ating skill. Perhaps most important, contesting encourages people in a highly individualized hobby to work together as a team in a multi-operator entry.

Last, but by no means the least, contests are a lot of fun -- why don't you give them a try?

By John Gilbert VE3CXL From the Ottawa ARC 'Groundwave'

VE3ARS

New TCA Editor

For those of you who raised eyebrows and said, "Who is he?" when the new TCA editor was named, here is the story:

Cary Honeywell VE3ARS was born and raised in Ottawa, Ontario. He obtained his licence at the age of 17 in 1965.

His call at that time was VE3EBH... for those of you who enjoy CW, you can imagine sending that call by hand. In 1971 he acquired VE3ARS.

In 1967, Cary became net manager for the Ontario-Quebec Traffic net, a position he gave up a year later while pursuing education in Toronto. In 1971 he once again took up the post of Net Manager, OQN, on the death of the Eastern Canada Net manager.

In 1973, he became editor of the Ottawa Amateur Radio Club bulletin, 'The Groundwave', and shortly afterward became the vice-president of that club.

At the same time, Cary joined CARF and has acted as the chairman for the Auto Repeater Advisory and VHF Advisory committees. He has also been a member of the Regulations, WARC 79 and Communications committees. From time to time, Cary acted as Technical Editor for TCA and provided a sympathetic ear for VE3CDC's cries of anguish.

In 1976, Cary, along with Doug VE3CDC and Ron Belleville VE3AUM, assisted the Department of External Affairs with the selection of Amateur gear for their Newfoundland fishing schooner 'Norma and Gladys' for its Atlantic voyage. This was necessary when it was learned that someone had recommended the use of a threeelement beam on the voyage. Our advice paid off for the crew of the schooner; she sailed through hurricane Candice on her homeward voyage. A beam would not have survived. Cary assisted Gerry King VE3GK and Ron VE3AUM in keeping a vigil, providing Alan VEOMEA aboard the schooner with reassuring voices through the ordeal. No lives were lost.

Aside from Amateur Radio, Cary graduated from Carleton University with a B.A. degree in Law and Political Science. He has also obtained certification as a broadcaster, working for stations in Ontario and Manitoba. For a short time he was Editor-Proofreader for the Federal Government. Subsequent to that, he was Service Manager for an Ottawa Hi-Fi outlet and is currently a Transmitter Technician for the CBC in Ottawa.

Cary is married to Kris VE3KLH.



National General Meeting / Directors' Meeting

A Synopsis

The 1980 CARF Annual General Meeting and Directors' Meeting took place at Ottawa's Carleton University over the weekend of May 30/June 1. The following is a synopsis of the reports made at those meetings.

PUBLISHING COMPANY

The Directors approved the formation of a new 'arms length' publishing company. known as 'CARF Publications, Ltd..' and whose principal officers will be the same as that of the national Federation. The foremost advantage of this action will be the introduction of second-class postal rates for TCA, which should provide for a more economical and timely delivery to TCA subscribers. than the present 3rd class arrangements.

CARF-CRRL MERGER

The Directors approved in principle a recommendation made to the Board aimed at an eventual merger of the CRRL with CARF, for the good of the Canadian Amateur Service. (Such a proposal has subsequently been drafted by the CARF national executive and presented to the principals of CRRL for their consideration.) (See Oct. 80 issue TCA). The underlying basis for such a merger would be that the resulting combined organization will remain essentially "autonomous" and "Canadian", ie, that CARF would remain totally free of foreign influences in its

affairs, such that CARF relationships with ARRL would be no different than those of the RSGB with ARRL.

ASSISTANT GEN'L MANAGER

At the request of the CARF General Manager VE3AHU, the Directors approved the future appointment of an Assistant General Manager to share the ever increasing workload at CARF HQ in Kingston.

PRESIDENT'S REPORT

It was noted that CARF has enjoyed increasing membership over the past year to the point that we are now the largest national organization of licensed Radio Amateurs in Canada. Concern was voiced over the fact that fewer new Amateurs entered the had Service in the last DOC fiscal year than in any other year in the past decade. Many comments and recommendations received from individual Amateurs and concerned Clubs have formed the basis for recent submissions to DOC hopefully will bring improvements in this regard. The two national symposia held over the last year enjoyed considerable success, as well as the 5

regional symposia which preceded the last national event held in Hamilton, Ont. Their successes can be attributed wholly to the dedicated efforts and support of all the Amateurs and their local clubs that took on the task of organizing these meetings. President Wilson decried the apathy that he has perceived to be permeating throughout the Canadian Amateur community with regards to the continuing very real competition for space in frequency spectrum, especially in those bands above 50 MHz. In the U.S., "the Final Acts of an ITU WARC become U.S. law when the Senate ratifies the Final Acts." Amateurs there "are relatively safe once a WARC successful. changes that are made are done only after following one of the best law-making processes in the world". However, "in Canada, the Final Acts are merely guidelines insofar as allocations are concerned. Canada develops its own table and policies based on the Final Acts of a WARC after following one of the poorer law-making processes in which DOC is now required to justify the decisions it makes! Thus, for us the competition is

far from over. It is going to be a continual affair. We Amateurs will have to be alert and CARF will have to watch-dog it". The President noted the many successful encounters he had with various Amateur organizations throughout the country over the past year, at which Amateurs obtained a better impression of what CARF is all about. Concluding, VE3NR thanked the executive for their support and assistance in running the affairs of the Federation over the past year.

AWARD

The President expressed a desire for the establishment of a new award in the memory of Canada's founding Radio Amateur, Reginald Fessenden, who accomplished the first two-way trans-Atlantic CW contact, the first voice transmission across the Atlantic, and the first musical broadcast. Before his passing in Bermuda (1932), he had been credited with some five hundred inventions.

TREASURER'S REPORT

Treasurer Lorna Hill VE3 IWH presented the financial report, noting that CARF remain in good financial condition, with a 1980 operating budget of over ninety thousand dollars. The Auditors report was presented and accepted, with recommendations for the establishment of a depreciation account to cover future equipment replacement costs, and that, in the light of recent interest rate fluctuations. it might be more desireable to make some future investments as short term ones.

DIRECTORS' REPORTS

The presentation and discussion of the regional Directors' reports brought out many points, including:

- greater emphasis should be placed on field organization;
 - 2. Directors to increase their

output of regional news and other activities for publication in TCA:

3. Club bulletins should be sent directly to the TCA editor, rather than to CARF HQ in Kingston, so that news items therein can be disseminated faster to the membership in general via TCA.

BI & BI

While noting the considerable financial and technical difficulties involved, the General Meeting approved a motion that CARF supports publication in both official languages, and further, that the CARF executive explore ways and means of providing news and CARF publications in the French language as a service to CARF francophone members. The executive to report back on this item at next year's annual general meeting.

CARF PRESIDENCY

Considerable discussion arose regarding the heavy administrative workload placed on the CARF Presidency. The need was seen to secure a President from within CARF ranks so that the incumbent would have the proper "feel" for the Federation's history, its aims, and future directions. The President's workload will be eased in future through enactment of the mechanism which now exists to provide for an



assistant to the President. The idea of using specific working groups was welcomed although it was felt that some projects should be farmed out of the Ottawa-Kingston area to spread the load more evenly. Candidates for regional Directorships should be prepared to accept candidacy for higher office at a later date.

ELECTIONS

As reported in the Sept. issue of TCA, Bill Wilson VE3NR was re-elected as President, Don Slater VE3BID re-elected as Vice-President, Lorna Hill VE3 IWH re-elected as Treasurer. Don Emmerson VE3KJW joined the Executive team with his election as the new CARF Secretary. Art Blick VE3AHU was re-appointed as the General Manager for a further term.

AMSAT SUPPORT

AMSAT Canada President John Henry VE2VQ outlined the problems facing AMSAT in the immediate future as a result of the loss of the OSCAR 9 satellite last May. A motion was presented and passed, that CARF support the Amateur Radio Satellite Association of Canada through the purchase of a life membership (\$125.00), and with publicity in TCA.

TCA: CHANGES, ADVERTISING AND PRODUCTION

Outgoing TCA Editor Doug Burrill VE3CDC reported that the monthly newsletter had been replaced with a compilation of the weekly Radio News Bulletins, sent to the various Amateur Radio clubs. Commencing with the Sept. issue, the Editorship will pass to Cary Honeywell VE3ARS.

Those assembled expressed their appreciation to Doug for his very considerable efforts and dedication in many areas of CARF activity throughout the formative years.

Vice-President Don Slater VE3BID, who also handles TCA advertising, estimated a 20 per cent revenue increase this year over 1979. Production costs average \$4600.00 per issue. An advertising rate increase is expected this year, to \$150.00 per full page. New advertisers are now being sought in the American market to augment those already established here in Canada.

TRAFFIC NETS

The CARF Board of Directors expressed appreciation to Chip Schoenherr VE3JLL for his project aimed at the development of a Canadian traffic net system. It was agreed that the CARL would be used as the best vehicle to assist in this project.

SUB-BAND ALLOCATIONS -- WARC

Bud Punchard VE3UD urged the Board to forward to DOC as soon as possible, the recommendations of the Hamilton national symposium regarding Canadian sub-band allocations. It was agreed that such a communication would be approved by the CARF Directors before being officially submitted.

CRTPB

Bill Wilson VE3NR reported that due to CARF's letter (Jan. '80) on the subject, DOC is currently re-evaluating its proposal to cut back on its work in the area of EMI from electronic devices such as computers and organs.

MID-WESTERN MOTIONS

Several motions were presented by the Mid-West Director, Jim McKenna VE6HO, which were passed by the Board:

-that a Mid-western Vice-President be elected:

 that Telex service be instituted between the Midwestern Director and Kingston; - that the 2-envelope system be used for future elections.

It was decided that the job descriptions of regional assistants will be developed by each Director.

MISCELLANEOUS

Other reports tabled at the Annual General Meeting and the Directors Meeting will be published separately in this, or a later issue of TCA.

General Manager's Report

Membership Report

31 May 1980

Region	1 Jan 79	31 Dec 79	30 Apr 80
Atlantic	525	603	609
Quebec	342	393	402
Ontario	1962	2164	2209
Mid-West	506	612	662
Pacific	793	879	950
Foreign	37	46	47
Life	106	157	173
Total	4271	4854	5052
Increase		583	198
Subscription	1	34	46
Affiliates	61	72	75

- 1. During 1979, 653 members did now renew membership for a non-renewal rate of 15.29%.
- 2. During 1979, clubs that renewed or applied for support of CARF were given subscriptions so that membership figures now show only individual membership.
- 3. Rate of growth of membership in 1979 was 13.65% and rate of growth to 30 April 1980 is 16.3%. This rate, in 1980, is expected to drop during the summer months.

PUBLICATIONS REPORT

Sales of CARF Publications continue to be satisfactory. In first 4 months of 1980 sales were - CSG-588; RRH-525; ASG-407; IG-77; Log Sheets-155. A new printing of the Regs Handbook is under way including amendments to 1 May 80.

Appraisal of copy and re-writing where necessary of the Operator's Handbook is in hand and publication is expected in 1981. The book is expected to have approximately 150 pages.

The writing of the Digital Operator's Handbook has met with problems due to frequent changes made in the examinations set and no date can be forecast for publication.

A new Questions & Answers Handbook for the Amateur and Advanced Amateur examinations is under way with publication sometime after 1 Sept. 80.

CARF OFFICE

- 1. The Office is now staffed weekdays from 0900-1600 hours with phone 613-544-6161. Andy is the Office Manager; Mary is the Accounting clerk and looks after the general work of the Office; and Janet looks after membership details including the operation of the computer system.
- 2. The computer system is now loaded with membership data and programmes are being developed to run labels by postal code for TCA mailing. Until these programmes are developed and data entered in this format, labels will continue to produced by an outsider computer centre in the normal manner.
- 3. A run-off of the coding line of membership data will be made quarterly for the use of the QSL Services. This coding line contains the membership number, expiry date of current membership, call sign (or first 4 digits of last name for Associate members), information re location of data for TCA mailings and first section of postal code.
- 4. The computer system consists of a Motorola 6802 processor with 8k ROM, 71/2k RAM, dual ACIAs and single PIA with disc handler and tape reader interfaces: a Datamedia video terminal and full ASCII keyboard; dual Model 82 51/4" disc drives; and Teletype Model 43 printer modified to use varying sizes of paper and labels. Video speed is 9600 bauds, printer speed is 300 bauds (30 characters per second).

The computer programmes are dedicated to CARF use to enable facile entry and change of membership, etc, data. Development of the system to further office use is planned.

A.E. Blick VE3AHU General Manager ANNUAL REPORT

CARF National QSL Bureau Services

Service priority: Outgoing cards take priority over all other work for CARF QSL Bureau Services. Letters are answered as soon as possible. Files are kept up to date.

Box 66 Incoming: Jan., 200 lbs.; Feb., 206 lbs.; March, 168 lbs.; April 149 lbs.; May, 156 lbs.

Mailing: Once every week at least.

Recycling: Still being done wherever possible. Interesting to note some world bureaus are doing the same.

Unclaimed: Still being cleared monthly for bureaus.

CARF offer to affiliated clubs: Clubs using this free service are on the increase across Canada. These cards are always meticulously sorted. This is much appreciated. Several clubs deliver personally, and get involved in helping with bureau work.

Publicity slips and req. slips: This is still available to clubs and is on a continued basis.

Work Load: Ken Rolison VE3CRL continues to record and open mail ready for sorter. Jo Molloy VE3IMS/GW4DWR is consistent weekly sorter of all mail from Box 66.

KOTARA: now handles one part of the work load. They are ready to take on another part which will be done shortly. The volume is not heavy to relay, but does take time to do, and saves us the extra work. Progress is very good.

Thanks and appreciation: In answer to my request for a gift

for The Ontario Trilliums 15th Anniversary and for teaching equipment for Sunnybrook (VE3 SBH) new class, I received a package of Study Guides from CARF. The new class needed them, so were relayed. On behalf of the Trillium Club, our appreciation for your generosity. The class is doing well. They have two instructors, Bob James VE3GYA and Ken Chapman VE3BYF.

Panel will visit clubs: 'The Threesome' is a panel for informative talks on QSL Bureau Services available. It consists of Joan Powell VE3FVO, Speaker, giving a run-down on how to QSL and all pertinent facts about it; Thelma Woodhouse VE3CLT will answer questions on the VE3 Bureau and Jean Evans VE3 DGG will answer questions concerning CARF National QSL Bureau Services.

We have been invited to two clubs, and were well-received. We were told by members of the clubs that they enjoyed our panel and found it to be of assistance by having questions answered on the spot.

Submitted on behalf of Volunteer Staff of CARF National QSL Bureau Jean VE3DGG

SUMMARY OF CARF FINANCIAL REPORT

Jan 1, 1980 to Apr 30, 1980 Income For Period Budget Total 30727.00 92000.00 Expenses For Period Budget Total 24205.00 91500.00

Canada Contest

The Canadian Amateur Radio Federation is pleased to announce the Canada Contest.

Time: 0001-2359 UTC on December 28, 1980.

Classes of entry: Single operator all band, single operator single band, multi operator single transmitter all band.

Contacts: All contacts with Amateur stations are valid. The same station may be worked twice on each band, once on cw and once on phone. No crossmode contacts, and no cw contacts in the phone bands allowed.

Exchange: Signal report and consecutive serial number starting with 001. VE1 stations will also send their province (NS, NB, PEI).

Scoring: 10 points for each contact with Canada. One point for each contact with others. 10 bonus points for each contact with any CARF official news station using the suffix TCA or VCA. Multipliers are the number of Canadian provinces or territories worked on each band and mode. (12 provinces/territories times 8 bands times 2 modes for a maximum of 192 possible multipliers).

Prov./Terr.: VO1/VO2, VE1 -NB, VE1-PEI, VE1-NS, VE2, VE3, VE4, VE5, VE6, VE7, VE8, VY1.

Frequencies: Phone — 1810, 3770, 3900, 7070, 7230, 14150, 14300, 21200, 21400, 28500, 50100, 146520.

CW - 1810, 3525, 7025, 14025, 21025, 28025, 50100, 144100.

Times: Suggest phone on the even hours UTC, cw on the odd hours UTC.

Entries: A valid entry must contain log sheets, dupe sheets, and a summary sheet showing a chart of multipliers per band/mode and score calculation. Send your entry with comments to: Canadian Amateur Radio Federation, 203-1946 York Ave., Vancouver, B.C. Canada V6J 1E3, postmarked before January 15, 1981.

Awards: The CARF Canada Contest Trophy will be awarded to the highest scoring single operator entry. Certificates will be awarded to the highest score in each entry class in each province/territory, USA call area, and DX country, and to the highest score from a Canadian non-Advanced Amateur (no phone on 3.5–21 MHz), and where participation warrants.

Results: will be published in TCA. Non-subscribers may include an SASE for a copy of the results.

News Briefs

IIC CONFERENCE

More than 300 of the world's leading policy-makers and experts in the field of telecommunications met in Ottawa recently at the annual conference of the International Institute of Communications. The resulting discussions and papers were mostly related to the economic and political aspects of telecommunications.

One paper noted that at last fall's WARC '79 in Geneva, when it was proposed to re-allocate much of the high frequency spectrum from the fixed service to other services, including the Amateur service, these proposals were "absolutely unacceptable to the developing countries". November will see vet another in a series of 13 WARC conferences called to implement the agreements reached at Geneva last year. It will be held in South America and will concern medium frequencies for Region 2.

AUSTRALIA

A recent report from a CARF correspondent in Australia says that regulations permitting third party traffic may soon be forthcoming from the regulatory

authority in that country. Our reporter also said 160 metres seems to be opening up between Canada and Australia as VE5 stations have been heard but due to the low power restriction at the VK end, no contacts were made.

Ontario Trilliums Elections

The following were recently elected to serve during 1980-81: President Eva Colleck VE3EVA; Vice president Mary Hedges VE3COH; Secretary Irene Williams VE3AUR; Treasurer Doris Cody VE3BBO; Membership Irene Simpson VE3IRS; Ediotr Publisher Thelma Woodhouse VE3CLT; and Past President Audrey McDermott VE3CCO.

TV COMMUNICATIONS

With Videotex or two-way TV intercommunication fast becoming a practical reality, a Canadian company, Infomart, is sponsoring an international conference and exhibition to be held in Toronto next May 20 to 22. Canadian and foreign two-way video systems will be on display and world experts on the new information media will conduct seminars.

NARC CW Net

It's that time of the year again and time to think of Amateur radio classes and code practice sessions. The response during last winters session was even greater than the year prior.

A break-down of the response by area is as follows:

20 20 20 20 20 20 20 20 20 20 20 20 20 2	1978/79	79/80
British Columbia	52	56
Alberta	54	53
Saskatchewan	15	20
Manitoba	7	13
Ontario	0	1
U.S.	5	13
Letters	3	15
	136	171

To repeat a few comments from my article of last year — it would appear that the time slot is more readily acceptable to western Canadian listening as it allows most to get their supper over with before settling down to other activities.

The usual format is to give eight minutes of cw at 8 wpm; eight minutes at 10 wpm; eight minutes at 12 wpm; eight minutes at 15 wpm and finally four to five minutes at 18 wpm. Each time segment is broken down into four minute sessions then reading back what was sent then on to another four minute segment. At each speed change I identify and solicit any stations wanting to break or give input into the net.

After the net has been going for about four weeks I drop the 8 wpm and start at 10 wpm expanding the cw times in each remaining group. After another four to five weeks 10 wpm is dropped and the code sessions start at 12 wpm with about 12 minutes of cw at each remaining speeds of 12, 15 and 18 wpm.

The frequency chosen (3.747 ±) allows CNIB equipment to tune in and also allows

SSB readback of the text sent.

So here we go for the fourth winter — Calendar days of Sunday, Wednesday, and Friday at 0300z on a frequency on or about 3747 MHz starting Sunday December 28, 1980 and ending early in May 1981.

Due to our computer club meetings on the second Wednesday of each month there will be no cw practice on those evenings (Jan 14, Feb 11, Mar 11, Apr 8).

News Briefs

THIRD PARTY TRAFFIC

Although reciprocal privileges are in effect for Haiti, we are still awaiting the conclusion of a third party traffic agreement. Negotiations for a reciprocal operating agreement with Japan have been discontinued, as full reciprocity could not be reached due to the difference in rules governing operation by aliens.

MARITIMES HAMFEST

The first Maritimes hamfest in three years was held over the Labour Day weekend. The event, hosted by the Sydney club, attracted about 350 Amateurs and XYLs from the Atlantic provinces, Quebec and Ontario.

CARFNET

The CARFNET teletype net is looking for check-ins. It's on Sundays at 2000 hours Zulu and Thursdays at 0030 hours Zulu. The net operates on 60 words per minute and is on 14.078 MHz. There is now a Newfoundland sideband net on 40 metres. VO1QE is net control station on 7.200 MHz.

VE8YQ

Corrected information for Zone credits for contacts with station VE8YQ, opr. "MAC". As follows:

Nov. 1/78 to Mar 7/79 - QTH's "Longstaff Bluff" and

"Cape Hooper" Baffin Island - Zone 2.

Apr. 22/79 - Oct. 22/79 - QTH Byron Bay, Victoria Island - Zone 1.

Jan. 30/80 – Jun. 1/80 – QTH Pelly Bay, Melville Peninsula – Zone 2.

Current QTH from Aug. 1/80 - Gladman Point, King William Is. - Zone 2.

P. MacDougall VE8YQ (QSL - Via Bureau PSE)

Box 6200

Winnipeg, Man. R3C 3A4

6 METRE CANADAWARD

The first 6 metre Canadaward to be issued to an American Amateur has been earned by Clarence Dempsey KA4AOK. Clarence has won only the second Canadaward to be issued for 6 metre work and deserves congratulations for his efforts in working all provinces and the territories on 6.

VE7LPC ON THE AIR

Lester Pearson College in Victoria is now on the air with the call VE7LPC. Because it is a college for foreign students studying in Canada, it is anxious for DX contacts. A number of students attending are now studying for their Amateur certificates. The station equipment was sponsored by a Victoria Kiwanis club.

CI3LSS

The CI3LSS operation is now Amateur radio history.

The Call

Our special prefix CI (for Collegiate Institute) was authorized by Communications Canada for the use of VE3LSS, the Amateur Radio Club of the Listowel District Secondary School from May 1-15, 1980. This was the unique way our Amateur club could participate in our high school's 100th birthday Centennial celebrations.

The QTH

Listowel is located in southwestern Ontario, 150 kilometres west of Toronto, or 60 kilometres northwest of Kitchener, Listowel, located at the north end of Perth County, has a population of 5,000. Our county is famous for its beef, butter, bacon and cheese, and, or course, the Shakespearean Festival Stratford, our county seat. L.D.S.S. has 64 teachers and about 1.050 students enrolled in academic, technical and business courses from grades 9 to 13.

The Operators

Four staff members were QRV mainly on 2, 15 and 20 metres. Gene Rogers, VE3HYZ (XYL of VE3FTN) is our school's cafeteria supervisor. VE3HLL, Eric Walden is a physical and health education teacher. John Hofstee, the Directors of Business Education is VE3IZH. Yours truly, VE3GCO, is Head of the Geography Department.

Contacts

3,178 QSO's in 108 DXCC countries on all continents were worked. All Canadian call areas and forty-seven states are in our logs. (Vermont, Maine, and



CENTENNIAL 1980

Listowel District Secondary School 155 Maitland Ave. S., Listowel, Ontario, N4W 2M4

Sarah Hammond, VE3GCO's young lady sits on Dad's knee just before he called a CQ from CI3LSS. She is holding one of a number of the RSO's publications of "Talk to the World" that were handed out to interested spectators at the open house display station.



Delaware were the elusive ones.) Other than a few net check-ins on 80 we stayed on 14.190, 14.210, 21.245 and 21.290 on SSB and 30 kHz up from the bottom edge of the band for CW. In this way we felt we could maximize contacts by being available and being easy to find.

FB QSOs

All of our contacts were fine business, but a number do stand out. We enjoyed numerous ragchews with other teachers including VE3KCE, KB4UX, KA5 ASD, WB5TQN, VK2BQT, VK3 VU, W0ZCX, FR7BE, ZL1AZV (ex VE3IAT), and OZ1IF. Our contacts with other school calls included OZ1AAS, ZF1HS, and ZL4HH.

G3VBL is the "Reach for the Top" U.K. staff co-ordinator. Recently he was in Ontario with his team filming TV shows while competing with high schools in our neighbouring counties.

EI6AH at Ballybunion gave us a QSO from his QTH just 10 km from Listowel, Ireland. We were amused to hear of the Ballybunion International Bachelor Festival. You single OM's may want to look into this!

By coincidence, C21BS called CI3LSS the very day VE3GCO was going to teach a grade 12 world regional geography lesson about the richest nation on earth – Nauru – i.e. C21. Amateur radio is a contempory textbook! Bill brought me up-to-date on this phosphate rich, central Pacific island nation.

When we contacted VE1LB in Liverpool, Nova Scotia on 20 metres George Crowell told us already had all the information on our QTH, etc. You see his XYL, Betty had attended our secondary school in 1948-49 and had received the invitation and registration package from our centennial committee.

Our CQ and QRZ calls from CI3LSS netted us contacts with DX'pedition stations ZK2DX and



A Mother's Day Greeting... CI3LSS provides the medium for an on-the-air Mother's Day greeting on May 11 from Wilf Smyth, Head of the English Department at LDSS, to his mother via a two-way 75 metre QSO with his OM VE3LLA in Keswick, Ont. VE3HLL Eric looks on next to the QSL display.

VK9NM. From central Asiatic Russia UI8ADQ, UL7CBS, UJ8 BQ, and UF6HK all called for contacts.

We had calls from tropical FO8DF in Tahiti to storm stayed VE8YQ at Pelly Bay, N.W.T. to newly independent Zimbabwe with ZE2JK.

WB0CGJ called us to tell us he had our VE3LSS QSL from a February, 1974 QSO. Picture QSL's make it easier to remember calls and stations.

VKOKC "Keeping Cool" on Antarctica, called us shortly after a QSO with VE8RCS at the top end of the world. Kevin is a scientist at Mawson Base involved with meteorite research on the ice.

Rotary Exchange

Much to the delight of one of our students, Joanne Colquhoun, we established three contacts with stations in the tropical Townsville, Queensland area. VK4GD, VK4CD at the regional education office, and VK4AGV, a science master from the Pimlico H.S., Townsville have all indicated they'll be pleased to welcome her when she arrives later in the year for the fun and experience of a Rotary Exchange stay. Let's hope we can follow up with a 2X QSO!

Open House

Visitors to the displays set up by all the departments in the school were given an added treat. CI3LSS was put on the air from a hallway which gave us easy access to RG8 from the beam and dipole for 80. Many people stopped by to see and hear what was happening. Amateur visitors included Roy Burton VE3DTA (father of one of our teachers), Paul Henderson VE3DDP (A former student of the and VE3DFN 1960s): Hutson, a teacher from Norwell H.S. in Palmerston, Ontario. Dave loaned us his Triton IV transceiver for the display. VE3DFN is the kind of Amateur

every club needs. He's keen to help anyone with anything, anytime just as he did with our setup and the operation too. His compact digital solid state gear was used to show the state of the art in 1980 in contrast to a working spark transmitter, circa 1920 which we borrowed from Old Timer VE3HH. Periodically, between QSO's on 20 or 80 metres we fired up the spark for a snappy demo!!

Centennial Activities

CI3LSS was just one activity of a fantastic success story. More than 2,000 former students/alumni registered for the assembly, teachers' dinner, decade parties, BBQ, and dances. The town's population more than doubled for the weekend to enjoy the hour long parade and the open house displays.

All such activities take a tremendous amount of planning and preparation but the fun and enjoyment from them makes them all worthwhile.

HiHi! [On the Lighter Side]

One of the opening ceremonies to "kick off" the Centennial weekend was flying in our school colours. Arrangements had been made for four skydivers to drop in with the blue and white colours of our school. Station operators we told about this event, kept kidding us to warn the divers not to get tangled up in the aluminum the TH6DXX 6 curtain of element beam at the school. They all missed the antenna but one did land in a nearby tree and had to be rescued by the local P.U.C.! hihi.

One Texan we contacted gave us new phonetics for our "LSS" suffix – what else. "Lone Star State", hihi.

Our secretaries took two long distance telephone calls from the U.S.A. from Amateurs who wanted to be sure they worked the first-ever use of the CI3 prefix. We got them on schedule all ok, hihi.

FM7WQ heard us on many times earlier in the operation but did not call us then because he looked in the callbook and found no CI3 listing so thought we were NOT real. Somebody must have convinced him we were ok! hihi.

We waited a hundred years for our LDSS centennial to happen. Imagine how surprised we were when Geoff, VS6DA, (who was operating /VK1 from Canberra, A.C.T.), a pilot with Cathay Airlines told us that he attended a 500th year reunion at

his school (St. Bartholemew's at Wormstall, Newbury, England) in 1966! hihi.

A number of stations on CW just couldn't believe their ears and so sent .-. .. .- .- . hihi. About 800 stations did check their ITU call allocations for CFA to CKZ to see that we were in Canada OK. hihi.

One fellow said, "I heard the I3 part of your call, heard the pileup, and couldn't imagine any Italian being that popular!" hihi.

Besides correcting those calling us I3 we had to convince others that we were not a GI3 in



Northern Ireland or a TI3 from Costa Rica, hihi.

Then there was the AUSSIE who thought we were a C13 (C Thirteen). He remembered working C9 stations years ago ... thought China was finally back on the air ... and for half an hour beamed north to PEKING! After realizing we didn't talk with a Chinese accent he turned his beam our way and had a good laugh telling us of his calls for China. hihi.

Centennial Scholarship!

This may be an Amateur radio first! Stations who contacted CI3LSS twice - ie. either on two different dates, bands. modes, or operators are eligible for our attractive Centennial certificate. According to our count almost 300 qualify. We contribution of one dollar or five IRC's for this wallpaper. All monies received go to the Centennial Scholarship Fund. It is our way of supporting this very worthwhile fund. appears that the 'profits' from the dance, BBQ, etc. will total some \$7,000.00! Not bad for a celebration that was not initiated as a moneymaker.) (CL3LSS contributed \$240.00).

Special Certificates

Specially endorsed centennial diplomas go to the following:

First QSO VE3IZH 1 May 0000 utc on 14.190

stations asked for a

QSO 1880 WOMLY 8 May 0022 utc on 3.810

QSO 1980 WB3CFY 8 May 0319 utc on 7.237

Last QSO OZ3RC 15 May 2359 utc on 14.190 Our centennial 1880-1980 QSO # 3,178

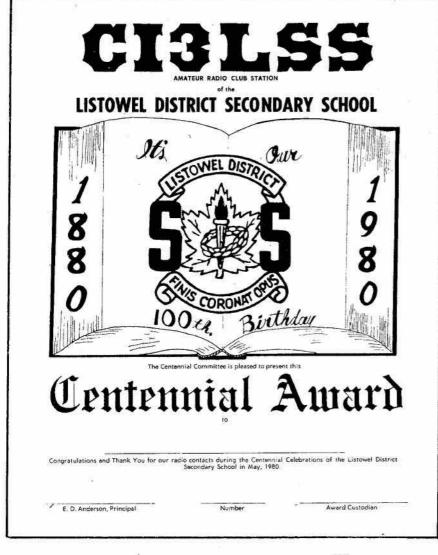
QSLs

I wish to thank the Amateurs who sent us their cards promptly so they could be on display for our Open House display station. It shows a fine spirit of co-operation when fellow Amateurs go to that expense to send QSL's direct. All 3,178 stations contacted will automatically receive a QSL for each of their QSO's. Naturally we'll use the CARF bureau for most of them. Any that we received direct will get theirs the same way. I heartily recommend that all Canadian stations which do use a special call follow a 100% QSL policy as a goodwill gesture.

If we missed you in 1980 be sure you mark May 1-15, 2080 on your calendar. We hope we'll have a Bicentennial QSO with vou!

Notes for DX ops

Elizabeth YBOADT has left Indonesia and is now in Australia with a most appropriate call...VK6AYL. George Collins VE3FXT, now operating HS4AMI and his wife Gem HS4AMJ, are at Khon Kaen University in Thailand for another year. They are usually on the Canadian Overseas Net on 14.160 MHz at 1700 Zulu and about an hour later on 21.300 MHz, daily, Bill VEOMEV is often on the air from Singapore on 14.116 MHz. working home to B.C. at 1400 Zulu. Thanks to Roy Parrett VE7TG for the DX news.



Canadian Amateur Research Club

The Canadian Amateur Radio Research Club is presently working on a number of projects with which you may wish to become more closely involved:

1000 2000 - 1000

- 1. A project to carry out E.M.E. ("Moon-bounce") experiments in the 1215 1300 MHz band.
- A project to link, by U.H.F., repeaters in Gimli, Pinawa, and Winnipeg through a "hub"

control repeater located in Selkirk.

- 3. A project to launch a balloon flight during the summer of 1981. This will involve a number of separate experiments:
- (i) A microprocessor which will act as the control centre for other experiments on board. This will demonstrate that programming and execution can

be controlled from the ground, and could have commercial value to the Club as a balloon control system for future N.R.C. balloon flights.

(ii) A duplex 2-metre repeater under ground control.

(iii) A 432 MHz beacon to assist in possible "balloonbounce" communications.

(iv) A television camera to provide live pictures from the balloon in flight. N.R.C. are interested in this experiment which will be able to provide information on balloon behaviour at the instant of balloon "cut-down".

As you can see, while we have, at this time, a small but growing membership, there is much work to be done. We need help from members and prospective members in any capacity.

If you have a talent for construction, we certainly can find work for you in producing modules for inclusion in the final packages. If you have a talent for drafting, we need system and circuit diagrams for use by those who will be carrying out the construction work, and for reports, and for our day-to-day records. We need access to materials, hardware, welding expertise, graphic arts expertise, etc. If your only talent is in having "the gift of the gab", we need members who will talk to the Amateur community and try to recruit new members.

Please drop us a note soon telling us what your particular talent is. If you have spent your money in joining us -now you can start to get your money's worth by becoming an active member of the team.

Larry A. Toms VE4VX President 1784 Jefferson Avenue
Winnipeg, Manitoba R2P 1N8.

Special Prefixes

Just a year ago, the DOC asked Amateurs for ideas on the use of special call sign prefixes. As a result, the Department has come up with a proposed policy and has asked CARF to find out from Amateurs their views on its acceptibility.

Briefly, special prefixes could be used by all Canadian Amateurs in the form of a special national prefix to commemorate a significant national event or anniversary. It could be granted, on request, for a period of two months.

For significant provincial or territorial events or anniversaries, a special prefix could be granted to all Amateurs in the province or territory, as requested. It would be good for one month. Such events would be those marked by a provincial or territorial government proclamation.

On a **local** basis, significant municipal events or anniversaries may be marked by the use of a special prefix by Amateurs living within a municipality which proclaims a special occasion. The special call prefix would be used for two weeks. The anniversaries which qualify for a special prefix are the 25th,

50th and 100th anniversaries.

As for special **suffixes**, these may still be issued by Regional DOC offices to mark notable events.

CARF invites comments on the Department's proposal in order to reply to it. They should reach the CARF office at Box 356, Kingston, Ont. K7L 4W2 before November 15. The full text of the DOC proposal and letter to CARF is being mailed to all affiliated clubs.

AGREEMENT WITH GREECE

Greece and Canada have concluded a reciprocal operating privilege agreement, according to a DOC head office official. Canadian operators who may intend to take advantage of this new arrangement should contact the Embassy of Greece, 80 MacLaren Street, Ottawa K2P 0K6 and ask for details of applying for permission.

NEW VES BEACON

Beacon station VE7TEN in Vancouver has moved to 28.250 MHz and a new beacon is now operating in Mackenzie District with the call VE8AA on 28.255 MHz. Both stations are on 24-hour operation.

TCA: Technical Section

LED-ing your Yaesu 207R

By Dave Lester VE3KIM

Since getting my Amateur licence in 1978, I have been amazed at the ability of my friends to create little circuits to solve all the various problems we Amateurs face. Not being an "expert" in IC's and LED's, I have been rather reluctant to recreate the circuits I have noticed in Amateur magazines, but something had to be done because my 207R handie from Yaesu was running out of juice right in the middle of a QSO with no real warning.

The specs call for a voltage of 10.8 vdc plus or minus 10% maximum. This gives us a range of 9.72 to 11.88 volts for active duty. The main problem is that when the battery is at 10 volts, you can still receive very well but when you transmit, you just fade, fade, fade away.

Obviously, we needed something to tell us when the voltage was around 10 volts so we wouldn't transmit and be lost in the spectrum. This would also tell us when it was time to recharge the nicads! Perhaps

some type of LED and IC could do the job? As I mentioned before, LED's and IC's don't like me, so I hunted through my 73's and low and behold Mr. Rodney A. Kreuter had the answer for me on pages 56 and 57 of the July 1980 issue.

His circuit works perfectly in my Yaesu 207R with a few personal modifications and warnings. Mocking up the circuit was a cinch due to his excellent layout but I had to fit it all into my handie since I wanted no add-ons poking out of my rig. Therefore, these were the problems I faced:

#1: Where to put the IC circuit?

#2: Where to put the LED?#3: What flashing rate for

#3: What flashing rate for the LED?

#4: What parts need to be removed or kept in the 207R?

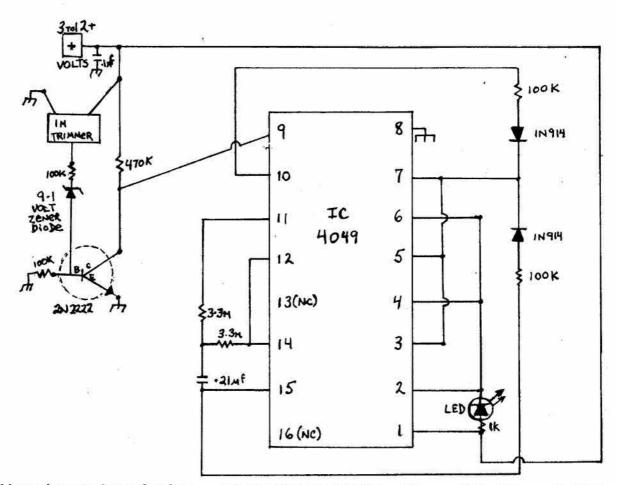
Problem 1 was easily solved. Yaesu (on the North-American models) has a high/low power switch instead of a tone call on the bottom of the rig. When you take the back off the rig, there is a fairly large square area for the tone module. Since I wasn't going to install the tone module, I could use this space with the added bonus that Yaesu had already supplied the screw receptacles to hold the board down.

Problem 2, where to put the LED, was a little tougher, but if you don't use the earphone that came with the rig, you can use this hole (earphone hole beside the antenna in case you missed it).

Problem 3 was decided at about 1 flash/second and that the LED would not light below 3 volts thereby giving me 3 types of warning status:

- LED on equals voltage above 10 volts.
- 2. LED flashing equals voltage between 3 and 10 volts.
- 3. LED off equals deep recharge needed, volts 0 3.

Problem 4 was my nemesis. I told you before that LEDs and ICs don't like me. Well please



add earphone jacks to that list! To put the LED into the earphone jack hole, I first had to remove the earphone jack, no really great problem because I just bent it out of the way for a while. I then put a plastic LED holder in the hole and the LED into the plastic. I then bent the earphone jack back into place in order to clear it for the closing of the back cover. When I closed the back, the LED went out! Why you may ask? Because I had grounded the LED (which is joined to pins 2,4 and 6 of the IC 4049) onto the ground of the earphone jack! (This is an experimental licence isn't it!] This in turn blew the 4049 IC. After another trip to my parts store for a new 4049 IC, we put the circuit together (again) but when we dropped the voltage below 10 vdc the LED flashed so fast that it seemed to be constantly on, VE3HUB (my dad) came to the rescue. We put a

.1uf capacitor in parallel with the .01uf and the LED slowed down but not quite enough, so another .1uf was added in parallel. The LED went on and off at about 1 flash every 1½ seconds.

To avoid the same grounding problem, I decided to remove the earphone jack completely. After surgery, I joined the loose end of the big blue capacitor to the grey wire and the yellow capacitor (very small and joined to the \$\frac{1}{2}\$ 600 switch) to the black ground wire. All the above wires came from the removed earphone jack. I taped the wire joints (we wouldn't want to ground the IC again would we) and used some nail polish to hold the LED firmly in it's plastic holder and voila!

My thanks to VE3HUB for the extra capacitors, solder, knowledge etc. and to Mr. Kreuter WA3ENK for his wonderful article.

P.S. IC's and LED's and earphone jacks really aren't that bad!

73's and good soldering!

Dave Lester VE3KIM 2241 Beaver Ave. Ottawa, Ont. K1H 7W3

References:

Rodney A. Kreuter WA3ENK
 "Flat Cells are No Fun!
 Build a battery status monitor"

 Magazine, July 1980, p. 56 and 57.



Amateur Radio Desk Set

Have you ever had your pen run dry, without another pen handy, just as the DX operator gives his QSL info? For a few dollars and a couple of evenings work you can build a station accessory which has a pen installed, along with other attractive items.

The photograph shows a desk set which I made a couple of years ago. It has a pen and holder, name and call sign plaque, and a transmitting tube all mounted on a block of solid oak. Besides the convenience of the pen, it makes it easy to tell visitors to the shack a little about electronics.

Guests can be told that, within the fragile-looking glass envelope, temperatures of over 800° Celsius cause electrons to flow through the vacuum and how the signal produced on the plate cap can transmit around the world. You might also throw in a few comments about radio pioneering and the triode discovery of the amplifier tube by deForest. It is a good conversation piece.

I have seen desk sets with tees and golf balls for golfers and bowling pins for bowling enthusiasts, so what could be better for radio men than a vacuum tube? Since radio hobbyists are in the minority, gift shops don't seem to carry anything suitable, so you must make your own. A junkbox is of help here. When I built mine, the only cash

outlay was for wood, felt, stain and the pen. The call sign plate was a gift from a friend. It was originally equipped with a pin and clasp on the back, but a few minutes missionary work with a hot iron removed that. The 6146 was an old weak one that had sent its last SK.

To build the desk set, it is best to first collect all the parts you intend to mount on the top and lay them out on a sheet of paper or cardboard. That way, if you don't like the layout, you cut a different sized piece of cardboard instead of sawing up more wood. Once you have decided on the proper size of base, hie yourself off to the lumber mill and select your wood. I chose oak since my radio equipment sits on a rugged old oak desk

and I wished to match its finish up nicely when sanded and stained.

If you are fortunate enough to live near a planing mill, you will have a better selection. Not every place, especially the discount home centre sort, have any hardwood so you may have to do a bit of looking, but there may be an end piece laying around that can be obtained reasonably.

Hardwood makes a better base, as softwoods like pine, spruce and cedar are planed immediately and sold while still as green as the tree. They contain a lot of sap and the large pored wood does not make a very good looking base. If you use hardwood, see if you can have it planed on the premises, as this will



reduce the sanding chore at home.

About 7/8"- 1 1/8" thickness is suitable for the wood once it is planed. The bottom side will be covered with felt and need not be as smoothly finished as the other edges. Choose the best surface for the top, and if you have access to a power router it can be shaped in a variety of contoured edges.

Using medium and then fine grain sandpaper, smooth the wood surface, rubbing the length of the grain. Then sprinkle a few drops of water on the wood and rub it on with your hand. Hold the piece of wood over a stove burner and tiny 'whiskers' od wood will spring up due to the heat. These can now be sanded off.

With an expandable wood bit and drill, sink a hole in the wooden base to mount the

tube socket in. Octal sockets for 6146 tubes and old metal 8 pin tubes require a 1 1/8" hole. If you wish to connect a pair of wires to the socket to light the tube filament. another small hole will be necessary in the side or bottom of base. Other ornamental items could be old RF power transistors, telegraph keys, or antique or nostalgic objects.

Choose a stain and apply several coats, allowing drying time in between coats. Mount the tube socket and apply felt to the bottom (gift shops should have this felt with a peel-off backing). Mount the call sign plaque with contact cement or small wood screws. Next mount the pen holder. These, too, are self-adhesive and hold surprisingly well. Insert the tube and your project is complete.

You are now the proud

builder and owner of a handsome desk set that will really set off your radio desk. Now that you know the technique and have all that sandpaper and stain handy, why not rustle around the junkbox for another old tube and build one for a friend?

Glenn McMichael VE3CGU

We pay for technical articles. Send contributions to: CARF Technical Editor, Box 356, Kingston, Ont. K7L 4W2.



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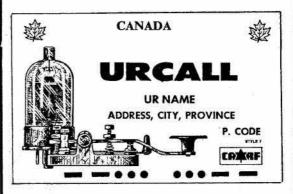
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Ron Walsh VE3IDW Asst. Gen. Mgr.

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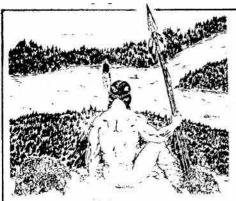


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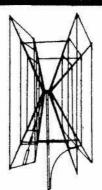
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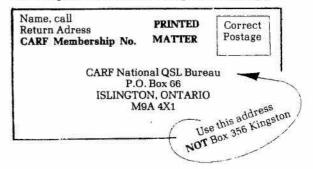
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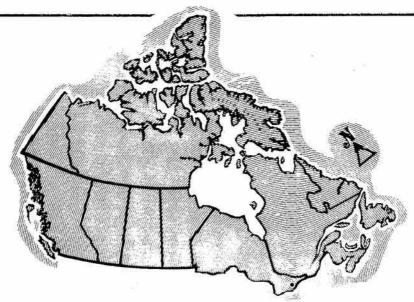


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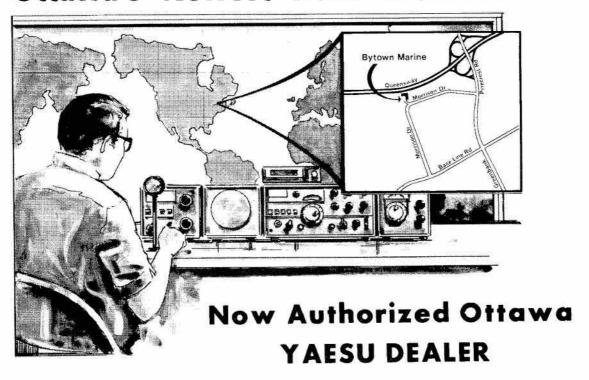
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