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Number 5073

TCA



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JANUARY
1983

The Canadian Amateur Radio Magazine

The Canadian Amateur

VOLUME 1

JANUARY, 1973

NUMBER 1

MAGNA EST VERITAS ET PREVALEBIT!

D. O. C. TO POLL ALL LICENCED AMATEURS IN CANADA

Commenting that "There appears to be some doubt as to exactly how many Canadian radio amateurs are represented by the Canadian Amateur Radio Federation or the Canadian Division, American Radio Relay League," the Department of Communications in Ottawa has decided to postpone action on the recent petition presented to them by C.A.R.F. requesting a downward extension in the 40 and 75-meter phone sub-bands to escape the invasion of U.S. amateurs recently moved into our previously all-Canadian sectors. The Federal Communications Commission of the United States.

As a result some considerable delay has been experienced before any relief from the present situation has been our net for a long time as expected. The C.A.R.F. proposed to find a way to do this, just as they do in representing the Canadian Amateur and to do this they are preparing to poll every licensed amateur in Canada by mail ballot. In the words of W. J. Wilson, Director General, Communications, Regulations Branch, "Consultation with Canadian Amateurs will be conducted on an individual basis by the Department and the ballot will also be used to determine whether an amateur belongs to the A.R.R.L., C.A.R.F. or other amateur organizations.

A full report of the meeting between the Department of Communications and the claimants to be the National voice of the Canadian Amateur is reproduced below.

C.A.R.F.'s request for expansion of Canadian Phone Bands

The Canadian Amateur Radio Federation Inc. and its provincial members decided, in MAY 1972 (after preliminary comment and opinion had been received from the Amateurs in the provincial areas) to request an immediate adjusting increase of the Canadian phone sub-bands if, and when, an expansion of the phone frequencies allotted to the Amateurs of the U.S.A. was announced. As a result of this decision, a formal request was made to the Department of Communications on receipt of news that U.S. expansion was imminent.

A full year elapsed after the publicising of Docket

19162 during which time the Amateurs of Canada had the opportunity to discuss, debate and consider the implications contained therein, before further C.A.R.F. action was taken. This action was a request to the provincial Amateur associations to get an amount of opinion from the Amateurs of the U.S.A. on the policy they should all, or any of, systems of expansion. The docket to be implemented in Canada. Looked Clear

The message went to the Federation by its membership was widely publicised in the minutes of the 77th Annual meeting of the corporation and in subsequent Newsletters. This action can hardly be construed as precipitate or without the backing of a large segment of the Amateurs of Canada.

Realising that any expansion of the Canadian Phone frequencies would meet strong opposition from the American Radio Relay League, the national spokesman for Amateurs in the United States, the original docket submitted to the F. C. C. by C.A.R.F. to the C.A.R.F. Div ARRL, comments made by the C.A.R.F. Report and Order of the FCC announcing the expansion were carefully studied and notes made to support the policy of the Federation and the necessity for expansion by Canada. A synopsis of these notes, circulated to all attending the meeting on 25 October, follows:

Gained Wide Circulation

Docket 19162, in its entirety, was circulated to the Amateurs of Canada through the channels of the Federation and this resulted in a large volume of knowledgeable and considered comment to the Federation, the D.O.C. and the ARRL. Briefs and comment were sent to the F.C.C. based on the material received and ALL pointed out that expansion of the US phone frequencies would necessitate Canada expanding its phone frequencies to channels outside of the US phone and Novice frequencies on 75 metres. The brief submitted by the Cdn Dir ARRL is quite explicit on this point—QUOTE: "Canadian Amateurs will simply move lower in frequency (Continued on page 8)

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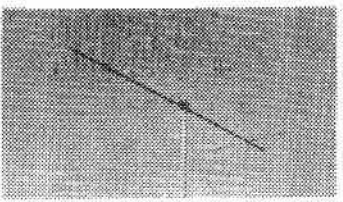
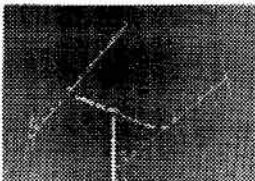
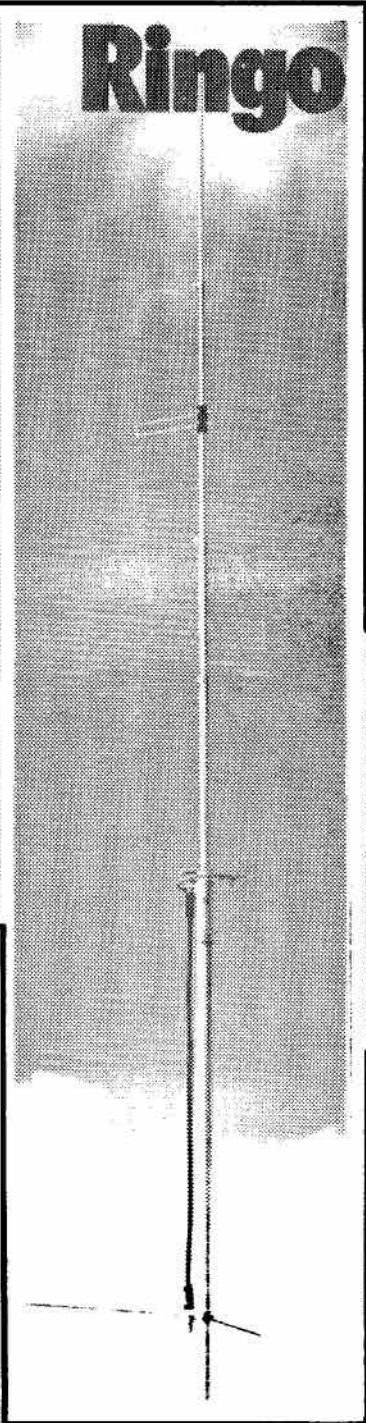
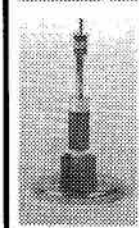
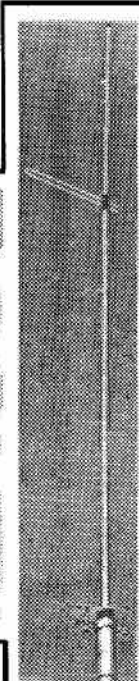
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Toronto Amateur Dept.: 47A Colville Road, Toronto 15, Ont.

EDITOR
Cary Honeywell VE3ARS
P.O. Box 2610, Station D
Ottawa, Ont. K1P 5W7

ASSISTANT EDITOR
Dave Nessman

CONTRIBUTING EDITOR
(C.A.R.F. News Service)
Doug Burrill VE3CDC
151 Fanshaw Ave.
Ottawa, Ont.
(613) 733-7108

TECHNICAL EDITOR
Ed Hartlin VE3FXZ
P.O. Box 356, Kingston, Ont.
K7L 4W2

TECHNICAL DESIGN
Don Prickett, VE5KP
41 McAskill Crs.,
Saskatoon, Sask, S7J 3K1

CRAG COLUMN
Hugh Lines VE3DWL
P.O. Box 192, S.S. 11 Belleville,
Ont. K8N 4Z3

CONTEST SCENE
Dave Goodwin VE2ZP
4 Victoria Place
Aylmer, Que. J9H 2J3

DX EDITOR
Douglas W. Griffith VE3KKB
33 Foxfield Drive,
Nepean, Ont. K2J 1K6

ENCOM
Ken Kendall VE3IHX
777B Springland Dr.
Ottawa, Ont. K1V 6L9

YL NEWS AND VIEWS
Cathy Hrischenko VE3GJH
56 Stockdale Crescent
Richmond Hill L4C 3S9
Ontario

VHF UHF COLUMN
John Dudley VE5JQ
3125 Mountbattan St.
Saskatoon, Sask. S7M 3T3

QC: A REPORT
Ron J. Hesler, VE1SH
P.O. Box 418
Sackville, N.B., E0A 3C0

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TCA — The Canadian Amateur is published in Canada 11 times per year to provide Radio Amateurs, those interested in radio communications and electronics and the general public with information on matters related to the science of telecommunications.

Unsolicited articles, reviews, features, criticisms and essays are welcomed. Manuscripts should be legible and include the contributor's name and address. A signed article expresses the view of the author and not necessarily that of C.A.R.F. Publications Limited.

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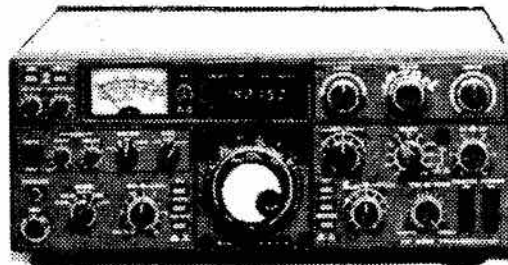
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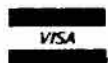
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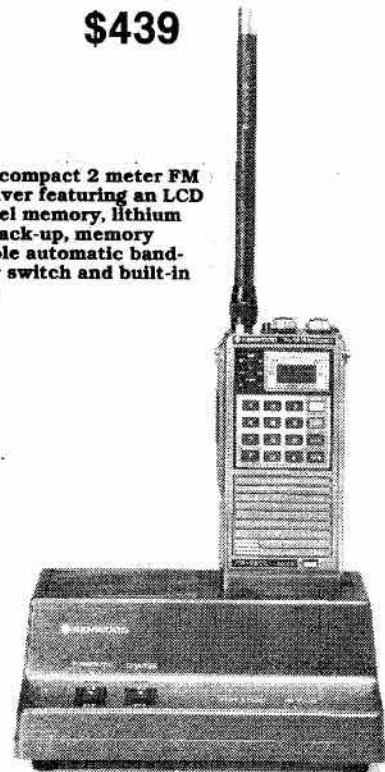
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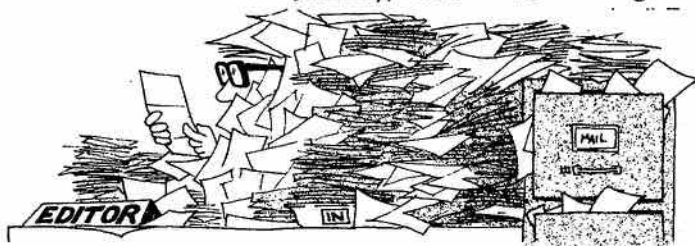
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LETTERS



Dear Editor

Have just received TCA for the month of Oct 82.

In regards to computer program on page 18 as written by VE7EZR - it doesn't "run" but that is because of an error in the printing.

None the less - how about a contributors column for micro-processor (or computer) buffs? It could be called "Basically Speaking" to keep it simple.

To start it off here is my version for a log book program!

Nice magazine but sure wish the mail was faster.

73's to all
Bob VE7SG

So do !! (ed)

Notes

1. This program can be altered to suit any individual requirements by changing the READ statements (lines 15 & 40) and rearranging the DATA statements (lines 100-9998) to suit.

2. In data statements the **actual** call sign, the **actual** operators name and the **actual** date of QSO are inserted in place of CALLSIGN, NAME, DATE.

Bob (VE7SG)

**The Northern Californix DX Club,
P.O. Box 717,
Oakland, Ca.,
94606.**

Gentlemen:

At a recent meeting of our Nanaimo DX Association, there was considerable discussion regarding the recent PY0 operation in which your club was involved.

A lot of ill feeling and in fact, downright hostility was created on the 20m band, particularly among those amateurs who are not DX oriented. They were very unhappy

at the split-frequence operators who were listening over the whole 150 khz range of 20m from 14,200 to 14,350. This wide range made it not only impossible for any other amateur to make any use of the band, but it also made it extremely difficult for those of us wishing to work the operation (even though the writer was successful).

There did not seem to be any pattern whatsoever as to where they were listening at any given moment. More than one amateur was heard to remark, that this operation created more QRM on the band than any other DX operation they could remember. Other operators were heard to remark that they were ashamed of many of their fellow amateurs and hated to admit that we were all amateur radio operators, sounding more like a bunch of frenzied CB fanatics.

It is the suggestion of our Association, that in future, any DX Operations using split-frequency, limit the listening range to 25 khz, and then if the QRM is still too great to go by call areas, within that same 25 khz range.

We make this suggestion in the best interests of all Amateur Radio operators, both the DX fans and the others with whom we share the bands.

We look forward to participating in future NCDX Club DX operations and wish you the best of luck.

Yours very truly,
NANAIMO DX ASSOCIATION,
Divl of
Nanaimo Amateur Radio Association
Ernest W. Harding
VE7FCK

Dear Editor:

I would like to thank CARF for publishing the TCA magazine. It is

a very interesting and popular magazine.

I write to you because I am still waiting for my JUNE and AUGUST issues, those I have never received.

Those two issues were probably lost, and I would appreciate getting the JUNE and AUGUST issues by return mail.

Thanking you, for taking care of your members.

Ronald Ouellet No. E 064

Thank you for reading TCA! (ed)

Dear Editor:

We have been requested by the D.O.C. to insert a notice in TCA to the effect that anyone knowing the whereabouts or have any information on the amateurs listed below, should contact:

Mrs. J. Nosotti
D.O.C. Room 909, 9th Floor
55 St. Clair Avenue East
Toronto, Ontario.
M4T 1 M 2.

Wade D. Rowland	VE3LKZ
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George R. Funk	GMP
Edward Boutilier	INZ
Thomas MacPherson	CWM
Peter Pientka	HHP
Jonathan White	MLI

Yours truly,

James Don Dudley VE3 BUQ

Dear Editor:

This is to advise that a member of our club, VE3GH, GERRY HALLIDAY, of Powassan, Ont.,

passed away on 13 Jun 82.

He was a member of long standing in this organization, and is well known to Hams all over the world.

Yours truly,
L.H. (Dick) Mewett, VE3LQO,
Secretary, NBARC

354 Hillcrest
Rosemere, Que
J7A 1 Y9
Oct 25

Dear Editor:

I have just realized that neither the September nor October issues of TCA have reached me. I renewed in August and the cheque has been cashed. Regardless, I gather from a note in a recent issue that the Sept (expiry) and one copy should have been sent. I would appreciate your checking.

I have a couple of questions. Although I now have my license I am still only listening, planning to get my code speed accurately up to 15-18 wpm before I launch myself. Last night, Sunday, at about 2045 I came across a station sending letter groups at about that speed. The frequency was 7,100 mhz. He finished at 2100 without identifying himself. It wasn't a tape because he made some errors which he corrected. Is this by any chance a CARF operation? (no! (ed))

I read frequently of the need for hams to follow the "informal" rules of procedure. I read about "DX windows", and specific frequencies "allocated" to QRP. Is there any publication that would be helpful in learning about these before putting one's foot in it?

Sincerely,

Dave Savage

Yes. TCA. Occasionally we have articles on these subjects. Also, very soon, our up to date Amateur Band chart will be finished and published in TCA. It will provide you with answers to all your questions about frequencies. As for the missing TCA's, I hope you have recieved

them by now. We are working on the Post Office. (Ed).

Dear Editor:

LETTER FROM SINGAPORE

I am on a year's visit to Singapore, operating as 9V1VT, and the following is based on my experience and information gleaned at meetings of the Singapore Amateur Radio Transmitting Society (4th Thursday, 8PM, YM-CA, Stevens Road, all welcome).

Canadians wanting operating privileges have to apply in person, after which there is a mandatory 90-day wait. Citizens of non-Commonwealth countries can wait much longer.

You will need your certificate of proficiency and Canadian Station license, specifications of your equipment, and two local character references. If you rent accomodation, as do most people you will also need a letter from the landlord stating that there is no objection to an amateur station on the premises.

When the station is set up, technicians from telecomms will measure SWR and TVI before the license is issued. You will then have to pay a license fee of SG\$25 (about \$14.50) and go to the commissioner for oaths to swear an oath of secrecy, which is another SG\$2 (about \$1.20).

I live in public housing and the authorities wanted another \$125 for permission to have a vertical antenna on the roof and insisted on welded mounts, etc., that would have made the cost prohibitive.

Equipment approval is by type, and lags behind the state of the art. The latest approved Yaesu is the FT101ZD. New equipment costs about the same as in Canada except for the absence of sales tax, and second-hand rigs are very rare. You need government approval to buy, sell, or change station equipment.

I understand there are now arrangements for short-term visitors (less than a year) but do not know how this is affected by the mandatory 90-day visit.

I live on the top (25th) floor of an apartment block, so my antenna solution was to buy a telescoping Japanese fiberglass fishing pole, 7 metres long attach a galvanized pipe at the bottom as a counterweight, and tape some No. 18 enameled wire to the pole, with two short random lengths of wire along the outside window ledge as counterpoise. I run it out of the window when operating and retract it during the frequent electrical storms. This has provided lots of contacts with HS, VK, VU, JA, DU, YB, etc., within the region and the occasional VE7 and W6 and W7 on 10 or 15 meters. Singapore is 12 hours ahead of Halifax time and 16 ahead (or 8 behind but the next day) of Vancouver.

There are 20-odd active hams, about equally divided between Singaporeans and expatriates. The most active bands are 10, 15, and 20 meters, with the SEANET each evening at 8 Singapore time on 14.320 or thereabouts.

I am glad I brought my equipment and took out a license, and if any of you come out here you will enjoy it too. If they hold equipment in customs, it will be released when the technicians are ready to test out the station. The club is very helpful in these matters.

A.P. Ruderman, VE1PZZ/9 V1VT

Dear Editor:

In South Western Ontario Amateur repeater operation has started in full force on the sub band in 145 mhz region.

Most people were not aware of the strong interference being caused by the Cable TV systems operating in some cities with sub channels at or around 145.25 mhz.

This CATV interference in many cases makes certain of the sub channel frequencies such as 145.25 unusable in some areas.

Our calls to the DOC indicate that the CATV system must not cause interference but it may not be that easy to get any action regarding repair of the problem by

the CATV systems.

I would suggest that as has been done in the U.S.A., strong representation should be made to the DOC to have the CATV industry move their sub channel off of the Amateur Radio band.

We also have conflicting answers to this question; can a single call be used for Amateur repeater operation in different bands at the same location? (eg; VE3XYZ on 147.00 and 444.800) (it has been done. Yes. (ed)

U.S. Amateurs can operate a repeater with their own call but Canadian Amateurs must pay to obtain a special license. This fact should be brought to the attention of the DOC and the Minister of Communications.

Best 73

Yours truly,

Carl F. Veroba VE31JB
Chairman.

There is no special repeater license in Canada. If you sign your repeater as a portable ie VE3-- % 3 you can operate it as such, only don't have 2 of them. You are allowed 1 fixed, 1 mobile and 1 portable. How you use them is your own business. (ed)

**Minister of Communications
Department of Communications
Ottawa, Ontario.**

Dear Sir:

I am writing in response to an article which appeared in the October 1982 issue of TCA, entitled "How to Flunk the Code Test".

While the point being made in the article that Amateurs should be authorized to conduct licencing examinations is a good one, given staffing cut back within the DOC making the giving of examinations increasingly difficult for both the examiners and the examinees, we strongly take exception to the statement that nominees for examiners "should be screened and recommended to

DOC by the provincial organizations and by the national society, CARF".

CARF, in no way, represents every Amateur's wishes in Canada. Nor, for that matter, does the CRRL. The only thing that would result from allowing CARF to approve examiners would be that more fuel would be added to the current CARF/CRRL political fight, with Amateurs taking sides and disagreeing among themselves.

Accordingly, we feel it necessary to make it known that the Burnaby Amateur Radio Club views the duty to appoint examiners as the responsibility of the DOC and we wish it to remain such. A change in this policy would make the issue a political football between the two national organizations.

Yours truly,

Graham Shortreed, VE7AVU
President.

The idea of giving Amateurs the right to give their own examinations does need close scrutiny, and the Federation is giving it just that right now. Don't jump to conclusions just yet. The football game has not started, and will not so long as both sides treat it as an important gain for Amateurs rather than organizations. Progress requires change. (ed)

Dear editor

During the summer of 1982, I was subject to a very severe and steady QRN, so loud as to prevent any communication on 10-15-20 metre.

I made a complete inspection of the shack, checked every a.c. outlet in the house, checked T.V. cables for leakage, dimmers, light bulbs, chimes, etc. only to have the noise ever present in my different receivers, day or night.

As an a.c. line transformer from the power company is quite close to my house, I suspected that it was defective or overloaded.

My antenna is a Cushcraft ATV-3 located approximately 40 feet from the power line. After being unable to pinpoint the trouble, I

contacted the local Department of Communications in Montreal for help.

The Department responded quickly by sending a detection car, and after circling the area for a few minutes, the radio inspector found a defective lightning arrester located one block from the house, and causing heavy interference due to arcing. Hydro crews have since replaced it and everything is back to normal.

My thanks to the Department of Communications for its good service.

Yours truly,

Marcel Gingras
VE2ES1
Pointe Claire, Quebec

Dear editor:

I would like to congratulate you on the best edition, of T.C.A. yet! (October) As a member of both CRRL and CARF I am in favor of TCA being used as a vehicle for discussion of "Amateur Views" for Canadians regardless of whether they support CRRL, CARF, or both. Each organization has its strength to further our hobby. CARF seems to have very good contacts within DOC and does a very good job with TCA. The CRRL through its affiliation with the ARRL offers technical strengths such as the handbook, and QST. Also, its recent work in establishing interference standards for electronic equipment in the U.S.A. will be one of the most important issues of the eighties. Canadians would do well to follow this example quickly before we become a dumping ground for substandard equipment.

I enjoyed the article "How to flunk the code test" in the October TCA. A couple of years ago, I drove some young people out to the exam. While there, I asked the Inspector for permission to write the exam. Since I am the holder of an expired second class certificate and do lots of CW operating, I feel qualified to comment on the quality of the morse code.

Ray, VE3KND is absolutely correct in his assessment of the morse code exam and the code tapes and audio equipment. They are really awful. I found that I had to be right in front of the speaker to get all the dits and dahs. A person who is already nervous about the test is really under a handicap using the present system. I have been running code practice on 80 meters for some time now. I have found that good hand code with the characters at about 15 WPM and spaced slower and well spaced between words to allow the candidate to catch up, goes over very well. For those working on the advanced code, we crank it up around twenty WPM. Those reporting in "on the air" who can copy my sending without error, are ready for the exam. I can also tell by their sending that they qualify as good operators. It is very encouraging to get the report that they passed, and that our sessions really helped. Both CARF and CRRL must work together to get the volunteer examiner program off the ground. Amateur Radio has too much at stake for us to relax and sit on our laurels.

I would like to suggest that CARF and CRRL both print up a list of the most important issues concerning Amateur radio today. Where agreement is present, both should work their tails off to get that issue off the ground and reach a satisfactory conclusion. On these issues, the view presented should give equal credit to both organizations, and should represent the opinion of most Canadian Amateurs. Where, these organizations differ, the subjects should be thrown out for discussion and comment at the provincial level. Special care should be taken to ensure that the opinions stated are those of the membership and not necessarily that of local directors. Amateurs should discuss these matters on the air, not just at symposiums. As a western Amateur, it is very difficult for my opinion to be heard at the level where things happen. TCA provides somewhat of a forum, but does not enable

me to be as effective as I would like in getting Amateurs to work together in our great country.

Lou Beaubien
VE7CGE

Well put! (ed)

Dear Editor:

This refers to "Commentary" by Doug Burrill, VE3CDC in the October 1982 issue of TCA.

The proposal that amateurs be permitted to give amateur radio examinations is certainly an idea whose time has come. With the present cut back in staffing by Federal Government Departments the need for amateur examiners has become urgent. Ray Fleury's letter certainly makes the point.

The various points in favour of the proposal made in the Commentary are also very easy to accept, but, when we get to that part of the proposal about how examiners should be chosen, there we part company. CARF proposes "that nominees should be screened and recommend to DOC by the provincial organizations and by the national society, CARF." The idea of any amateur organization, other than the local clubs, being in a position to control who shall be examiners is completely intolerable. This applies particularly to both CARF and CRRL.

While both organizations claim to act on the wishes of the membership. I have never seen a decision made that was backed by a fully representative sample of the membership. Perhaps ARRL is properly acting on the wishes of the U.S. amateurs, but it certainly does not happen in Canada. We would be facing policies and standards for amateur examiner qualifications, not based on skills and experience, but instead dictated by the power politics of headquarters groups. If CARF got the green light to screen applicants, in no time at all, it would become a powerful weapon in the CARP/CRRL fight and to the detriment of the Canadian Amateurs. This also applies to CRRL.

If the opportunity to serve amateur radio by becoming ex-

aminers is granted by DOC it will be a much too precious privilege to be put in the hands of battling political organizations. There is only one way to go and that is to have DOC make all the decisions for qualifications of examiners and that certainly includes screening of candidates at any level.

I am a CARF member as well as an instructor and I feel just a little ashamed of this blatant power play by CARF. The qualifications of examiners is a matter strictly between the individual amateurs and the licencing body, DOC. Please keep the CARF organization out of it.

James A. Hill
VE7CYO

I disagree with your comment that this is a CARF power play. CARF is trying to arrange affairs to the advantage of all Canadian Amateurs. Organization of this sort of work must be fairly central and be consistent. The comments by Doug were not to be used as CARF policy. Only the Board of Directors can set that. Doug is laying the groundwork for comment in order to see if there is support for such as this. If you are so set against a national organization competing with its competition then the members of that organization will gain nothing. The only way you will keep politics out of it is by merging the two or eliminating one of them. Canadian Amateurs have done neither but they continue to complain about policies. Either they don't know what they want or they lack the guts to do anything about it. (ed)

Dear Editor

Since February 3, 1982 the Canadian Traffic Net has been operating on a frequency of 7055khz at 0130 Z daily. During the first nine months of operation the net has passed over one hundred eighty five pieces of traffic over a coverage area from British Columbia to western Ontario and north into the Northwest Territories. To date we have had only a few checkins from central On-

tario and eastern Canada. Hopefully our representation will improve from this area in the future or perhaps we could affiliate with a similar net in this area to route traffic eastward.

This net uses the cw mode and grew out of a sincere interest in cw traffic handling by a group of amateurs who regularly worked the aurora net, also on forty metres. Inspiration came from VE3JLL who ran a similar net a couple of years ago.

The intention is to be able to route traffic across Canada without having to rely on the American regional nets.

These nets have certainly been an asset to us up to this point, but there is some feeling that perhaps the time has come for Canadians to utilize their own traffic network.

At present all that seems to be lacking is a system to route traffic beyond the lakehead. CTN has done well for coverage across all three prairie provinces and to some extent, B.C.

There are several different stations which call for checkins during the course of each session from different provinces, so don't

be discouraged if you don't hear someone calling at the net starting time. Continue to monitor, and you will likely hear one of the calling stations. The net has a policy of running a minimum of fifteen minutes.

Any suggestions or comments would be greatly appreciated.

See you on CTN 73s

Dave Alister VE5BAF
Asst. Net Mgr.

AN AMATEUR RADIO CALL UP PROGRAM IN BASIC (NO RIGHTS RESERVED)

5 CLS: PRINT @ 535; "CALL SIGN PLEASE": INPUT L\$
10 CLS: RESTORE

15 READ C\$, N\$, D\$: PRINT @ 530, "SEARCHING"

20 IF C\$ = L\$ CLS: PRINT C\$, N\$: GOTO 30

25 IF C\$ = "END" GOTO 85 ELSE 15

30 PRINT: PRINT "DATE"

35 RESTORE

40 READ C\$, N\$, D\$

45 IF C\$ = L\$ PRINT D\$

55 IF C\$ = "END" GOTO 90 ELSE 40

85 CLS: PRINT @ 531, L\$ "NOT IN LOG": GOTO 95

90 PRINT: PRINT "END OF LOG"

95 PRINT: PRINT "NEXT CALL SIGN": INPUT L\$

96 GOTO 10

99 END

100 DATA CALL SIGN, NAME, DATE, CALLSIGN, NAME, DATE, (ETC TO LINE 9998)

9999 DATA "END", "END", "END"
PROGRAMMER BOB DENNETT
DATE, JANUARY 1981

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		3,0	1,182
Split Separation	Advertising Content	Wrapping Allowance	Tare d'emballage
		%	
Rate / Tarif	Frequency / Fréquence	Received From	De
3	MONTHLY	D.J.	M. Y.A.
		3,0	1,182
Received To	A	Days	Nombre de jours
3,0	1,182	01	
Copy Weight Unwrapped	Poids de l'exemp. non emballé	Copy Weight Wrapped	Poids de l'exemp. emballé
	180 gr.		oz.

An electronic horror story

The wired city

Doug VE3CDC

This item might well have been featured in the Hallowe'en issue of 'TCA' as it deals with the latest electronic horror...cable TV interference to and from the Amateur Service. This problem is fast becoming the number one topic with operators who live in areas with cable systems which use 'mid-band' or 'super-band' distribution frequencies.

First, a word on how cable TV systems work. With their strategically-sited 'head end' receivers cable systems pick up TV signals from stations which you cannot normally get because they are out of range of your own antenna. These may be piped down the cable on the same channel as they are received on or, by means of RF mixing or heterodyning circuitry, converted to a different channel on the cable to cut down interference or to satisfy Canadian Radio-Television and Telecommunications Commission (the 'CRTC') rulings. Distant TV signals brought in by microwave are also converted to cable channels. This process simply demodulates the incoming TV station signal and uses the resulting video and audio signal to modulate a cable channel frequency generated in the cable company's control room.

If more than the standard 12 TV channels are distributed, 'mid-band' or 'super-band' frequencies are used to deliver the additional stations or services to the customer, who must use a 'converter' to receive them. This is simply another RF mixer circuit which outputs on a fixed clear TV channel which is not subject to direct QRM from a local TV station, usually channel 3 or 4. Station changing is done at the converter except for UHF output converters which are switched at the TV set.

Now for the problem; - as far as Amateurs are concerned the problem is mostly generated by

'leaky' cable systems and illegal connections. It shows up on two metres and on 220 megahertz in the form of the squelch breaking on and off, or a steady carrier. The main interference is from signals on 145.25 and 223.35 megs, commonly called cable channels 'E' or '18' and 'K' or '24'. Other cable channels incompatible with the Amateur Service may be used in the future as cable services expand.

If you live in a cable TV area and if you want to now what it's all about on a practical basis and you have a two-metre rig turn it on to 'receive' on 145.25 and listen. Try the same thing with your mobile rig and drive around town. In Ottawa, for example, everywhere you go either your rig will go into full quieting or the squelch will keep going on and off. THAT is a cable TV 'mid-band' channel leaking out of the coax or amplifier or escaping from the system for some other reason.

The strength of that signal is limited by regulations found in DOC's "Broadcast Procedure 23", which allows up to 10 microvolts per metre at three metres from the cable. At 60 feet, however, that 'leak' is still strong enough to get into a modern two-metre Amateur receiver.

Now for the second part of the do-it-yourself demonstration. Turn your rig to 'transmit', being careful to identify and announce a test transmission. Now watch what happens to the picture when your TV is turned to channel E (18) of your converter.

The average Amateur two-metre base station signal...let's say ten watts from an antenna some 50 feet away from the nearest cable TV coax lead...will cause pretty patterns to appear on your screen if it's getting into the cable system. To check whether the problem involves only cable penetration or if your TV itself or the converter are also entering into the picture (!),

switch to the adjacent channels, D (17) and F (19). If these channels are clean and the QRM shows up only on channel E (18), then it's a good indication that your rig is infiltration the cable with its 145.25 megahertz signal, the same frequency as channel E (18).

You can see then, that there is both signal ingress and egress to and from the cable. If you get neither manifestations of this mutual interference either you are lucky, the cable TV is 'tight' or happily for all, channel E (18) is not being used.

Let's look at the two positions here. Cable TV emissions intruding into Amateur Frequencies and causing harmful interference to Amateur communication are illegal. The Amateur station on the other hand, is operating quite legally within the Raid Regulations and it is NOT liable for any interference caused by the 'ingress' of its signal into the cable system.

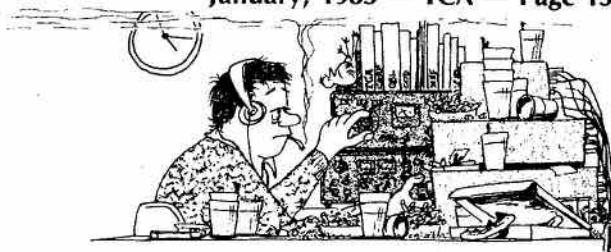
Legally, as we said, the Amateur station is not responsible for the problem of 'ingress' to the cable but when you figure that cable companies maintain a high pressure lobby with the Department of Communications and that they have millions of viewers who don't like messed-up pictures, especially if they are Pay TV ones, Amateurs had better be prepared to come to grips with this problem in the years ahead.

Here's why;...the advent of two-way services on cable means that all sorts of new things such as burglar alarms, information centres, banking and business transactions will be offered to cable customers. The thought of a potential 20,000 Amateurs possibly lousing up not only Pay TV movies but bank accounts and burglar alarms of many millions of their citizens (who vote and can holler to politicians who make the rules) should give pause to both Amateurs and cable operators.

Until the advent of fibre optical cables eliminates the problem entirely (which is not likely for many years) there are steps which can be taken with or without the co-

Continued on page 30

CONTEST SCENE



by Dave Goodwin, VE2ZP
4 Victoria Place
Aylmer, Quebec,
J9H 2 J 3.

Contest Calendar

January 8 73 Mag 40 metre SSB
9 73 Mag 80 metre SSB
15-16 73 Mag 160 metre SSB
15-16 PVRC WCY Contest
16 VE1 CW Contest
28-30 CQ WW 160 CW
29-30 Ref CW
30 VE1 SSB Contest

February 5-6 RSGB 7 MHz SSB
12-13 YU DX WW
19-20 ARRL DX CW
25-27 CQ WW 160 SSB
26-27 RSGB 7 MHz CW
26-27 REF SSB

March 5-6 ARRL DX SSB
12-13 RSGB Commonwealth CW
19-20 Bermuda Contest
19-20 BARTG RTTY
26-27 CQ WPX SSB

The first bit of very late-breaking news I have for you is that the rules of 73's new 40 and 80 metre contest have been altered. The contests are now two instead of one, that is they are entirely separate contests, and that no double credit is offered for QSOs from 1000 - 1400 local time. Even though I sent an SASE for the results, all I got was a note telling me what issue 73 I would find them in, and even that info was wrong, so results will have to wait until next month.

CQ WW DX CW

Canadian activity was quite good this year, even if conditions were not. 10 metres was perhaps the greatest disappointment, but the relatively poor propagation doesn't come as much of a sur-

prise. 10 sounded very much like it had back in 77 or 78, opening well after dawn, and closing with sunset. Saturday was particularly poor, with a very poor opening to Europe. 10 was good for multipliers, and not much else. Sunday was much better, and there were useful openings to Europe and Africa most of the day and good propagation to the USA and South America. From the east JA was just another multiplier, and not much of a source of QSOs. 15 was as usual the primary DX workhorse with consistent openings to most areas and good signal strengths both days. As with 10, the JAs were no great force, reflecting the generally poorer propagation. 20 was generally good, but more as a source of multipliers and 2-point Qs. High QSO totals were hard to roll up.

40 was in quite good shape, with a very marginal long path opening to JA from the east on Sunday evening, and good signals from Europe both days. Multipliers were plentiful and for all-banders, 40 was a major source of score.

80 was significantly poorer than last year, with little in the way of a sunset opening to Europe and some apparent noise problems at the European end of the path during the European sunrise opening. Signals were way down, and so was activity over last year.

160 was very much poorer than last year's excellent conditions, and only other stations in the Americas were heard.

The long and the short of it is that very few records were in any sort of danger, with the best hopes of a new addition to the Canadian table coming from Yuri VE3BMV's 20 metre effort.

Only very spotty information is available about scores, as I haven't been chasing people down since the contest, but for once VE1DXA was not MS, but

VE2FU was. Manned by Phil and Noel VE2HQ, they made about 2700 Qs, but had no idea of their multipliers. At VE3PCA, we made a similar number of Qs, and managed about 440 Multipliers, 60 down from last year. If that difference doesn't speak loudly about conditions, nothing will.

The number of countries available this year seemed down, illustrating just how dependant we are on contest expeditions. We managed only one QSO with a VP2, and normally we can expect to work each of the VP2 countries on each of five, and maybe six bands. No VP5s were worked, either. P42E was a very welcome big MM operation, taking aim at the world MM record, as was OH0W, who made that country very unrare. What I can't figure out is why we missed OH on 10, yet worked OH0 on five bands. The last good year for 10 metres may well have been 1981. Except for the low band records, the records table that we see now may be the measure for the next eight to ten years.

RSGM Commonwealth CW

Canadians dominate the high scores this year, with Western entrants leading the way. Congratulations to Lee VE7CC on his superb score, for which he earns the Senior Rose Bowl. The second place Junior Rose Bowl goes to John VE6OU, who came within 2 % of Lee's first place effort. Hot on their heels, VE3BVD, and VE5RA took third and fourth place, respectively. Canadian activity was quite good this year, with some 19 stations participating. Although the VKs seem to have more participants, the quality of Canadian scores over the years has been very high. Let's hope this will continue, and that some of these top-flight operators will give

the CARF Commonwealth Phone a try this year.

CANAD-X Canadian Contests Championship, 1981

Results appeared in December Long Skip. Congratulations go out to the following trophy Winners: Hal Hickey, VE7BTV, overall champion; John Suymer, VE6OU, CW Champion; Garry Hammond, VE3GCO, SSB Champion; Yuri Blanarovich, VE3BMV, Single Band Champion; and the Nova DX Assn, VE1DXA, Multi-operator Champion. The Special Achievement award went to Tom Nash, VE3MFT, who set a new world record in the 160 metre Single band class of the CQ WPX SSB contest, during his first year on the air.

Just as a measure of the calibre of competition, VE7BTV beat out VE3BMV by only three points for the overall spot, VE6OU held VE1AIH off by a similar margin for the CW award; and VE3GCO held on to the phone award by only one point, challenged again by VE3BMV.

Regional Awards go out to VE1ANU, VE2AYU, VE3GCE, VE4AIV, VE5RA, VE6MP, VE7IN, and VY1CM. Rules for this year's CCC appear elsewhere in this column.

CQ WW 160m 1982

Conditions for the CW contest were very poor last year, especially for those in the Great White North. Actually, to us the comment from VE6OU, it may have been more accurately called the Great Green North, after the colour of the sky. Conditions were certainly strange, with a 2200z Saturday opening to Eastern Europe that noone could work, and a perponderance of north-south propagation. The SSB contest was not hit by an aurora, but conditions were down considerably along with scores.

Congratulations to high scorers VE3ABG in the CW and VE1YX in the SSB contest. VE3PCA took Multi top honours in the CW and VE3BGA/2 in the SSB.

Some good news this year are

the changes that are to be made in the scoring system. Primarily on demand of European Amateurs, the points system will come close to that in the CQ WW contest, allowing 2 pt/QSO with your own country, 5 pt / QSO with other countries in your own continent, and 10 pt / QSO with others. For Canada, that turns all those 2 point USA QSOs into 5 point USA QSOs, with a commensurate increase in Canadian scores, and USA interest in working Canada. That was an excellent move CQ, well done.

PVRC WCY Contest

Sorry about this, but I forgot to include some rather important information with the rules for this contest. You earn 1 pt/QSO with your own zone, 2 pt / QSO with other North American Zones, and 5 points for QSOs with other continents.

CQ WW Trophies

I recently received a letter from Henry VE7WJ who made an inquiry about the eligibility rule for trophies in the CQ WW DX Contests. To save Henry embarrassment, I will not reprint his letter, but explain the rule. Trophies for Canada the Carribean and Central America can only be won by residents of these countries. (See rule IX, final paragraph). The reason was to encourage the development of Contesting in these areas by the nationals of these countries. Henry, as most people know has built a very impressive Multi-multi station, and recently has allowed his station to be used by some US operators in single operator all band efforts. They can certainly be considered the winners of the contest if they do well, and set Canadian records, but trophies will only be issued to Canadian residents.

RSGB Commonwealth Contest CW 1982

Canadian Results

Pos	Call	Score
1	VE7CC	7,588
2	VE6OU	7,434

3	VE3BVD	6,722
4	VE5RA	6,311
11	VE2ZP	5,125
17	VE2WA	4,605
18	VE3JKZ	4,598
22	VO2CW	4,230
33	VE7UZ	3,665
53	VE4RF	2,416
58	VE3KZ	2,238
68	VE7BS	1,999
82	VO1HP	1,380
90	VO1QU	1,173
94	VE5BAF	1,110
106	VE7IQ	935
116	VE6CNV	685
121	VO1AW	510
131	VY1DD	236

tnx RSGB

CQ 160 Metre CW 1982 Canadian Results

Call	Score	QSOs	Mult
VE3ABG	46,368	370	56
VE3INQ	25,700	225	50
VE1AXT	20,304	172	47
VE5XU	9,030	125	35
VE2WA	8,052	110	33
VE1IV	7,280	114	28
VO1HP	6,180	51	30
VE6OU	5,936	106	28

Multi-ops

VE3PCA	29,792	268	49
VE3BGA/2	12,540	153	38

CQ 160 Metre SSB 1982 Canadian Results

Call	Score	QSOs	Mult
VE1YX	28,254	229	51
VE3INQ	17,910	175	45
VE3ABG	8,642	145	29
VE7WJ	7,936	112	32
VE3KYT	1,360	36	17
VE2QO	1,330	35	19
VE1BQJ	1,188	25	18
VE5XU	560	20	14
VE6AQI	416	16	13
VE2QA	360	15	12

Multi-op

VE3BGA/2	14,508	166	39
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tnx Dec. CQ

CQ160 Metre

Period: CW: 2200z 29 Jan to 1600 z 31 Jan

SSB: 2200z 26 Feb to 1600z 28 Feb
 Classes: Single or Multi-operator. Multi-operator entrants are limited to no more than five operators.
 Band: 1.8 MHz band only. Please respect the DX window principle. DX Windows are: 1825-1830, 1850-1855, 1907.5-1912.5

When using SSB, stay at least 3 KHz above the higher edge of each window. DX will transmit there and indicate their receive frequency.

Exchange: RST and Province/territory. US will send their state, DX their country.

Points: 2 pt/QSO with Canada, 5 pt / QSO with other North Americans, 10 pt QSO with stations on other continents.

Multiplier: total of Provinces, Territories, States and DXCC Countries.

Awards: certificates will be awarded to top-scoring stations in each province and territory. 1st place single operator entrants will receive a plaque in each contest. Entries: should be sent by 28 Feb for the CW and 31 Mar for the SSB contest, to CQ 160 Metre Contest Director, Don McLennon, N4 IN, 3075 Florida Ave. Melbourne, Fla., 32901, USA.

REF Contests

Period: CW: 0600z 29 Jan to 1800z 30 Jan

SSB: 0600z 6 Feb to 1800z 27 Feb
 Single operators may work up to 26 hours, with the 10 hour off periods in up to three blocks.

Classes: Single or Multi-operator, all bands.

Exchange: RST and serial number. F stations will send their department number, ONs will send their province.

Points: 1 pt / QSO. VE2 stations may work anyone. Stations elsewhere in Canada may work only stations in Francophone 'countries'.

Multipliers: total of French Departments, Belgian provinces, and Francophone 'Countries'. There are 96 Departments. Belgian province, abbreviations are: AN, BT, HT, LG, LM, LX, NR, OV, WV. Francophone 'countries' are: C3, CN, D68, DA 2/FFA, F, FB8, FC,

FG 7, FH 8, FK 8, FM 7, FO 8, FP 8, FR 7, FW 8, FY 7, HB, HH, J 28, LX, OD, ON, TJ, TL, TN8, TR 8, TT 8, TU, TY, TZ, VE 2, XT, YJ, 3A, 3B, 3V, 4U, 1ITU, 5R8, 5T5, 5U7, 5V7, 6W, 7X, 9Q5, 9U5, 9X5. Collect a separate series of multipliers on each band.

Entries: including score summary, dupe sheets, and multiplier checklists should be sent within 30 days of each contest to: Concours REF: 2 Square Trudaine, F-75009, Paris, France.

RSGB 7 MHz Contests

Period: SSB: 1200z 5 Feb to 1200z 6 Feb.

CW: 1200z 26 Feb to 1200z 27 Feb.

Classes: Single operator only.

Exchange: RST and serial number. Points: 15 points / QSO with stations in the United Kingdom. Work UK stations only. GB-prefixes stations do not count. Multiplier: Total of UK prefixed worked. Max 42.

Awards: Certificates will be awarded to the top three stations outside Europe.

Entries: must include a summary sheet and multiplier checklist, and sent to: RSGB HF Contests Ctte., P.O. Box 73, Litchfield, Staffs., WS13 6 UJ, U.K. to arrive by 3 April for the CW and 24 April for the SSB.

YU DX WW CW

Period: 2100z 12 Feb to 2100z 13 Feb

Classes: Single or multi-op. Single operators must stay on a band for a minimum 30 minutes, multi-ops must stay a minimum 10 minutes, unless collecting multipliers on the other band.

Bands: 40 and 80 metre CW only on 70100-7040 and 3520-3590 KHz

Exchange: RST and serial number. Points: on 3.5 MHz, 2 pt / QSO with other North American countries;

5 pt / QSO with stations on other continents; and 10 pt / QSO with YU. On 7 MHz, 1 pt / NA; 2 pt / DX; 5 pt / YU.

Multiplier: total of YU prefixed and DXCC countries worked on each band.

Awards: Certificates will be awarded to the top scoring stations in each class in each country, and plaques will be awarded to the top-scoring single operator entrant on each continent.

Entries: must include summary sheets and must be sent by 15 Mar to: SRJ, YU DX Conteste, P.O. Box 48, Beograd, Yugoslavia.

1983 Canadian Contest Championship Rules

OBJECTIVES: To generate interest in contest operation and to provide a measure of the performance of Canadian Contest operators.

ELIGIBILITY: Only holders of Canadian Amateur Licences are eligible.

CATEGORIES: A - Single Op All-mode B-Club Stations
 A1 - Single Operator CW C - Special Contest Achievement
 A3 - Single Operator Phone S - Single Band/Operator

A/A1/A3/S - Only eligible if the operator is the holder of the station licence.

B - Club stations, single operator stations operated by someone other than the licensee, multi-operator single transmitter and multi-operator multi-transmitter stations.

C - Special achievement in contest operating, i.e. establishment of a record, a remarkable score, a contest expedition or similar noteworthy accomplishment.

WINNERS: In the S, B and A/A1 A3 categories, the champion will be determined by the highest point total obtained in the contests selected for this championship year. Separate tabulations for each of these five categories will be kept. In category C, the winners are selected by the CANAD X Contest Committee. It is not necessary to apply to be included in the CCC. The results will be tabulated automatically when the results of the various contests are published.

CONTESTS: Participation in the following contests will count, if the contest gives at least 10 points to the highest Canadian in the contest.

ARRL-DX-Phone
ARRL-DX-CW
CQ-WPX-SSB
CQ-WPX-CW

SCORING: The station placing first in a contest will be given points equivalent to the number of those participating in that category. The next station, placing second, will receive one point less, and so on. The last station, will have one point. For category A, both all band and single band are listed together. A separate scoring is also included for the category S single band where appropriate. In multi-mode contests with separate CW and SSB entries, these individually count towards categories A1 and A3 as well as towards category A. Where CW and SSB are combined, such scores count for category A only. Category B scoring is basically the same as for A.

CHAMPIONSHIP PLAQUES:

- A - Canadian Champion, Single Operator
- A1 - CW Champion, Single Operator
- A3 - Phone Champion, Single Operator
- S - Single Band Champion, Single Operator
- B - Canadian Champion Club Station
- C - Special Contest Achievement

Awards will also be granted to the geographic winners in category A for each of the following areas, VP/VE1, VE2, VE3, VE4, VE5, VE6, VE7 and VY1/VE8. If a station is eligible for more than one award, the second, or less significant award will be granted to the next qualifying station.

TCA WELCOMES LETTERS
TO THE EDITOR.
PLEASE SEND ALL
CORRESPONDENCE
TO EDITOR TCA.

P.O. BOX 2610 STATION D
OTTAWA, ONTARIO K1P 5W7

Another look at field day (or how the OVMRC rigged it)

If you saw the cover of the April QST, you saw the wrong way to service the driven element of a large yagi! Well the Ottawa Valley Mobile Radio Club (OVMRC) has its own way of putting up its home-brew 10-15-20 quad; probably not sanctioned by IAPA! Just as the TV dare devils say, don't try this yourself, it's for the professionals only (or the legally insane!)

The quad was made a year or so ago using bamboo spreaders. During the tuning of the antenna last year, we broke a spreader the week before field day. We got it fixed and had no other problems that year.

This year the same bit of bad luck found us, as another spreader broke Saturday morning and a splint (Jerry VE3CDS donated his snow brush/ice scraper) had to be pressed into service.

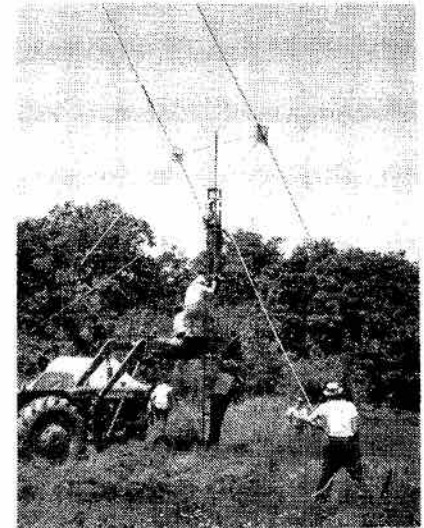
In the photograph, the group setting things up are as follows: foreground, Merv, VE3CV; base of tower, Rene, VE3JKR; at Merv's elbow, Bill, VE3YK; in the bucket, Dave, VE3KLX and Dave, VE3JLV; and under the bucket, Jerry VE3CDS.

I don't know how other clubs are doing these days but generally speaking interest in field day in the OVMRC is waning. Total points

earned has steadily fallen off in the last four years. In an attempt to rekindle interest, we ran off car batteries this year but once darkness fell and well into Sunday very little operating was done. It is fun if you keep things in perspective; taken too seriously, a good hobby may be ruined.

Anyway that's the story from here!

73
DE Mike Shacklock
VE3LAR



VE3NPL ex SP9FLY Andy Pfeiffer

People you have heard and would like to see. Send in your picture to TCA.

VHF/UHF News

John Dudley VE5JQ

2 meters...Preamps

K17D	.4 db H.B. MGF1200
KY4Z	.6db H.B. MGF1200
WAOLSH	.6 db H.B. D432
N6AMG	.7 db H.B. MGF1200
KOKE	.7 db H.B. MGF1200
W5JTL	.9 db H.B. 3SK48
K51S	2.0 db Lunar PA1144
N7ARE	2.1 db Janel QSA 5

2 meter Converters

K17D	1.8 Janel CA144
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220 MHz...Preamps

KOKE	.4 db H.B. MGF 1200
WBOTEM	.4 db H.B. MGF1402
K6JKQ	.6 db H.B. D432

220 Converters

K17D	2.0 db ARR R220VDA
WBOTEM	12.0 db ARR DBM 220VD

432..Preamps

WBOTEM	.3 db H.B. MGF1402
KY4Z	.6 db H.B. MGF1200
AAOL	1.6 db H.B. HP2201
W7HAH	1.7 db Janel 432PL
W7HAH	1.9 db H.B. 3SK48
N6AMG	2.4 db ARR P432VD (901)

432 Converters

KY4Z	.9 db HB MGF1200DBM
KOKE	2.6 db MMC432

1296...Preamps

WBOTEM	.60 db MGF1420
WAOLSH	.99 db MGF1400

2 Meter Production Antennas

Cushcraft 17 ele 4.2 WL Bmr	14.0 db
Cushcraft 19 elem 3.2 WL Bmr	13.5 db
JWL Elec 13 ele. Quad 26' Boom	13.5 db
KLM 13 LBA 3.2 WL	13.0 db
JWL 12 elem Quad 3.2 WL	12.8 db
JWL 11 elem Quad	12.1 db
JWL 10 elem Quad	11.5 db

TCA - Tenth Anniversary

I am very happy to be able to contribute a column to this January issue marking the Tenth Anniversary of TCA's publication. The magazine has certainly grown and I am especially delighted that my area of interest, VHF-UHF, has an opportunity for coverage emphasizing Canadian activities and viewpoints. Certainly the spectrum above 50 MHz will continue to grow in importance and I am certain that The Canadian Amateur will be there to report on all the developments during its next decade of publication.

VE1SPI - DX pedition to St. Paul Island

Andy, VE1ASJ was a member of the successful DX pedition to St. Paul Island this summer. In addition to a large number of HF QSOs, VHF work figured very prominently in DX pedition's activities. Six meter openings while not specatcular provided 440 QSOs mostly with 1st, 2nd, 8th and 9th US call areas. Best DX on 6m was San Antonio, Texas. Unfortunately, few VE operators were blessed with openings on 6m to St. Paul Island.

Two meter operation provided an amazing 120 "E" skip QSOs which is nothing short of amazing. Best DX was South Dakota and many 2m ops were indeed fortunate to snag a new "country" on 2M. 2m E.M.E. operation was attempted with a four yagi array but no success was had probably due to a moontracking problem.

Satelite operation was also tried and VEZL1, VE1BB and VE5XU were there to catch this rare one via the birds! Well done fellows and we hope your example will lead to more VHF operation in suitable DX peditions.

2 Meter Production Antennas

JWL 9 elem Quad	11.3 db
Cushcraft 11 elem	10.6 db
JWL 6 elem Quad	9.7 db
AFOS Cushcraft 4 elem	7.8 db

2 Meter Homebrew Antennas

W5UN 12 elem 26' Boom	13.2 db
W5UN 11 elem 3.2 WL Boom	12.6 db
W5UN 3.2 WL NBS Yagi	11.9 db
W7IUV 8 elem Quagi 14' Boom	11.8 db
WBONWI Unknown	11.4 db
W7IUV 6 elem NBS Yagi	10.4 db
N7BHC Homebrew 3 elem Yagi	7.4 db
ref. antenna Hy Gain 10 elem. 9.8 DB.	

220 MHz Production Antennas

Cushcraft 17 ele. Boomer	14.1 db
KLM 219-226 14	13.4 db
ref antenna, 11 elem WBOTEM HB	13.0 db

432 Production Antennas

Cushcraft 24 elem Boomer	15.8 db
KLM 432-16 LB 12' Boom	15.3 db
Cushcraft Corner Reflector	13.6 db

432 Homebrew Antennas

WBOHMP 11 elem Tilton Yagi	13.6 db
WBOCZI 11 elem Cushcraft	11.6 db
ref antenna WBOTEM 19 ele HB RIW	15.2 db

1296 Production and HB Antennas

F9FT 23 elem	15.8 db
WAOLSH 45 elem Loop Yagi	17.4 db
ref antenna WBOTEM 13 elem yagi	31.8 db

(courtesy The Lunar Letter)

What's in a callsign?

**Ralph F. Campbell
VE1QU**

"Is anyone listening on this repeater? This is VE3XYZ mobile VE1." "This is VE1 Yankee Oscar, the name is Angus, can I help you?" and thus would start a QSO where Angus would direct a visitor to the area right to the door of the party he was looking for, suggest a good seafood restaurant or just "ride along" for a few miles exchanging pleasantries. Angus was indeed the "watch dog" for not only 2 meters, but every Amateur band in the Halifax, Dartmouth

Metro area. He handled message traffic, patches, and phone calls for the military and civilian populace with the ease and expertise of a professional operator. He had "skeds" on just about every Band throughout the day and night and always was there on frequency waiting for a call. He participated in all aspects of Amateur Radio including N.C.S. for the Maritime Net, APN, providing communications for road races, Little League ball games, E.M.O. and Ground Search and Rescue.

There were many nights on

3760 that a broken laugh could be heard through his VOX, he really enjoyed "the boys" and their comments made on the "nut net". Ever heard of a two way patch with one of the stations on "CW"? Angus had a "sked" with a station and this was how the two way was done. He also enjoyed visitors to his station so he could take their picture and add it to his "Rogues' Gallery", which was quite large and included not only the owners of Canadian and American but also some "DX" calls, Angus was known far and wide from the City of Dartmouth, Nova Scotia.

I suppose by now, since you have read this far you are wondering who I am. I have tried briefly to describe a deceased Amateur who had rendered a much valued service to the Amateur fraternity and whose call has been proudly picked up by the Dartmouth Amateur Radio Club.

The following was provided Courtesy of the NSARA Bulletin and the Canadian Red Cross.

Angus MacDonald VE1YO 1911 - 1980

Angus was born in Dominion, Cape Breton, and spent the early years of his life there. He got his Amateur ticket in 1953, and operated from there until leaving to live in Montreal. He later took up residence in Moncton, where he was employed with a construction company as an office clerk.

Angus was a haemophiliac, having a deficiency in one of the blood clotting factors in his blood, referred to as Factor IX. When this factor dropped below a certain level, he would start to haemorrhage. If the haemorrhage was severe, he would require massive blood transfusions to replace the lost blood and build up the clotting factor again. There were two occasions during his life when he survived only through having had these transfusions. During the period 1957 to 1968, he underwent 934 blood transfusions. In 1957 when he had his leg am-

Continued on page 29

Life on the Ocean Wave - II

In my first article, I mentioned the wide range of experiences one may encounter at sea. One voyage in 1934 produced a number of unforgettable events.

On July 26th, 1934, at the suggestion of the Canadian Marconi Co., I joined a British cargo ship — the "Parthenia" at Seattle for continuation of a voyage via the Panama Canal to the U.K. In addition to general cargo, this ship had a large section refrigerated for the carrying of fresh fruit from Southern California, as well as bananas from Costa Rica to Britain. The British radio operator had disappeared at Seattle, and the Captain, deeply steeped in the gangster lore of that era, was convinced that the operator had been "taken for a ride". Although I was to be paid by the English Marconi Co., I had a firm understanding that it would be at Canadian rate.

The crew was mainly Scottish, the home port being Glasgow. Those old timers who are reading this will remember the famous Donaldson Line, which also operated as Anchor-Donaldson in the Trans-Atlantic passenger service in the pre-war era. It was a well run ship with a fine crew, and I got along quite well with everyone after a little upset in the first week of sailing. On the first Sunday, one of the crew asked for the "football results", and I rewarded him with a blank, dumb stare. I was then informed in curt, crisp, unequivocal terms that "Sparks" was expected to and always got the football results from the U.K. so that the boys would know who had won the ship's football pool.

I had no information at hand on how, when or where to pick up such vital reports. It went without saying that it wouldn't be obtained from American press transmissions. Then I got into QSO with another English vessel; and discovered that most British ships subscribed to an encoded transmission of football results from station GBR at Rugby, England. I also found out that our

boys had been paying such a subscription, and they sure as Hades wanted their money's worth. A day or two later, after a diligent search through all the drawers in the wireless room — EUREKA! I found the codes and the schedules. I was back in everyone's good graces.

Old timers will recall the massive Longshoremen's strike of that era in the U.S. We arrived in San Francisco from Seattle to be confronted with this problem, and there was a fair bit of cargo to be loaded. The crew was offered excellent wages to do such stevedoring as they were capable of, and the shipping agents sort of hinted that the Donaldson Line would be somewhat less than thrilled with anyone who felt compelled to side with the strikers. Since almost no one in the crew knew how to operate a standard shift in a tractor (British used the Universal shift), I was given the job of operating a little tractor, pulling along the cargo carts from the loading sheds to the ship's side.

We worked all night at that job, so that we were entitled to overtime. At this late stage in life I cannot recall how much I made, but I do know that I had a happy visit to an Amateur Radio store in Oakland the next day with a not-so-skinny wallet.

In that store I met a famous W6 — Horace Greer, W6TI. Horace wrote many an article for QST in those days; and was almost as well known as Don Wallace, W6AM and the California Kilowatt gang down at Redondo and Manhattan Beaches. Horace took me in tow for a fine tour around the Bay Area. One visit was to a ham whose call I will never remember, but who lived in a palatial mansion where a chauffeur was busy polishing one of three big cars (remember now, this is the depression year of 1934). We had to wait for this ham to return from "the horses", and he eventually appeared, complete with jodhpurs and riding whip, to give us a gracious welcome. It was

quite an experience for one from such a humble level of society to be offered a drink in a richly carpeted and tapestried room by a very austere butler. I was so impressed with the atmosphere at that home, that I completely forget what kind of station the fellow had. I do remember having the feeling that horses and big cars held his attention much more than ham radio ever could.

At the Ham shop, I bought a DC relay to use for keying the synchronous spark transmitter with my bug. I guess I was the only ship around — certainly with a "G" call — that had a bug "fist" on spark.

I found, to my great dismay, that my artistic bug sending could not raise the British coast stations. Remarkably though, they could hear me quite well when I went to the hand key. The British do have a way of making interlopers feel unwelcome. I also found that, unless one called a British coast station exactly as prescribed in the Postmaster General's Handbook, one hadn't a hope in Hades of raising them. The prescribed procedure is to send the call letters of the station being called three times, "de", then the caller's callsign three times — followed by "AR" — and NO deviations. What a difference from the practices in North America!! Most likely, things have changed since WW II to slightly snappier procedures. Or have they??

After our departure from the Bay Area, we stopped at San Diego to fuel up and to load peaches, pears and cherries from the Imperial Valley. This is where the refrigerator part of the ship came into play. After that we set course for the Panama Canal.

I was quite unprepared for the sights to be experienced in the area off Baja California and Mexico. Large turtles probably 200 lbs. or more were moving around in their sluggish way. Sea snakes (I had never heard of them before) wriggled about in the water with their variegated colors coursing

along their bodies as the sunlight hit them at ever changing angles. Flying fish that were the largest I have seen. That includes those off Japan and in the Caribbean. They were about as big as a moderate-sized herring with a wing span of 18 inches or so. Incidentally, some people still say that the flying fish doesn't fly. It just makes a long jump. I watched them very carefully, and I noted that they fly along just a few inches above the water. If they don't hit a wave crest, their wings get dry and they drop into the water, but if they can just skim through the wave-top and thus wet their wings, they will continue on for quite a distance.

One of my great delights in that area was to lean on the rail and watch the porpoises - or dolphins - frolic about the bow of the ship in the most joyous leaps and bounds. They acted for all the world like a troop of school children leaving their classes on the first day of summer vacation. The porpoises would frequently scrape their backs against the bow of the ship; and I imagine it was to remove barnacles off their skin. One could almost see big smiles on their faces as they bounded around the ocean in a gay, devil-may-care fashion. What a lift it gave one, if one were feeling slightly depressed. They were with us for several days; and I, for one, missed them very much when they finally disappeared.

We saw about 4 waterspouts one afternoon, and they are a bit scary. Waterspouts are water-borne tornadoes; and if one were to move on to the ship, all heck would break loose. Fortunately, none did.

Every evening, we would see lightning on the Eastern horizon. This was from thunderstorms around the mountains on the West coast of Mexico. The QRN on 500 khz from this stuff is constant, and it is no wonder that so many marine operators have hearing problems. In those days, between spark rigs and the low frequency ICW transmissions from the Mexican coast stations, trying to copy anything from those stations under those conditions was the supreme test for an operator.

On we sailed toward the Panama Canal in hot and very humid weather. It was my first voyage into the tropics, and I found it very difficult for a while to get a decent sleep when the pillow became drenched in perspiration at night. The humidity also made it miserable work to "do dhobi"; which is an old sea-going expression for doing one's washing. You scrounged warm water from the galley, together with a bar of Sunlight soap, and attacked those of your clothes that required some degree of relief from the slings and arrows of outrageous wearing. The one blessing with the tropics was that the clothes dried more quickly after washing.

One relief was to get into a swimming pool that the Chief Engineer and the Chief Officer had organized. On the after well-deck, hatch tarpaulins were suspended in a sort of bowl formation, and the Chief Engineer had a pump placed alongside it to pump up sea water into the "bowl" or pool. Of course, water leaked out profusely, but was continuously replenished from the pump. It was surprising to find how much spare time our group of officers and engineers could find for the pool. It was not taken down until we finally hit cold Atlantic weather after departing from Puerto Rico.

At the Panama Canal, we had to anchor near Balboa to await our turn for entry into the line of ships for the eastbound (really north-westbound) passage. My uncertain recollection is that it took some 8 hours to transit the Canal.

A series of locks (Miraflores and Pedro Miguel) raise the vessels up to enter Gatun Lake. Upon entering a lock, the vessel's lines are taken by several "iron mules", which are like small electric locomotives on tracks beside the lock walls. The lines being secured to the "mules", it is a relatively simple and rapid procedure to place the ship exactly where required in the lock. Release of the lines for exit from the locks is equally simple. After sailing around what seemed to be a myriad of Islands, the descent to the Atlantic is made through the

Gatun Locks, leaving the Canal at Colon.

We sailed to San Juan, Puerto Rico for refuelling. Here the Scottish crew dashed ashore to get a supply of cigars and bay rum for their relatives "back home". For the younger readers, Bay Rum was sort of the poor man's cologne in those days, and was used extensively by those living in the tropics.

The balance of the voyage to London, Liverpool and Glasgow was uneventful, except that I had the great experience of finally meeting part of my mother's family. The usual tour of the London sights was made; and there is nothing in that that would be of interest to readers. For me, however, it was a profound experience because of my British heritage and upbringing, as well as being an ardent fan of Charles Dickens, London, of course, is the focal point of most of his writings.

After entering the Clyde River enroute to Glasgow, I was stirred by the awesome sight of the mighty "534" (later to be named the Queen Mary) on the stocks in John Brown's Shipyards. She was minus her funnels, but the massive propellers were in place and they looked most impressive. With the shipyard being on a bend in the river, the vessel minus its funnels looked, at first sight, like a giant factory against the sky. She was launched some two-odd weeks later, while we were back in the Caribbean area on our next voyage to the Pacific Coast.

While in Glasgow, I went to the famous Empire Theatre on Sauchiehall Street and saw Will Fyfe, the popular Scottish comedian, on stage. He was, I guess, the successor to the great Harry Lauder. Here again, I must apologize to the relatively younger readers for bringing up so many references to events and people of nearly half a century ago. However, I feel I must recall some of these events for the benefit of the old codgers like myself. They are bound stir up old memories of mixed qualities.

For the good old Scots, I must tell you that I went to Ibrox Park and saw the Glasgow Rangers beat

the Celtics. There was more violence in the stands that day than appears on the ice in the modern hockey game. Boy, those Scots are a hard-headed lot!!

I should have mentioned that, upon arrival in London, a Donaldson agent came on board to advise me that they had arranged rail passage to Liverpool departing shortly after my arrival in London for the purpose of boarding one of their fine passenger liners for my return as a passenger to Canada. I expressed dismay at the thought of losing my chance to see England, and asked if I could not return to Canada on the *Parthenia* in the one cabin we had for passengers. It turned out that it was already booked. However, the Donaldson people kindly agreed to let me remain on the ship as a Supernumerary Officer if I would be willing to use the dining salon as my sleeping quarters. To this I quickly and happily agreed. From London onward, I had nothing to do and was being paid for it. As the old song used to go, "Nice work if you can get it".

During the few days in Glasgow, I was able to visit Edinburgh to tour the famous castle there, as well as to admire the beauty of the Prince's Street Gardens. I also experienced the dismal sight of an Edinburgh street on Sunday morning. Not even a stray cat dared to roam about, as all good Scots closed up everything including tea rooms for the Sabbath morning.

We then commenced our next voyage out to the Pacific Coast with a stop at Liverpool before heading across the Atlantic. During the brief stay in Liverpool, two or three of us decided to go to a cinema in a town near the docks named Bootle. That name will never be erased from my mind. I don't remember what the movie is, or really very much about the cinema, but the visit there was constantly recalled and regretted for many of the ensuing days. It seems that fleas found the cinema seats a fine residence, although they were not averse to transferring residence if a suitably warm body were immediately available. It seems that they found accommodation on my person to be

much superior to the smelly cinema seats, and so they took up occupancy without any by-your-leave or warning.

Their presence became uncomfortably and persistently manifest the next day and for days after. The other two chaps and myself spent several hours on deck for several days picking out the little beggars from the seams of our underwear. You must remember that, with no laundry and not too much spare clothing and no showers, we just couldn't change underwear every day, nor could we shower. It is just as well that I was Supernumerary at that time, because trying to keep watch while constantly scratching would have been real misery. Anyway, after a few days, we seemed to have de-flea'd ourselves' and resumed something approaching normal living once again.

The voyage to San Juan, Puerto Rico and through the Panama was routine, and now we were heading northward along the Mexican coast toward San Diego. This was now mid-October. I wasn't aware at that time that this was hurricane season in that part of the world. There were no weather reports that I ever heard from Mexican coast stations — partly because they couldn't be heard through the heavy QRN, and perhaps because they simply didn't send any. I only got in the radio room for two 30-minute sessions per day, when I relieved the regular operator at meal periods. This wasn't necessary, but I loved operating, and wanted to keep my hand in.

The Chief Engineer, Chief Officer, another whom I have forgotten, and myself played bridge almost every evening after supper. On one evening while off Cape Corrientes (Mexico) we noticed as we were playing that the whistle of wind through the rigging was increasing, and the ship was beginning to pitch and roll quite a bit. Things rapidly increased in tempo, and soon we were in gale conditions.

Through the late evening the wind force increased in intensity, screaming and howling through the rigging as if in violent rage. The

ship was throwing about so severely that I could not sleep on the dining saloon settee. I was being thrown from side to side. Eventually the storm became so intense and fierce that the wind, in one long steady blast, would hold the ship over on her starboard beam without any further notice. It would stay there until there was a brief let-up in the wind, at which time the ship would roll violently over on her port beam, only to be flung back immediately on her starboard beam again.

This motion was not from heavy seas — the sea was being blown flat by the intense force of the wind. Sea water and precipitation was blowing in a horizontal stream across the ship, so that it seemed to be almost submerged. We ended up with two inches of water in the dining saloon, galley and surrounding cabins, so that, for my part, much of my effects in a large suitcase were the victims of the seawater.

The violence of the storm was felt not only in the physical throwing-about, but in the terrifying shriek of the hurricane through the guy wires. In all my days at sea, it was the only time I saw fear on the faces of those fellow officers I came into contact with that night. It was a most fearsome experience for me; and I promised God all kinds of fantastic things if He would get me through this safely. In other words, I suddenly got religion. This, in itself, was a very enlightening experience, and it showed just how inadequate we, who think we can be so brave, really are in times of great stress and danger.

After the storm had eased off to gale force winds in the morning, we took a look around the decks in daylight, and I, for one, was amazed to see what havoc wind can create when it unleashes its full fury. 1-inch iron stanchions that supported two-by-fours above the rails to provide a suspension system for deck tarpaulins had been bent up into grotesque shapes as if a giant gorilla had attacked them. The two-by-fours were shattered into pieces as small as match sticks. The emergency batteries, vertically stacked in a

NEW

Authorized
ICOM
Dealer

IC-720A
ALL-BAND TRANSCEIVER



IC-730



IC-740



AND NOW AVAILABLE FOR IC-740...
IC-238 INTERNAL POWER SUPPLY

IC R-70

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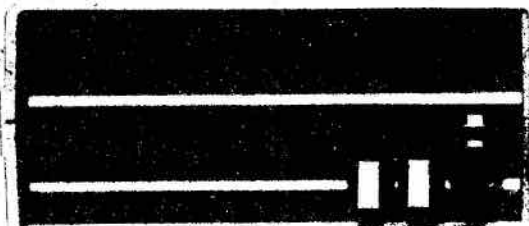
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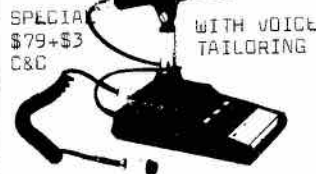
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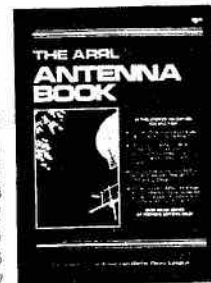


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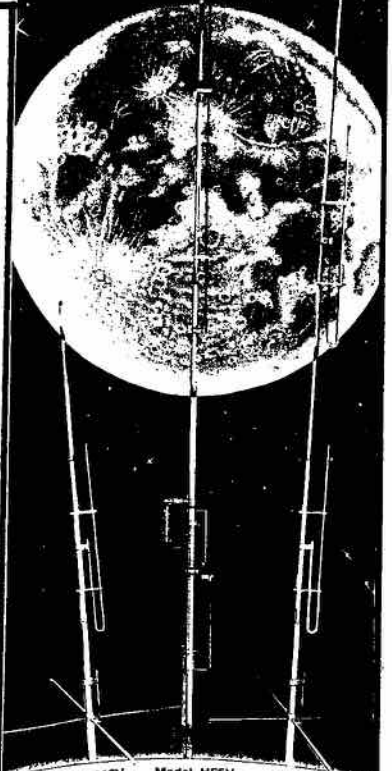
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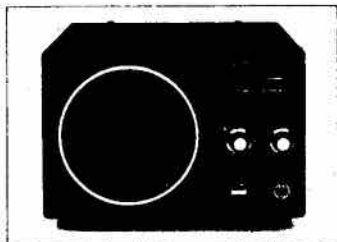
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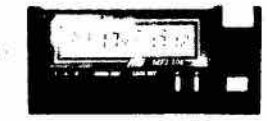
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cabinet on the lower bridge and held in by large bars, had been thrown out of their racks on to the deck. Wind had blown down through the hatch ventilators and back up through the large heavy hatch planks, scattering them all over the decks.

The direction finding frame, known as a Bellini-Tosi loop, was in very bad shape. This frame consists of two 4-turn vertical loops, each 5 ft. square, and this is surrounded by a screen of horizontal copper wires. The screen was in shreds, although the loops themselves were undamaged. The repair of that frame is a story in itself, but too long to include in this article.

Later that day, while on relief watch in the radio room, I heard two American ships reporting their damage to the owners. One had lost its foremast and part of the mainmast, one or two lifeboat, and had several windows shattered. The other had lost part of its foremast, had some damage to lifeboats and to windows.

The wind speed is pure speculation, but the consensus was that it was of the order of 165mph. I imagine this was a bit on the high side, but it probably matched anything that had happened before in that area.

I mentioned how the ship would lay on her starboard beam in that storm as if a mighty hand was pushing it over. Then the wind would briefly ease and the ship would swing over violently to her port side. This caused the condenser intake to rise out of the water, sucking in air. This caused an air lock in the circulating pump, so that no more cool water could be pumped in to condense the steam. This in turn meant that, unless the engines were shut down and the steam turned off, we would have the boilers run dry, and they would explode (unless the fires were shut off).

Three times on that night, this problem occurred. The engines were shut down while the pump was re-primed. During this time, the hurricane was driving us in towards reefs off the Mexican coast, so rapid repair was essential for our safety. The heat in the

engine room during this period was well over 100 degrees F, putting a fantastic strain on the engineers — particularly the Chief. You have heard the usually unbelievable story of hair turning grey overnight. The Chief's hair turned about $\frac{3}{4}$ grey within the 10 days following that eventful night. So I know that it really happens.

This voyage, one of the most interesting in my career, ended in Vancouver on October 26, 1934, exactly 3 months after its commencement. It was with some degree of reluctance that I left a fine ship and a very fine crew. It was sad to hear in later years that she had been sunk off South America, a victim of World War II.

So ends the second episode of Deacon's chronicles.

Bill Deacon
VE3BDO

Attention!

All users of the TCA Newsline Telephone

The telephone number
changed as of October
15th, 1982.

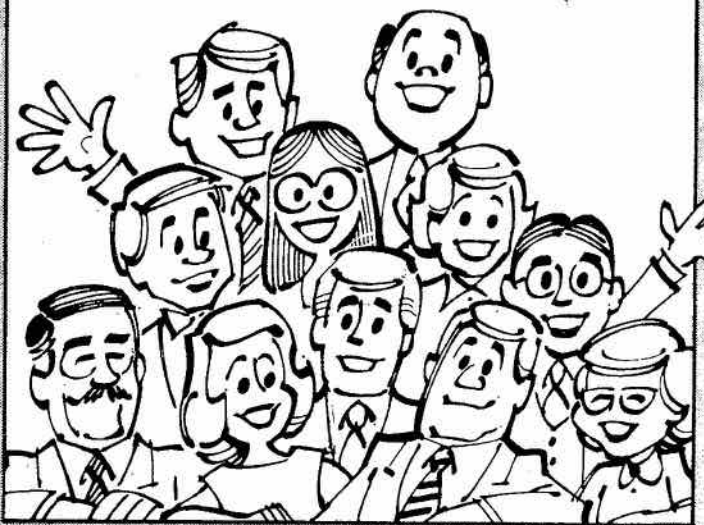
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TCA



The Canadian Amateur

Intruders

by Fred Towner, VE6XX
Vice-President of CARF

Have you heard it? That mess that is developing on our alledgedly exclusive Amateur bands is what I'm talking about.

Right at this moment, December 7, 1982, 18:18 UCT, I'm tuned to 28.014 MHz listening to two Spanish speaking operators. One has a badly overmodulated transmitter and is splashing all the way to 28.100 MHz. A Spanish speaking friend tells me the one with the rotten modulation is a fishing vessel, the other one is a shore station. They are passing traffic concerning catches and rendezvous with a "pick-up" vessel.

On 28.038 is a conversation between two women in the U.K. and a guy in the U.S. No callsigns, obviously old friends, equally obviously CB'ers. One woman indicated she is located in Brighton.

28.048, a group of Spanish speaking stations, joined eventually by our rotten modulated friend from 28.014. Another phone call to my Spanish speaking friend. This is a group of fishing vessels passing information back to a shore based station, apparently a packing factory.

Now I hear some loud splatter. Slide back down the band to 28.005 and find a woman in San Diego carrying on a "very friendly" conversation with a guy in North Dakota. However, my attention from this steamy duo is distracted by some more lousy modulation on 28.020.

This station on 28.020 has about the louisiest modulation of all, FM'ing quite badly. This guy calls himself "Armadillo One" and is in QSO with a station in Indiana. I didn't hear the other station. Armadillo One says he lives just outside of San Antonio. Claims that 28.020 is his "assigned frequency." Claims there isn't a centre over 10,000 population he hasn't worked on this frequency.

Activity on 28.020 is suddenly blocked out by loud splatter from

a Spanish speaking station on 28.014. It's our old friend with the lousy modulation talking to a YL on a station that was obviously tuned up by the same person. Both stations are splattering all over the lower portion of the 10 metre band.

Of interest, a search of the band between 28.000 and 28.100 reveals a total of 3 Amateur stations, all of course on CW. The time is now 18.44 UCT. Another YL has joined the crowd, modulation as bad as the rest. FM'ing, badly overmodulated, the whole works. Another call to my Spanish speaking friend, who offers to enroll me in a Spanish language course. Conversations between fishing ships about location of catches, etc., between husbands and wives about arrival times and problems awaiting husbands at home, between ships and factory concerning transferring "the stuff." I presume they are talking about fish, but who knows. My friend says "don't be so darn suspicious, if it was anything other than fish they wouldn't be so openly discussing plans for transfers." Gotta believe him, I don't speak Spanish.

But what's all this about? Why am I bringing this to your attention? Well darnit. That is an Amateur band. A band that we held onto during the last WARC convention only because we had people in the halls of power on our side. My concern is that if we are content to just close our eyes to this blatant flouting of international convention we are opening ourselves to a "shared band," or, even worse, the same fate that befell our 11 metre band. For those of you not old enough to remember, the 11 metre band was once an Amateur band.

I don't know what the answer is, but, sitting idly by, doing nothing, is NOT the answer. That much I do know for sure.

The intruder watch, organized several years ago by the ARRL, was a darn good idea. For some

reason it never seemed to have caught on. Maybe it is time for us to reactivate the old Intruder Watch program once again. I know, I know, if you're fooling around looking for intruders you can't be doing constructive things like DXing and ragchewing with your old friend down the street. Well doggone it, if we lose our bands, because we sat idly by, while others took them over, you're not going to be able to do the things that matter to you either.

If you want to see the effect that these interlopers are having on our hobby already just take a listen to 3.755 MHz any night the band is even half ways open. Listen to that carrier that seems to always be there. That carrier appears to originate in the Caribbean, probably Cuba. It does erupt into traffic (RTTY) from time to time. Because of this the B.C. Public Service Net was forced to move operation to 3.757 MHz. Now another carrier has shown up on that frequency.

Take a long listen on Canada's National Calling Frequency, 14.140 MHz some days. Split frequency jammers frequently bracket this frequency apparently protecting the frequency for the Russian station UMS. Lately another Russian station, USO, has been using this as a calling frequency. Quite frequently there is high speed morse activity on this frequency (150-200 WPM) utilizing FSK. I hardly need to tell you about the Woodpecker activity, but have you heard the amount of activity of other commercial operations taking place in this band?

I really don't need to go on, point by point, to tell you what has happened on our 40 metre band. Even the portion below 7.100 MHz, supposedly exclusive Amateur, is now being clobbered nightly by propaganda stations, including VOA.

Well, where is it going to end? Are we going to crawl out of our

shells to do something about it, or are you just going to ignore the whole thing because to do something requires some effort on your part, and besides, we can't really do anything about it anyhow, can we. Maybe it will be best not to do anything, just as you did regarding the first call for assistance to fight the proposed U.S. 20 metre phone band expansion. You know, if we had gotten any sort of assistance on that first call for help that expansion could quite likely have been headed off at the pass. As it is, you can now expect to start hearing the masses of U.S. QRM down to 14.150 almost any day now.

WELL DONE MY FELLOW AMATEURS.

Here is my challenge to you. I propose the Federation reorganize the old Intruder Watch. I also propose that each and every active Amateur dedicate at least 1 hour per week to the intruder watch. To you retired Amateurs out there, I propose you dedicate 1 hour per day to the intruder watch. This hobby of ours has given a lot to us. It is about time we all started giving something of ourselves to protect our hobby.

For gosh sakes, don't blow it this time, like we did with the U.S.

phone band expansion thing. Insist that the Federation reactivate the Intruder Watch. Insist that the Federation dedicate the time and organization necessary to setting up a viable program so that these intruders can be properly catalogued, and their illegal ac-

tivities reported to their respective governments by the proper Canadian government agency.

I challenge both you, the Canadian Amateur, and our National Organization, CARF, to do something NOW about this ever increasing threat to our hobby.



EH?

Steve Campbell (left) and editor Cary Honeywell, VE3ARS (right) interrupted at a CARF executive meeting.

VE2TD—Silent Key

Paul Cooper
VE3JLP

Just a few days ago I heard the sad news that my friend, Walter Dolphin VE2TD, had become a silent key. I can't say I was shocked, I knew Walter was well over 70 and had not been enjoying the best of health over the last year, but the news of his passing saddened me for I knew I had lost a friend and the Amateur community a tireless worker for all that is best in our hobby.

I first met Walter on 75 Metres one evening when I was operating a station that was publicising the last Ham Convention held in Ottawa. He told me about his News Letter and how he would be pleased to give us publicity amongst his

readership and in exchange for the material I sent him he mailed me a complementary copy of "The VE2TD News Letter - A private publication to old friends and new friends in Amateur Radio." I was immediately taken with his publication, it was filled with interesting articles and reflected, on every page, his own strong character and views. The News Letter was his personal creation and he produced it, virtually single handed, every one or two months. It wasn't long before I realized that he welcomed copy and I started sending him clippings from the technical magazines I received, mostly from England. He

often found them useful and invariably I received a kind letter of thanks with details of his latest plans for the News Letter or his other enthusiasm, the Forum Net. I also learnt of his great interest in Amateur Radio for the blind and his work on their behalf.

One of my regrets is that over the nearly four years that I knew Walter I never met him face to face. Our friendship grew through the notes and letters we exchanged and the occasional sked on 75 metres. However perhaps this was appropriate we didn't need to actually meet, our common enthusiasm for Amateur Radio drew us together and, with the letters we exchanged formed a bond I shall always remember with great affection.

TECHNICAL SECTION



Autopatch Dialing Problems

Are you having problems dialing up your local autopatch repeater and successfully completing an autopatch call? Your problem is most likely due to tone distortion because your touch-tones are too loud. Also some commercial transceivers employ pre-emphasis which only makes matters worse. Why does tone distortion affect dominantly access disconnect for those repeaters that employ * and # for these functions? The reason is that it is rather easy to generate a false # when you are sending the digit *.

The DTMF digit * is 1209 Hz plus 941 Hz. The digit # is 1477 Hz plus 941 Hz. Now if your tones are distorted, when you press the digit * it is possible to generate the frequency $2 \times 1209 = 2418$ Hz, and since $2418 - 941 = 1477$ Hz, which is the high-tone for the digit #, you have in fact generated the digit # when you were pressing *. If this third order intermod does not occur, it is still possible for a * to become a false # by first and second mix products. When your tones are distorted, the two frequencies present in the digit * can mix: $1209 - 941 = 268$ Hz, and $1209 + 268 = 1477$ Hz.

The solution is simple. Turn down your tone levels. Tones should be 14 dB below peak voice. The frequency deviation for tones should be ± 1 kHz, whereas ± 5 kHz deviation is typical for the level of peak voice.

If your transceiver has a sub-audible tone generator, you are in for trouble with touch tone dialing if you leave it on. First it increases the overall frequency deviation and hence the possibility of distortion because modulation levels

are higher. Second, depending on the frequency of the CTCSS tone, it could combine with your touch-tones and generate false digits.

Any audio, voice or alternator whine that appears simultaneously with DTMF signalling and has a level above 1/10 of the DTMF tones may cause the decoders to misdial or to ignore your DTMF tones. Don't have someone beside you calling out the numbers as you dial, store the number in memory and dial in silence.

Finally, some encoders employ automatic PTT. The problem here is that frequently the delay after sending a digit is so short that your transmitter carrier drops between each digit if you dial too slowly and if you dial too rapidly the transmitter does not have time to reach full power before the digit is half over, or the digit may be missed entirely. The resulting squelch-

Callsign?

Continued from page 20

give up work altogether.

He later had another operation for the removal of a portion of his pelvis, which created a condition putated, he underwent 222 transfusions, and during a severe attack of internal bleeding in 1967, underwent 167 transfusions. He never had a transfusion prior to his coming to Halifax in 1957, and the attacks he had from his early youth up to this time, numbering in the hundreds, resulted in weeks, sometimes months of immobility and racking pain.

Following the loss of his leg, he

bursts and the short time the transmitter is on as each digit is touched poses a touch problem for the decoder to validate without falsing. In fact unless properly adjusted such encoders almost ensure misdialing.

An awareness of the tone formats and the audio frequency circuits in your transceiver can give the best performance that the interconnect device is capable of providing. Only "clean" DTMF tones should be used to dial up the RAP and the telephone network.

From the Kingsmere Park Gatineau Amateur Repeater Association's bulletin dated December 1981.

Thanks to: J.S. Belrose, VE2CV
3 Tadoussac Drive
Aylmer, Quebec
J9J 1G1

took a Rehabilitation Course in Watch and Instrument Repairing, and accepted a position with Gabriel Aero Marine Company for a few years, but eventually had to of instability of balance. During the last years of his life, he required two transfusions each and every week.

I hope after reading this article you can see why all of us in the Dartmouth Amateur Radio Club are pleased and proud to have VE1YO as our Call sign.

PS. For all who don't already know we have "Coffee and Doughnuts" at the Club "Oakwood House" every Saturday morning from 9:30 a.m. till you get tired of talking, so if you are in the area, drop in. Directions to the Club can be obtained on either of the Halifax or Dartmouth 2M repeater.

Wired city

Continued from page 14

operation of the cable companies but preferably with the latter. These are outlined in a 'TCA' article by VE3NR, Bill Wilson, so they won't be detailed here. Co-operation rather than conflict appears to be the answer. Amateurs are willing to extend it and some companies have already done so. Other companies have unfortunately chosen the hard way and Amateurs are intervening at CRTC hearings, being held for cable license renewals or changes, to force an end to cable QRM.

Two examples of the opposite tactics are the one of the intervention of the Halifax club when the local cable company appeared before the CRTC in connection with its license. The result was that Channel E (18) was taken out of service. The St. John's cable company co-operated with Newfoundland Amateurs and settled the QRM problem between them.

From the viewpoint of practical politics the problems caused by the ingress of Amateur signals into cable systems are potentially greater than the interference by cable TV to some Amateur frequencies. Some of the mutual interference problems, by the way, are not attributable to the cable system itself. Among the other sources are "cable rustlers" or "pirate" who steal the cable signal by lifting the coax feed off the TV set and hook it up to a rabbit ear antenna to feed more than the one set they pay for.

This piece of larceny sprays around everything that comes down the cable, including the troublesome frequencies which ARM the Amateur band.

Another cable-cheater is also a trouble-maker. On older sets he parallels the 300 ohm ribbon lead from the 75 ohm to 300 ohm transformer (between the converter and the set) with another nice long lead of 300 ohm twin lead to another TV receiver. This length of unshielded ribbon again makes an excellent radiator of the stuff carried on the cable system. The same problem can be caused

by the same inexpert do-it-yourself enthusiasm moving his TV somewhere else in the house and changing the short 300 ohm lead to a length to suit the new location, rather than have the cable company lengthen the coax run.

Another problem which is out of the hands of the cable operators is where they sell the service to an apartment building owner who has his own distribution system which is not properly installed and maintained.

Improperly disconnected cable leads to houses or in the house can also radiate all of the problem frequencies. Careless service personnel or unauthorized persons have been known to just cut the coax at the house leaving the free end to dangle in the air, cheerfully radiating all the cable signals. (A proper termination is a special dead-end fitting which provides a shielded 75 ohm resistor dummy load across the cable.)

All of these illegal or unauthorized actions are of concern both to the Amateur and the cable companies because the interference is a two-day deal.

At this stage of the game, before you think that this is a "how-to-do-it" article and you feel tempted to experiment a bit on your own, be advised that among the frequencies coming down the pipe are specially modulated ones which are monitored by cable company service vehicles. If heard by the service man they reveal a bad leak or perhaps an illegal connection. Believe it or not, these illegal "add-ons" have even been picked up on service calls in response to a "pirate's" complaint!

Obviously for technical and commercial reasons the companies take a very dull view indeed of such shennanigans. In fact, their view of it is so dull that they will prosecute private cases in court and have done so successfully. These can result in a fine of five grand or a five-year stretch in the clink. Just for starters, however, the usual step is to remove the offending devices, disconnect and possibly deny the offender further service.

The problem of mutual in-

terference between Amateurs and the cable systems isn't going to go away but will probably become more prevalent as more cable systems are set up and extend the type of services available using mid-band and super-band channels. In the end it will be to the advantage of both cable companies and the Amateurs to co-operate and work out solutions of problems posed by this electronic age invention.

CARF is working to beat interference problems through its participation in the related committees of both the Canadian Radio Technical Planning Board and the Canadian Standards Association. To make that work effective, detailed documented information from clubs or individuals who have been involved in cable TV or other interference cases is necessary. It would help all parties if such information could be sent to CARF EMI Committee Chairman, C.B. (Barc) Dowden, VE 3TT, 29 Pellan Crescent, Kanata, Ont. K2K 1 J 7.

It's *our* spectrum that's at stake....work to protect it.

NEWS SERVICE

Rocky Mountain 1982 VHF Convention

Colorado Springs, Colorado was the scene for the first running of this event. It was well attended and included many interesting presentations. Of interest to all VHF operations were the noise figure and antenna gain measurement tests. These were done in a very professional manner and I feel the results listed below are quite valid.

Ariane Rocket Lost

LO-5, the fifth in a series of the European Space Agency's rockets now lies at the bottom of the Atlantic. In its recent launch there was a malfunction 1 1/2 minutes into the launch which proved to be the demise of the rocket. Amsat's Phase IIIB satellite is due for launching on LO-7 which may fly in early 1983. Let's hope the Ariane rocket's track record improves so that Phase IIIB will escape the watery fate of Phase IIIA.

TCA's Tenth Anniversary

Ten years ago this month, TCA magazine came into being. Volume 1, Number 1 was the result of many months of planning on behalf of the Canadian Amateur Radio Federation. Very early in 1972, the federation ex-

ecutive decided that a truly Canadian Amateur journal was necessary. Previous attempts at such a venture had never completely gotten off the ground. Shortly after the second world war, Xtal magazine made its

appearance on the scene. I cannot be too sure how long this journal survived until its demise, but enthusiasm for a Canadian Amateur magazine was thriving even then. Figure 1 was taken from the January/February issue and if you can make out the printing, you will see a letter from Ron HESLER, VE1KS, (now VE1SH, and a contributor to TCA).

The next appearance of a Canadian Magazine for Amateur Radio, came in the form of the first "The Canadian Amateur" in January of 1959. (fig. 2) This was a 40 page booklet style magazine published in North Surry B.C. by the "Radio Experimenters of Canada". A look at the index of that and subsequent issues will stir some memories I am sure. (fig. 3,4,5) You might also be interested to see some of the pictures, and a contest promo from the first few issues. Boy have we changed since then!

A number of months later, this magazine ceased publication due to many causes, not the least of which was a lack of support by the Amateurs of Canada. Very little is left of that publication except the few copies gathering dust somewhere, and memories.

In 1967, CARF was started up by a group in what is now called CARF's Mid Western region. A few years later, the RSO in Ontario threw its support and assistance to the new organization and the Federation began to grow. By 1972, CARF had the support and backing of every provincial organization except RAQI. The Quebec organization felt it did not need to support a national organization in full since their organization was very strong. It still is. Relations between CARF and RAQI remain good to this day. RAQI has always had and will continue to have input to the Board of Directors. CARF in return, supports the provincial organization (all of them) and will continue to do so in future.



Editor, XTAL:

Congratulations on your fine issue of XTAL. I hope to see it grow with each issue, both in size and circulation. I think that every Canadian Amateur should get behind this organization and boost it.

I read with interest the letter in the September issue by VE3ADR and also those by 3ANX and 3BO in the Oct.-Nov. issue. They both have their good points, but in this magazine of OURS I am sure that there is room for material to satisfy both schools of thought, so let's end this ancient argument of Oldtime vs. Newcomer.

W. Kirkwood
VE4AEQ

Box 211, Flin Flon, Man.

Editor, XTAL:

..... have a Hallicrafter SX 18 (Sky Challenger) and have been doing a lot of listening on ten during the noon hour. So far, must say the band sounds very good here. All W Districts have been heard and W6's operating portable from Hawaii with R8 signals on fone. Most often hear W6 and the band opens up, then the east coast rolls in. The only VE so far is VE4RO with R9 sigs.

Am nearly all set to go myself soon as I get an OK on my call to use here then will temporarily be using #02 Tritet—RK39 final 46 class B on 28,092 KC Fone and CW.

As my family are all living in Toronto would appreciate call or reports from anyone down there and if possible to arrange sked so that I could talk to the folks back home.

..... XTAL is off to a good start again and looks bigger and better than ever. Congrats OMs and keep up the good work.

Jack Spall, VE3ER
R. C. C. S
Whitehorse, Y.T.

Editor, XTAL:

I have followed with considerable interest your last two or three issues of XTAL and please allow me to congratulate all of you on the editorial staff for doing a swell job. The magazine is really growing and so is the association.

What are the chances of getting a Communications Dept. started and a Field Organization similar to ARRL. You sure have a solid supporter right here in me on this score.

I guess this is about all I have at this end for now. I just couldn't resist the temptation to drop you a line telling you that I think that you are doing a swell job and wishing you all the success and luck in the world for the future of this, OUR first all Canadian Ass'n.

Ron J. Hesler
VE1KS
Sackville, N.B.

Editor, XTAL:

Have just finished reading the copy of XTAL which you so kindly sent me this month. To put it mildly I was surprised to find that there existed in Canada a group of this type, and to see a magazine of the calibre of XTAL. Its format, makeup and the scope of its articles are excellent and I wish to compliment you on your efforts.

As one who has long been a proponent of a strong Canadian amateur body, I think that you are doing a fine job to fulfil this need. . . . Please let me know if I can be of any help.

Bernard J. Clancy,
VE4AHD
Lethbridge, Alta.

Editor, XTAL:

"Enjoy yourselves to your maximum capacity, not like years ago when a m overland his frame suffer from reacti and then sometimes choke. Hi! watts!

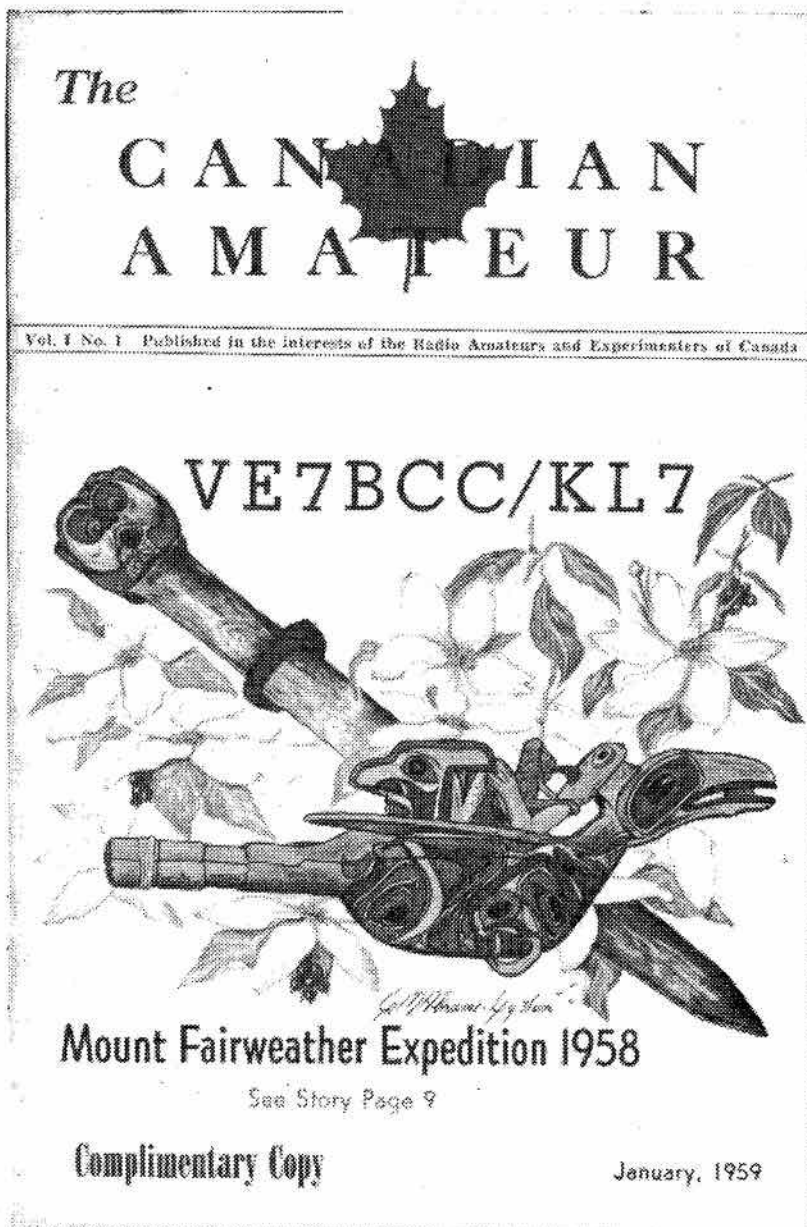
(Continued on page 38)

At about this time, Amateurs from across the country were asking if CARF intended to put out a monthly publication to keep all Canadian Amateurs informed of national events. With this in mind, CARF began to explore the possibilities. CARF had been contemplating the move to individual membership and this seemed to be the best sort of incentive for the move. After all the possibilities were considered, and a decision to go ahead was made. R.G. (Gill) Stevens, VE3BBQ, now a silent key, accepted the key position as

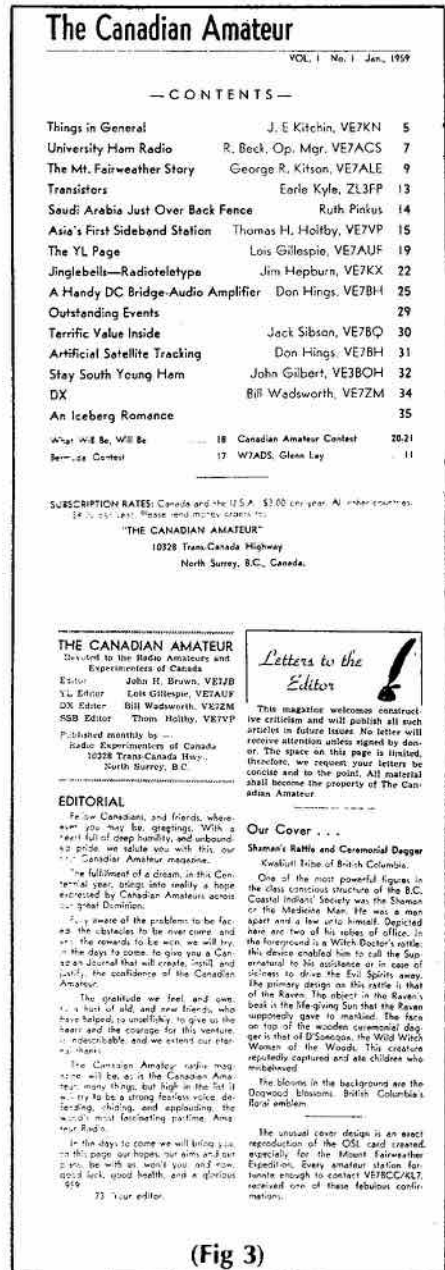
editor and set about producing the first issue. Copy was scarce and so Gill wrote most of it, or gleaned what he could from CARF material. Rowland, VE3AML, was one of the contributors. He remains one to this day. Over a period of time, others were encouraged to submit material. Of these, one stood out. Doug Burrill, VE3CDC, with a degree in journalism from Carleton College in Ottawa loaned his skilled pen to the journal. Many followed.

The first few issues were thin

and it often seemed that "The Canadian Amateur Magazine", as it was called, would suddenly fold as many before it had, yet the reader support was there. CARF's individual membership numbers began to swell as Canadians began to accept the journal. Few realized that editor Gill's health even then was failing. He was suffering from terminal Cancer. Every day was a struggle. Not only did he have to contend with putting out a growing journal, but also the mental and physical agonies of a disease that was sapping his life's energies.



(Fig 2)



(Fig 3)

Only a few short months after launching "TCA". Gil Stevens passed away. His last issue was completed while he was in his death bed.

The Federation now turned to appointing his successor. Gill had been editing and publishing the journal himself. Now, we needed both an editor and a publisher. Art Block, VE3AHU, then president of CARF, had met a young man just completing his studies in graphics and journalistic design at Loyalist in Belleville Ontario and asked if he would be willing to take over the journal. Thus Steve Campbell, a non Amateur, took up where Gill left off. Sharing the duties with Steve was Doug Burrill, VE 3 CDC who managed the development of editorial content, while Steve designed and produced the journal.

Over the next few years, Steve became the journal's designer and publisher, while Doug became editor. This arrangement worked very well for a number of years. The format and design of "TCA" developed from a newspaper to a magazine format and with Steve's guidance, "TCA's" excellence in visual effect became a trade mark. Many changes were taking effect and new people were coming into the magazine. Cary Honeywell, VE3ARS, took over the Technical editorship, although there wasn't much to edit. He was succeeded in later years by a number of Amateurs, including Brian Pass, VE3BGP, H.T. Edworthy, VE3CLG and finally Ed. Hartlin, VE3FXZ. At one time, we had an Art Editor, Stan Hill VE3DQ, who provided many cartoons for TCA, (Fig 6).

In 1979, CARF decided to change the name of the Magazine, along with changing the paper stock used in producing "The Canadian Amateur". The title "TCA" was chosen, and now, when Canadian Amateurs hear someone say 'TCA' they think of the magazine not the airline. In March of 1980, our present cover design was adopted, and has now become a fixture on the Canadian Amateur scene.

1980 saw another change in the operation of TCA. Doug Burrill, VE3CDC, was forced to resign

from his post for medical reasons. Soon after, he had successful open heart surgery, and has since returned to the pages as associate editor, and editor of the "CARF NEWS SERVICE BULLETIN". Cary Honeywell, VE3ARS, was recommended to fill the vacancy. Cary, being former Technical editor, and confidant to the editor, was

well versed in the operation of the magazine. Regular contributors started appearing on the masthead. "TCA" began to appeal to a wider audience of Amateurs across Canada.

In 1981, a lull in the contributing action saw the delivery dates and production deadlines thrown into confusion. A mail strike that sum-

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10328 Trans-Canada Highway
North Surrey, B.C., Canada.

(Fig 4)

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"THE CANADIAN AMATEUR"
10328 Trans-Canada Highway
North Surrey, New Westminster, B.C., Canada.

(Fig 5)



mer saw contributions draw to a complete halt. Had it not been for the many fine club bulletins across Canada, "TCA" would have been in real trouble. A great deal of pressure was brought to bear on both the editor, and Steve Campbell, the publisher. Through all these years, Steve had been with us, providing expert work and producing a progression of excellent magazines with little help. Finally in the summer of 1982, a combination of financial considerations and production pro-

blems forced CARF Publications to take "TCA" from Steve's hands and Runge Newspapers took over the production.

More production problems continue to plague "TCA" and both the editor and Runge are trying to resolve this condition. We still have our mailing problems though. The December issue was mailed late in November. We reprinted the mailing receipt from the post office elsewhere in the issue, so check it and see how long it took to reach you.

For the future, I can only see more work for the editorial staff. We have outgrown our resources in time and material. We need more staff to handle the production, proof reading and design of "TCA". We are almost a professional magazine, being produced by volunteers. The strain on those individuals who are at present doing the work is astounding at times. Nonetheless, "TCA" continues on. As of September of 1982, TCA was being read by more Amateurs in Canada than any other Amateur magazine distributed in Canada. We have a lot to be proud of and a lot to work for. Considering the time and effort needed to put together "TCA" each month, your \$15 membership in CARF is a real bargain.

A history of "TCA" could not be considered complete without mentioning a group that, without their help, we would not have been. Our Advertisers. Over the past decade, we have had a number of advertisers support "TCA" with their business, and it would be unfair to mention only a few of them. I would, however, like to express our appreciation at their support of "TCA". I urge all Amateurs of Canada to support them and help them to survive, as they have helped us.

To the Amateurs of Canada,

Thank You.

VE3ARS

Editor TCA



JUST LOOK at the PRIZES!

that are being offered in this Contest!

A COMMUNICATIONS RECEIVER!

We'll keep you drooling for info about this receiver for a while.

A TRANSCEIVER Value — \$700.00!

—Brand New!
The Ham Shack's contribution. This terrific Transceiver has two Pioneer Dynos, is 12 volt and will handle two handsets as it, plus broadcast receiver.

A HI-GAIN — 3 ELEMENT 10 METER BEAM!

Bill McCarter's 3 element, 10 mtr Beam is a beauty. It's built like a battleship and it hot as a fire cracker!

A Beautiful — VOLT - OHM METER!

The V.O.M. will do everything but mix the batter for you — It's a honey!

A Johnson SIGNAL SENTRY

Taylor Pearson & Carson have added a Johnson Signal Sentry to our list. A real handy gadget!

This magazine wants your thoughts on a very contentious question:

What is your opinion concerning the word "AMATEUR?"

DO YOU FEEL IT IS TIME WE GOT OUT OF A RUT?

DO YOU THINK IT IS A FITTING NAME FOR OUR HOBBY?

For the best letter, for or against a change,

We will award a Grand Prize!

All you have to do is write a short letter, 300 words or less, expressing your viewpoint on the subject and mail to:

"THE CANADIAN AMATEUR"
10328 Trans-Canada Highway,
North Surrey,
New Westminster, B.C., Canada

CONTEST RULES:

Entrants must be amateurs to win Grand Prize.

There will be other valuable prizes awarded to runners up.

A consolation prize will be awarded for the best letter to anyone not licensed but interested in ham radio.

All letters will be judged carefully by a panel of three prominent amateurs who's decision shall be final.

All letters must be legible and contain 300 words or less.

Contest closes June 22, 1983, and winners' names will appear in the July issue.

All letters to become property of "The Canadian Amateur" who shall retain the rights of publication.

More

Prizes

Coming!

"THE CANADIAN AMATEUR"

A NATIONAL MAGAZINE FOR RADIO AMATEURS
(Subscription Rates on Page 1)

Clip the coupon below and mail with remittance to:

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Help us Grow — Enter your subscription NOW!

Please enter my subscription to "The Canadian Amateur" for _____ years. I enclose my check or money order for \$ _____

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The following pages contain the reprint of the first issue of "TCA", January 1973.

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The Canadian Amateur

Official Journal of the Canadian Amateur Radio Federation Inc. Published Monthly

Managing Editor: R. G. (Gill) Stevens VE3BBQ

Volume 1 JANUARY, 1973 Number 1

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All correspondence is welcomed and should be addressed to the Editor, The Canadian Amateur, Canadian Amateur Radio Federation, Inc. P. O. Box 356, Kingston, Ontario.

The Canadian Amateur

NUMBER 1

JANUARY, 1973

**MAGNA EST VERITAS ET PREVALEBIT.
D. O. C. TO POLL ALL LICENCED AMATEURS IN CANADA**

Commenting that "There appears to be some doubt as to exactly how many Canadian radio amateurs are represented by the Canadian Amateur Radio Federation or the Canadian Division, American Radio Relay League," the Department of Communications in Ottawa has decided to postpone action on the recent petition presented to them by C.A.R.F. requesting a downward extension in the 40 and 75-meter phone sub-bands to escape the invasion of U.S. amateurs recently moved into our previously all-Canadian sectors by the Federal Communications Commission of the United States.

As a result some considerable delay can be expected before any relief from the present QRM chaos on our net frequencies can be expected. The D.O.C. propose to find out, once and for all, just who does represent the Canadian Amateur and to do this they are preparing to poll every licensed amateur in Canada by mail ballot. In the words of W. J. Wilson, Director General, Telecommunications, Regulations Branch "Consultation with Canadian Amateurs will be conducted on an individual basis by the Department and the ballot will also be used to determine whether an amateur belongs to the A.R.R.L., C.A.R.F. or other amateur organizations.

A full report of the meeting between the Department of Communications and the claimants to be the National voice of the Canadian Amateur is reproduced below.

C.A.R.F.'s request for expansion of Canadian Phone Bands

The Canadian Amateur Radio Federation Inc. and its provincial members decided, in MAY 1972 (after preliminary comment and opinion had been received from the Amateurs in the provincial areas) to request an immediate adjusting increase of the Canadian phone sub-bands if, and when, an expansion of the phone frequencies allotted to the Amateurs of the U.S.A. was announced. As a result of this decision, a formal request was made to the Department of Communications on receipt of news that U.S. expansion was imminent.

A full year elapsed after the publicising of Docket

19162 during which time the Amateurs of Canada had the opportunity to discuss, debate and consider the implications contained therein, before further C.A.R.F. action was taken. This action was a request that all the provincial Amateur associations gain comment and opinion from the Amateurs on possible Federation policy should all, or any, of the petitions contained in the docket be implemented.

Mandate Loud and Clear

The mandate given to the Federation by its member societies was fully publicised in the minutes of the 1972 Annual meeting of the corporation and in subsequent Newsletters. This action can hardly be construed as precipitate or without the backing of a large segment of the Amateurs of Canada.

Realising that any expansion of the Canadian Phone frequencies would meet strong opposition from the American Radio Relay League, the national spokesman for the Amateurs of the United States, the original docket of the F.C.C., briefs submitted to the F. C. C. by C.A.R.F. and the Cdn Div ARRL, comments made by the D.O.C. and the Report and Order of the FCC announcing the expansion were carefully studied and notes made to support the policy of the Federation and the necessity for expansion by Canada. A synopsis of these notes, circulated to all attending the meeting on 25 October, follows:

Gained Wide Circulation

Docket 19162, in its entirety, was circulated to the Amateurs of Canada through the channels of the Federation and this resulted in a large volume of knowledgeable and considered comment to the Federation, the D.O.C. and the ARRL. Briefs and comment were sent to the F.C.C. based on the material received and ALL pointed out that expansion of the US phone frequencies would necessitate Canada expanding its phone frequencies to channels outside of the US phone and Novice frequencies on 75 metres. The brief submitted by the Cdn Div ARRL is quite explicit on this point—QUOTE: "Canadian Amateurs will simply move lower in frequency (Continued on page 8)

EDITORIAL

It has taken several years to reach fulfillment but one of the main objectives of the Federation is at last on its way. We now introduce to you the first issue of "The Canadian Amateur" destined, we believe, to become a powerful voice in the affairs of the licensed Canadian amateur on the National level.

While by no means a first or original attempt to produce an all-Canadian news media (one was started by the Radio Experimenters of Canada on the West Coast in 1959 but lasted only a few months due to lack of popular support) this new publication is designed to carry news of interest to all Canadians. Its main goal will be to fully and factually report on all government directives, changes in regulations etc., as issued directly by the D.O.C. All amateurs will be kept up-to-date on controversial matters of the day in addition to news of general interest to Canadian Ham's everywhere. We hope to serve you well in the months to come and help improve our rather dismal record of communications between each other.

To act as a focal point for all matters Canadian we expect to be of much service to the fraternity as a whole, but it is not expected that "The Canadian Amateur" will win any Pulitzer prizes for meritorious composition as it now stands. It is merely a genuine effort to convey factual information, at an official level, to the greatest number of interested Canadian amateurs in order that they may have ALL the facts before them before coming to any conclusion, pro or con, on any of the red hot issues of the day.

Normally the introduction of a brand new publication is preceded by months of preparation before the first issue sees the light of day. Owing to the pressure of recent events this was impossible in the case of "The Canadian Amateur" which has now burst upon you with little more than a month's production period. As a result many changes can be expected in the months to come. Changes in layout, increased size as regular columns are added, and the eventual introduction of pictorial matter are all in the cards as a viable organization is gradually built up. We will promote action, not just talk!

Meanwhile, please bear with us. We will, at least, provide you with all the official information obtainable from government and other official sources on the main regulatory issues of the day. —73. VE3BBQ

The Canadian Amateur Radio Federation Inc.

STATEMENT OF OBJECTS

- 1 To act as a co-ordinating body for Amateur associations, societies and organizations representative of provincial and territorial divisions of Canada;
2 To act as a liaison agency between its members and other Amateur radio associations, societies and organizations within and beyond the territorial limits of Canada;
3 To act as a liaison and advisory agency between its members and the Ministry of the Canadian Government concerned with issuing licences for radio stations performing an Amateur Experimental Service;
4 To promote the interests of individuals licensed in respect of radio stations performing an Amateur Experimental Service through a program of technical and general education.

PRESIDENT'S MESSAGE

The New Year is upon us and must take this opportunity to wish all the readers of "The Canadian Amateur" a happy and prosperous New Year with not too many problems with the vagaries and inconsistencies of Amateur communications may all your contacts be S-9.

This year sees the Federation take another stride forward with the inception of AFFILIATE and ASSOCIATE membership. It is encouraging to note how Associate membership in particular is steadily increasing and I wish to thank all these who have accepted a note or letter with their application — very heartwarming reading. Our target is 5,000 Associate members and CARF should reach this figure by 1975. Now, if every member would recruit one additional member, and this could be carried out three times, we would handily exceed our target — sounds simple when put this way—but so did the old chain-letter game, hmmm.

Will ask every subscriber to show his copy to another Amateur and, if any of our readers can think of ways and methods to improve the publication, we are always receptive to constructive criticism. One way to improve is to gain more and more members, thus giving the Editor more incentive, and, most important, more finances.

The Federation appreciates the manner in which the provincial member organizations have publicized "The Canadian Amateur" and I note that, in several provinces, the Presidents of the provincial societies were the first to send in their application — two of them before my own application went in to the Treasurer.

One cloud on the CARF horizon is the continued lack of 100% membership from the provincial societies and I trust that 1973 will see the goal of unification realized. Recent developments have clearly demonstrated the need for a strong, united, independent voice to the Federal authorities on all matters concerning Amateur radio in Canada. This voice can only be given by the Federation and can only reach proper proportions when full consultation can be given to the individual Amateur on all important matters and this consultation can only be effective when the individual is in possession of the information necessary for him to make a decision. This information will be contained in "The Canadian Amateur" so that the Amateurs now have a source of knowledge of Canadian affairs that has been so sadly lacking in the past.

No longer can the individual complain that proposals and action were made and taken without his knowledge or concurrence — less than eight cents per week puts anyone in the picture.

AN APOLOGY

It is well known that the first rule of Kirchoff's Law is that "if it is possible for anything to go wrong, it will!" Such has been the unfortunate fate of issue 1 of the Canadian Amateur. We humbly apologize for the delay but have been unable to overcome breakdown of printing machinery, complete drying up of incoming and outgoing mail as the result of the postal strike in Ontario and now the refusal of the postal authorities to accept bulk mail until the strike is over. We hope to do better next issue.

In the meantime we are attempting to forward as many copies as possible to the larger centres while smaller towns will be mailed individually a few at a time.

"VE NEWS CORNER"

By: Rowland Beardow, VE3AML

And so the Phoenix has risen. Greetings to new readers, and welcome to all the new patrons of "The Canadian Amateur".

My involvement with C.A.R.F. from its inauguration in Winnipeg in 1967, through including C.A.R.F. news in my publication has been both exciting and stimulating, watching the Canadian scene, and noting the fantastic progress that we have made in Canadian Amateur Radio, has been most gratifying.

So, looking forward, I should now reiterate a policy which was originally written in January, 1966 so here it is.

Policy

It is the intention of the writer to promote Canadian Amateur Radio to the fullest extent, to give credit where it is warranted, and to comment without fear or favour. Readers comments are solicited, providing they are from licensed Canadian Amateurs. International news will be given where it is of interest to Canadians. Advance notice of coming events, awards, and club bulletins will still be appreciated as a condensed "VE News" page will appear in each issue of "The Canadian Amateur" from now on.

Amateur Radio Canadians

New Brunswick

"Violation Tag, Hartland Police Department" ... Have you received one yet? If you do receive one do not become disconcerted, you have probably been in contact with VE1ANZ, Chief of Police, Hartland, N.B. Give Stan a call on 80 or any of the DX bands, or try 40 within a thirty mile radius of Hartland.

Marion, VE1BH, has been in hospital for about three months, and is presently in Room 4, second floor, Lancaster DVA Hospital, Lancaster Ave., St. John (West). How about sending her a card?

The P.E.I. Convention for Centennial year 1973, is well into the preparation stage. It is planned for a summer event, so look for further information.

VE1CL, Burns, and VE1EE, Mural, were presented with a Loyalist City Amateur Radio Club certificate by VE1TS, Sully, in recognition of FORTY YEARS in Amateur Radio. (Credit to LCARC.)

Nova Scotia

George VE1TC, was the winner of the B.E.R.U. single band competition for 14 kHz. (Credit Halifax)

Dartmouth reports the 10 metre band in great shape with all the Malta Boys active, both on CW and SSB. A 10 metre net is held every Sunday on 28.2 MHz at 2 pm local time. VE1AUA, Martin, is net controller.

A move is afoot to have a Club Station installed at the Halifax School for the Blind. VE1AIV Barry is its President. 19 people are attending a training course. Thanks too to the Dartmouth gang for their nice comments to me. (Dartmouth A.R.C.)

Quebec

There are now 12,607 Canadian station licenses in force in Canada as of March 31st, 1972. This shows an increase of 452 over 1971 '69 and '70

showed a total decrease of 597 over 1968. The 1972 figure shows a gain of 105 over the 1968 total. Ontario 1972 figure is down from 4493 to 4478. The Western region showed the greatest gain of 1117 to 2221. Quebec a gain of 27. And the Atlantic a gain of 96.

Mr. Roch Veillet, President of Payette Radio, presented the MARC-RAQI Projects for the Blind, twenty-four cassette tapes, to be used for the recording of articles, lessons, Code practice, etc., for blind amateurs and candidates to become amateurs. Bruce Balla, VE2OO also presented a HW12 Transceiver modified for 160 meters, three Morse keys were received from Bert Laing, VE2BMQ. Mr. Cy Lewis VE2QJ presented a general coverage receiver and cw transmitter, and Lucien Pronovost VE2BXF on behalf of RAQI donated forty tape cassettes for the Blind Amateurs, and 20 tapes for MARC projects. A big tilt of the VE Beam to you gentlemen. (Credit MARC)

Ontario

C.A.R.F. has opened a QSL Bureau for Canada staffed by handicapped persons. The address is C.A.R.F. 26A Wy, Islington, Ontario, Canada.

It has been suggested by the Ottawa Amateur Radio Club, that the Club may sponsor the 1973 KSO Convention, rain or shine, in 1974, and Kingston will hold it in 1973.

December '72 issue of Groundwaves reported the resignation of Honnau Shepherd VE3JY from the RSO and also from the office of SCM. A news broadcast by KSO, now says he has reconsidered and will continue. COPY OF A LETTER NR 6202, Oct. 31, 1972, sent to Art Blick President of C.A.R.F. Taken from Groundwaves, Dec. 1972. "Dear Mr. Blick:

This refers to your letter of Sept. 29 and the meeting held with representatives of the CARF and ARRL on Oct. 23, concerning the expansion of the U.S. radio-telephone portions of the amateur 75 and 40 meter bands as provided for in the amendments to the F.C.C. rules respecting the Amateur Radio Service.

As a result of the meeting held on Oct. 25 it is considered that: a) there appears to be some doubt as to exactly how many Canadian radio amateurs are represented by the CARF and ARRL; b) there appears to be a difference of opinion between the two organizations as to the action that should be taken;

c) it would not be desirable for the Department to amend the regulations on the basis of what may happen in the future and certainly not before advance consultation with all Canadian amateurs plus discussions with the F.C.C.

It was therefore decided that: a) the department will take no action pending receipt of further reports after Nov. 22, the date the F.C.C. rule changes take effect;

b) on the basis of reports received the department will review the situation and if necessary prepare a proposal to amend the regulations and all consulted;

c) conducted with the Canadian amateurs will be conducted on an individual basis by the Department and the ballot will also be used to determine (Continued on page 11)

F.C.C. RULES ON DOCKET 19172 REJECTS ALL PETITIONS

MEMORANDUM OF OPINION AND ORDER
 Adopted: January 4, 1973. Released: January 10, 1973
 By the Commission: Commissioner Johnson concurring in the result.

1. The Commission has under consideration its Report and Order (FCC 72-849) released October 2, 1972, in the above-entitled proceeding, and the Petition For Partial Reconsideration filed by the American Radio Relay League (ARRL), and the Petition for Reconsideration filed by Gerald N. Seligman, et al.

2. The ARRL Petition requests the Commission to reconsider its Report and Order, and amend its rules to make frequencies 3.825-4.000 kHz available for radiotelephony operation to all but Technician and Novice Class amateur radio operators. ARRL repeats the request made in its Comments in Response to Notice of Proposed Rule Making filed on June 1, 1971, for relief from overcrowding in the 3.900-4.000 kHz telephony segment then available to all amateur radio licensees except Technician and Novice Class. ARRL states in the seventeen months subsequent to filing comments, overcrowding in that frequency segment has become even more severe.

3. The Seligman Petition requests the words, "the transmitter shall be crystal controlled," be allowed to remain in Section 97.7 (d)(1) of the rules. Petitioner would return the requirement for the frequency of a transmitter operated by a Novice Class control operator to be derived from an oscillator circuit utilizing a piezoelectric crystal. Petitioner states the belief the deletion of this requirement is deleterious to the Amateur Radio Service, and will prove to be detrimental to Novice Class type of operation.

4. The frequency allocation under the reconsideration requested by ARRL is popularly known as "75 meters," and is that frequency segment authorized for A3 and F3 radiotelephony in the 3,900-4,000 kHz amateur frequency band. Until our Report and Order, 75 meters occupied 200 kHz of the high frequency spectrum from 3.8-4.0 MHz. In our Report and Order, an additional 25 kHz was authorized for A3 and F3 radiotelephony, expanding it to the 225 kHz between 3.775-4.000 kHz. Four amateur radio operator classes, other than Novice and Technician Class, are permitted to operate stations in this frequency segment, subject to a system of expanding frequency privileges according to the level of difficulty in the examination requirements for each class. The objective is to offer an incentive for encouraging individual amateur radio operators to improve their technical and operating skills. Our Report and Order provides 110 kHz in the 75 meter frequency band for all four classes, an additional 90 kHz for the higher Advanced and Amateur Extra Classes, and another 25 kHz for "the highest operator class, Amateur Extra. Petitioner in effect requests the 75 meter frequency allocations for incentive purposes be amended to provide 175 kHz for all four classes and only 25 kHz exclusively for the combined Advanced and Amateur Extra Class only.

5. In support of the request, ARRL submits a Net Directory listing almost 300 amateur radio networks registered with their organization. Typical examples

are the Eastern Pennsylvania Emergency Phone & Traffic Net, which the Net directory indicates operates on the frequency of 3.917 MHz every day starting at 2300 GMT, and the Delaware Emergency Phone Net which operates on 1,904 MHz on Saturdays at 2300 GMT. Petitioner notes that all but two of the 154 registered networks with radiotelephony operations in the 75 meter frequency band have selected the frequency segment where all four license classes have operating privileges, and this activity accounts for 606 regularly scheduled network sessions each week. The other two networks have selected frequencies restricted to stations operated by Advanced and Amateur Extra Class operators, which represent but 7 regularly scheduled network sessions. ARRL claims there are many other non-registered, casual conversational networks, almost all of which choose to also operate in the same 75 meter frequency segment as the 154 registered networks and consequently contribute to the overcrowding. ARRL claims that amateur radiotelephony networks operating between 3.900-4.000 kHz were the primary communication circuits for many days following the 1972 disasters in South Dakota, Pennsylvania, and New York.

6. ARRL gives as the reason for the frequency selection pattern by these network participants, that the incentive of less interference in the exclusive frequency segments available only to Advanced and Amateur Extra Class licensees has been insufficient for some key members of these networks to upgrade their licenses to these two higher classes and obtain the additional privileges, even though, as ARRL reports:

"overloading has become so severe, both because of general communications as well as net operations, that everyone has suffered intolerable interference at times, and nets often have been unable to fulfill their role even in times of emergency."

7. The Seligman Petition presents the following argument in favor of returning Section 97.7 (d)(1) to the previous wording:

"... the newly licensed Novice will be tempted to have the SSB transmitter or transceiver that will eventually be used after he has upgraded his license, since this type of equipment is controlled by a variable frequency generating device. This type of equipment usually has a much greater power rating than the Novice is permitted to utilize, and normally cannot be detuned or lightly loaded enough to the extent required to operate at a 75 watt input level." and "due to the relative complexity of variable frequency generating devices, the beginner Novice Class license will be discouraged from home-constructing his own transmitter, thus leading to a reduction in technical skills and experience in the Amateur Radio Service, and contrary to the Commission's Basis and Purpose for the Amateur Radio Service as brought forth in Part 97.1."

8. In considering the overcrowding existing on many of the amateur bands, including 75 meters, the Commission fully realizes the difficulties of communicating under the conditions prevailing. We are mindful that our actions must be in the overall interests of the Amateur Radio Service. In this we are guided

by the basis and purpose of the Service contained in Section 97.1 of the Rules. However, we do not consider that 97.1 (a) precludes or normally should be accorded higher priority in respect to our decisions than 97.1 (c) which relates to rules which provide for advancing skills in both the communication and technical phases of the art.

9. It might appear from the comments of the ARRL that they would espouse a common-denominator level of achievement in the Amateur Radio Service rather than actively support the upgrading incentive plan for which they indicate approval. Insofar as it is known, the ARRL has not initiated any recent major program to upgrade the status of the lower classes of licensees. In this country there are approximately 23,000 Novice Class, 52,000 Technician Class, 30,000 Conditional Class, 87,000 General Class (both currently having the same privileges), 59,000 Advanced Class, and 12,000 Extra Class operator licensees. Recent information obtained from reexamination of certain Conditional Class licensees, indicates that probably a large percentage of that category of licensees does not meet the Commission's qualifications to occupy the high frequency bands which, as ARRL points out, are already over-crowded. It is well known that in many countries, the highest grade of license is required for radiotelephone operation on certain high frequency bands. In Canada, for example, that situation prevails and as a result, approximately 70% of their amateur population holds the highest class amateur license. It is considered that this is the most appropriate direction in which to pursue further measures to relieve the interference situation, rather than further expanding the phone sub-allocation for use of the lower classes of licensees which would only compound the problem. Further attention will be given this matter in appropriate actions. In so doing, the Commission will continue to be guided by what is believed to be the overall best interests of the Amateur Radio Service.

10. Further, the petitioner ARRL does not provide a rationale for the specific sub-band allocation requested. In reviewing the many frequency allocation plans proposed in comments filed in response to our Notice of Proposed Rule Making in this Docket, including the petitioner's plan, we find most of them to be subjective in their approach, and fail to account for the results of the upgrading incentive system. Overall, offering additional frequency privileges as an incentive to upgrading has proven to be workable. The number of Advanced and Amateur Extra Class licensees continues to increase while the number of General and Conditional Class licensees decreases. It is important to the further success of this system that as upgrading progresses, the frequency sub-bands must be systematically and periodically revised. When the number of licensees authorized to operate in each sub-band changes significantly, there must be corresponding modifications to the frequency privileges for the affected license classes. The method selected and outlined in the Report and Order was designed to provide an objective formula approach to the amendments adopted, and for future adjustments to frequency privileges. Sub-band apportionments are determined by considering the number of individual licensees in each group having privileges to each sub-band, weighted in favor of the higher classes.

11. Petitioner ARRL does not support its claim that between June 1, 1971, and November 1, 1972, overloading in the 75 meter frequency segment available for radiotelephony has become more severe. Commission records show that during this same period, the number of General/Conditional Class licensees decreased about 5%, and the number of Advanced and Amateur Extra Class Licensees increased about 6%. Therefore the number of amateur radio operators having access to the exclusive-frequency segments increased, and it does not seem likely they would choose not to exercise their new privileges.

12. We agree with the ARRL that it is unfortunate that key members of the amateur radio networks do not choose to upgrade their operating skills and privileges. However, we cannot agree that the solution is to compromise the upgrading system by authorizing additional privileges for the General/Conditional Class licensees at the expense of the Advanced/Amateur Extra Class. Rewarding those who have not upgraded at the expense of those who have, would be an unwise and illogical approach. If, as petitioner claims, key members of the radiotelephony nets do not find the incentives offered under the present system sufficient to increase their desire to upgrade their licenses, then incentives should be increased, rather than decreased as proposed by ARRL. Also, there is the possibility that participation in network communications does not fully provide the experiences and training necessary for upgrading. We shall keep these aspects in mind in future proceedings.

13. For the individual General Class or Conditional Class operator finding the overcrowding on 75 meters intolerable, he may select another frequency band or omission for his amateur radiocommunications. He may also improve his skills, upgrade to a higher class operator license, and earn additional frequency privileges. The new frequency allocations adopted in our Report and Order present new opportunities in the way of upgrading incentives. We believe every amateur radio operator should be encouraged to develop the ability necessary to meet the requirements of the next higher license class.

14. While it is correct that amateur radio nets undoubtedly do have value to the public, it is also true that the Amateur Radio Service can be more effective when the individual operators have advanced their communication and technical skills. Indeed, it appears from the information supplied with the Petition, that a significant percentage of the frequencies allocated to the Amateur Radio Service are heavily occupied by net operation. Yet, ARRL did not include either quantitative or qualitative data on that type of amateur radiocommunication being accomplished in the name of public service.

15. Although we have not been provided a comprehensive report of the complete activities of amateur radio operators in providing radiocommunications for the public during the 1972 disasters, we are aware it (Continued on page 9)

Oskar Brin, OE1BWV, QSL Manager, Österreichischer Versuchssenderverband, P.O. Box 999, Dachverband, A-1013, Vienna, Austria. Dear Oskar:

We are pleased to follow up the letter of our Secretary Ken Robinson, VE3CRL. Our National Canadian Q.S.L. Bureau has now established.

The official address is: NATIONAL CANADIAN Q.S.L. BUREAU, P.O. Box 66, Ingleton, Ontario, Canada M9A 4X1

It is my pleasure to be the manager of this new bureau. Incoming cards from all countries except U.S.A. will be promptly distributed to each Provincial Bureau in Canada.

My assistants in the Bureau will be licensed amateurs who are privileged to wheel chairs. It is a group I have had the privilege to train and develop into amateur operators. They eagerly look forward to this opportunity to serve fellow amateurs around the world.

Sincerely 73 Len Sumner, VE3DOR, Canadian National Q.S.L. Bureau.

Docket 19172

(Continued from page 7) was extensive and excellent. Reports received in due course once amateur radio communication systems were set in addition to 73 more radio-telephones, including VHF-FM repeater stations, and radiotelegraphy. Also, the Citizens Radio Service provided some of the needed communications. As noted by the petitioner, during the discussions of 1972, the Commission did decline certain frequencies for use only by amateur operators participating in emergency communications, when necessary. It is clear there are provisions to make the necessary frequencies available to amateur operators in an emergency.

16. The Saignan Petition does not submit any evidence supporting the claim that amateur single sideband transmitters and transceivers normally cannot be operated at the maximum power level authorized for the Novice Class. In fact, we are not aware of any that do not. Should there be such units available to amateurs, they would be unsuitable for Novice Class operation, but this is not sufficient reason to require crystal control.

17. Additionally, we are not overly concerned if the Novice Class operator initially does not construct his own transmitter. While it would be valuable experience for him, his main concern should be to develop the skills necessary to obtain the General Class license. Our experience in conducting many thousands of these examinations each year has proven the primary problem for applicants to be difficulty with the telegraphy examination. For this reason, we recommend Novice Class operators concentrate their amateur radio activities in this area. The amended rules should result in increased operating flexibility which should assist every Novice Class operator in acquiring the necessary telegraphy skills.

18. After consideration of all factors raised in the two petitions, we conclude that the amendments to the Amateur Radio Service Rules as adopted by the Report and Order, FCC 72-849, on September 27, 1972, in Docket 19162 are reasonable and in the public interest.

proviso if this change is made. There will be a considerable delay between any support given to the former request by the ARRL Board and any action that can be taken by the FCC. The position of the Federation is that the necessary expansion of the Cdn phone frequencies be granted as soon as possible.

ARRL Withdraw Support

Discussion on the CARF request then took place and the representatives of the ARRL adamantly refused to consent that any expansion was justified or necessary. As they rightly acted as the spokesman for the 3,000 and Canadian members of the League, the D.O.C. (and quite correctly) took the position that, as they were faced with representatives from two large segments of the Canadian Amateur Experimental Service with unimpeachably opposing views, they would enter any action until they had carried out a poll by mail en masse to the individual Amateur on the issue for expansion and would base future action on the results. This poll would be conducted in early December.

The Federation regrets that the ARRL took this position which we believe neither representative nor in the best interests of the Amateurs of Canada. We apologize to the provincial members for our failure to gain action on their request. We can see that the D.O.C., being faced with an awkward situation, had no alternative but to defer action.

The Canadian Amateur Radio Federation Inc. earnestly requests that the contents of this report be published as widely as possible so that the individual Amateur can see the necessity for expansion of the Cdn phone frequencies and base his decision on the facts and figures here presented.

Additional official information on this problem will be found on page 9.

CENTRAL CANADIAN QSL BUREAU OPENS

Until recently Canada has not had a National operating QSL Bureau. Foreign cards were usually sent via the VE1 Bureau or via the United States and forwarded to each individual provincial bureau across the country. Most of the overseas societies could not afford the postage to send direct to these individual bureaus. Now Canada has opened an all-Canadian central bureau and will undertake the distribution of all incoming Canadian cards.

This was brought about at the suggestion of the Austrian Amateur Radio Society (Österreichischer Versuchssenderverband) who learned of the Federation's incorporation as Canada's National organization through a notice in the I.A.R.U. Region 1 News, and queried C.A.R.F. as to the possibility of establishing their own Canadian Bureau.

C.A.R.F. acted quickly on the request and with the full and enthusiastic co-operation of groups of disabled amateurs in the Toronto area has now set up a fully operational system which is prepared to collect, sort and forward cards to the correct district bureau for onward transmission to the individual amateur. This bureau, which fills a long standing vacuum in our distinctly Canadian identity, will be entirely operated by the "Wheel Chair Gang" of disabled amateurs under the direction of Len Sumner, VE3DOR. Announcement of the opening of the new Bureau was made in a letter from Mr. Sumner to the Austrian gang as follows:

THE RATIO ON ALL BANDS IS 4:1 (The 40 and 75M bands include the proposed US and Cdn expansion frequencies, i.e. Cdn phone 3650-4000 kHz on 75M).

3. In 1969 the frequencies 3750-3800 kHz were becoming over-crowded due to the steadily increasing number of Cdn phone operators using these frequencies for aero and medium distance operation. They were saved by the introduction of the US Incentive Licensing Plan and found that, owing to the lack of incentive for the US Extra class operator to use the frequencies 3800-3825 kHz, "clear" channels could be found for Cdn phone operation. Frequencies above 3825 kHz, used by the US Advanced and General classes were as crowded as our own.

As more and more Extra class operators qualified, openings became fewer and fewer. The US Extra class now EQUALS the TOTAL NUMBER of Canadian Amateurs and is increasing at a fast rate as the Plan achieves greater acceptance.

International DX Possible

—holds a great incentive for it allows this class to work international DX stations on frequency — some thing they have not been able to do previously. The International DX Window occupies 3790-3800 and, with the sun spot cycle ebbing to a minimum in 1973, more and better DX openings will occur and the present hope of finding a "clear channel above 3775" will virtually disappear.

This leaves only 3750-3775 kHz for ALL Cdn net, traffic, phone patch operation and general rag-chewing and Cdn phone operation will be drastically affected unless additional frequencies are assigned for Cdn phone use.

4. It is evident that the FCC cannot change US assignments on the request of Canadian sources. Such a change must be requested or approved by the ARRL as the US national society, to carry any great weight. The request to re-assign Novice frequencies made by CARF and the Cdn ARRL was rejected by the League Board of Directors and will not be forthcoming if Canada maintains the status quo.

The request by the Federation for expansion of phone frequencies to 3650 kHz carries the proviso that, if and when, US Novice frequencies are moved below 3700 kHz, Cdn phone frequencies should revert to a lower limit of 3700 kHz.

5. The request by the Federation for expansion is based on the necessity for the Amateurs of Canada to have phone frequencies entirely separate from those used by the Amateurs of the United States. To accommodate the increasing use of phone on 40M and the over-crowding now present in the Cdn 75M phone portion, it is now necessary that the Cdn phone bands be set at 3650-4000 and 7100-7300 kHz.

"Greedy Canadians"

These points outlining why Cdn expansion is necessary and justified. Note particularly the ration of CW channels on 20,40 and 75M under the proposed US and Cdn expansions. There can be no justification for passionate outcries re "CW restrictions" and "greedy Canadians"—an analysis shows that the resulting expansion will give identical ratios of channel occupancy on both bands.

Note the action CARF considers necessary to cause a change in the Novice frequencies on 75M and the

D. O. C. TO POLL

(Continued from page 1) quency by an equivalent or greater amount. Where regulation changes are required, they will be forthcoming. In Canada we have been assured of this by the Department of Communications. And: "While Canadian voice operation could and undoubtedly would be moved to some lower portion of the band such as 3650-3700 kHz in order to avoid Novice interference."

The request made by the Federation to the Provincial associations was circulated one year after Docket 19162 was published so that the answers received can be considered those of deliberation and thought. On expansion on the 75 and 40 metre bands, there was unanimous agreement to match expansion by the USA on both bands with the proviso that this matching on 75M would stop at 3700 kHz provided the Novice frequencies were moved below 3700 kHz if not, CARF was to request sufficient frequencies below 3700 for viable phone operation. Two additional requests have since been received — one provincial group wanted the lower limit on 75 to be 3600 kHz; another wanted lower limit of 7050 on 40M. NO opposition to the original course of action has been received from any provincial association nor from the ARRL until two weeks before the meeting when the ARRL published and circulated a "Canadian Division Newsletter" requesting time for a "discussion and decision making and avoid the possibility of precipitate action." The League had almost six months for "discussion and decision making" and it would seem that they are the ones guilty of "precipitate action" — not the Federation and its members.

Reason For Request

The Federation bases its request for action on the following points:

1. While CW operation can be carried out in the presence of SSB interference without serious impairment of communication efficiency, the reverse is certainly not true. This means that net, traffic and phone patch operation can not be satisfactorily handled between 3700-3750 kHz due to the CW interference from the US Novice. This statement is substantiated when it is realized that there are NO phone traffic nets operating on these frequencies after 1800 hrs ED(SYT) when this interference reaches large proportions. Phone operation below 3700 will encounter QRM from the US and Cdn CW operators now using these frequencies. These operations would have been curtailed if the US Novice frequencies had been reassigned and trust that, in the best traditions of the US and Cdn Amateur, these operations would be moved below 3650 kHz.

2. The FCC has carried out a survey, mentioned in Docket 19162, about the relative need for occupancy by US CW and SSB and must conclude that the ratio they have on the 20 and (new) 40M bands is acceptable for proper operation by both modes. Allotting 3 kHz for SSB phone, 500 Hz for CW and disarding frequencies used for Novice and Cdn phone operation outside the US voice allotment, we have the following break-down: 20M—US SSB—150 kHz—50 channels; 40M—US SSB—150 kHz—50 channels; 75M—US SSB—225 kHz—75 channels; US CW—100 kHz—200 channels; —100 kHz—200 channels; —150 kHz—300 channels.

organizations of Quebec and Saskatchewan. Why is this? It now seems petty in the extreme not to support CARF, for whatever reason. What is it that specifically stops these two groups from giving and receiving support? Must there always be a dollars and cents advantage before these two provinces join CARF and ensure Canadian solidarity for Canadian Hams?"

British Columbia

Banver Valley A.R.C. recently decided to write to the D.C.K. and N. Falon that their club was in favour of asking downward expansion of the phone bands thus giving us extra space on the airwaves for the phone boys.

Reading the reports from B.C.A.R.A. they are having some trouble in getting club representatives to attend the meetings. VE7FB is doing his best to hold things together, a new procedure is being proposed, whereby a Committee of not less than three will be formed, they will conduct the business of the B.C.A.R.A. and prepare a news letter to be mailed to all clubs, members and non-members. Dues will be \$1 per licensed club member; twenty-five cents goes to CARF. This proposal of VE7FB is gaining some support.

That's it, gang, for January 1973, will try to get some propagation information in for February, 1973, 73 de Rowland VE3AML.

VE NEWS BOOKSHOP

General Delivery
COURTRIGHT, NON IHO
Ontario, Canada

- Radio Communication Handbook by R.S.G.B. \$10.00 pp
- Ham Handbook for the Beginner for Canadians \$4.95
- Ham Handbook for the Advanced for Canadians \$4.95
- Amateur Radio Techniques \$3.45
- IHF/VHF Manual \$3.50
- Ham's Interpreter by DL1CV \$2.25
- Morse Code for the Beginner .60
- Jim Kitchin's Amateur Licensing Call Book Only \$4.00

R.S.G.B. DIAMOND JUBILEE

23 December 1972

President
Radio Society of Great Britain
35 Doughty Street
LONDON WC1N 2AE

On behalf of the Officers, Directors and members of the Canadian Amateur Radio Federation Inc. I wish to extend best wishes and congratulations to the Society on reaching its Diamond Jubilee in 1973.

Since our beginnings in 1913 as the "London Wireless Club" to the present day, the Society has always been in the forefront of development of the Amateur Experimental Service with your monthly bulletin—"Radio-Communications"—, the Handbook and other technical publications finding an honoured place on many Canadian Amateur book shelves. A large number of Canadian Amateurs have retained strong ties with the "old country" by membership in the R.S.G.B., visits to your headquarters when travelling in the United Kingdom and by frequent, pleasurable contacts with the "gang from G-land".

May your Society go on to greater heights of development, achievement and service to the Amateurs in the years ahead.

Sincerely yours,
Arthur E. Blick, VE3AHU, President

VE News Corner
(Continued from page 4)

whether an amateur belongs to the ARRL, CARF or other amateur organization.

This will enable us to make a decision based on facts rather than conjecture. We will keep in touch with your association throughout the whole process. Yours truly,

W. J. Wilson,

Director General, Telecom Regs Branch.
NOTE: If you belong to the Provincial Association in any province except Sask. & Que. you do belong to CARF. It seems incongruous that the D.O.C. should question A CANADIAN organization over a foreign based organization. Also that they should consult the F.C.C.

Metro A.R.C. run a net for first year operators to gain experience in simple net operation on CW. The net meets at 9:30 pm Mondays at about 3690 KHz.

The Ontario Science Centre reports that the paid attendance during the five days of "Ham and his World 1972" was 14,109 persons, over 2,000 more than the previous record for the same period two years ago. More than 125 Radio Amateurs assisted this Amateur Radio Exhibition.

It is reported that Rene Levasseur, VE3FO, our congenial Chief Radio Inspector at London is officially retiring. Haven't heard who takes his place.

Manitoba

VE4SE reports that all licence plates go through the computer, except the VE4's call letter licence plates. The VE4 plates must still be done by hand. He asks that if you have not done so, please pick up your plate 770 McDermot Ave., Winnipeg, R3E-0T5, Manitoba. The additional cost is \$5. So how about contacting him for more information.

Mr. C. (Charlie) Grove, VE3CT has been appointed as the CARF Legal Counsel.

As of September 21st, 1972, a reciprocal Amateur arrangement between Canada and Guatemala has been concluded.

Also all Commonwealth countries are eligible for reciprocal Amateur operating privileges in Canada unless there is evidence that such a country does not grant reciprocal operating privileges to Canadian Amateurs.

Full list of Banned Countries, Third party traffic, and reciprocal agreements will be published if there is sufficient call for them.

Alberta

Basil Barnes, VE6BB, writes a topical editorial in VE6. Quote: "With the very welcome news of the FCC has now allowed American expansion into the 75 and 40 metre phone bands, there should be no longer any doubt in anybody's mind that we do need a Canadian organization separate from ARRL. While the ARRL is undoubtedly a worthwhile organization, it cannot adequately reflect a Canadian viewpoint, especially when the Canadians form a small minority of its membership."

It is rather distressing to find out that there are still two provincial organizations across this country who do not belong to the CARF. These are the Provincial

as might be needed by long distance pipelines, could be agreed as a fringe operation. Furthermore, service between points in the other country could be agreed either in the event of catastrophic failure in the other country's system or during limited periods of time when there was an insufficiency of facilities in the other country. In all of these cases, the specific approval of appropriate governmental authorities in both countries would be required.

"Both the Canadian and United States governmental authorities concerned are optimistic that if and when parliamentary action is completed, a new avenue of fruitful co-operation in the telecommunication field will have been opened up between our two countries," Mr. Stanbury said.

STOP PRESS ITEM

With the election of Lloyd Passingham VEGADI to the Council of Sarma Township, Lambton County, we now have two Radio Amateurs on Councils the other being Rowland Beardow VE3AML on the Village of Courtright Council.

MOBILE LOGGING CHANGE REQUESTED

The Amateur Experimental Service is the only radio service which requires that mobile stations log on the same basis as fixed stations. This requirement does not promote safety on our highways, unless, as is so often the case, the rules are ignored or at least bent.

The Federation, to promote safer motoring, has asked the D.O.C. for a relaxation of the rules as they apply to mobiles. Results will be reported in a later issue of The Canadian Amateur.

LETTER TO THE EDITOR

Canadian Amateur Radio Federation,
P.O. Box 356, Kingston, Ont., K7L4W2
Gentlemen:

As the result of information gained late tonight during a round table QSO on 80 meters with several VE1's and VE3's I am enclosing my cheque for \$4.00 for membership dues in your association.

I feel that many Canadian Hams will be taking similar action, because it is obvious we need strong representation particularly at this time, and from an exclusive Canadian Association such as yours. 73's

John A. Palmer, VE1XI, Fredericton, N.B.

SOME RECENT ACTIVITIES

Requested that Canadian phone sub-frequencies be expanded to compensate for the loss due to United States expansion on 75 and 40-meters.

Established a Central All-Canadian QSL Bureau—P.O. Box 66, Islington, Ontario — to receive incoming cards from foreign DX and other parts of the world and circulate them to existing area bureaus to facilitate receipt of cards by the individual Amateur. This bureau is operated by the Wheel Chair Amateur Radio Group under the management and direction of Len Sumner, VE3DOR.

Requested that Amateur licence fees be reduced for pensioners in receipt of the supplementary income allowance, White-cane and handicapped Amateurs.

Joint request with the Canadian Division, ARRL, to allow selected senior Amateurs to have telephone access to Department of Communications monitor stations. This has been approved and guide lines for efficient operation are being formulated.

Therefore, in view of the foregoing, IT IS ORDERED, that the two petitions for reconsideration are DENIED, and the amendments to the Amateur Radio Service Rules and Regulations, Part 97, adopted on September 27, 1972, ARE AFFIRMED.

FEDERAL COMMUNICATIONS COMMISSION,
Ben F. Waple, Secretary.

TELSTAT CANADA MAY PROVIDE LIMITED SERVICE OUTSIDE CANADA

Ottawa—Minister of Communications Robert Stanbury has announced that Telesat Canada may soon have the power to provide certain limited telecommunication service outside Canada. Under its current act of incorporation, Telesat may render service only between points within Canada.

Mr. Stanbury said it has "recently become evident to Telesat Canada that additional business could be obtained if the corporation had the power to provide service to and between points outside Canada." Accordingly, the corporation applied for, and will be granted by the Minister of Consumer and Corporate Affairs, letters patent amending its powers. In accordance with the Telesat Canada Act, the new powers do not become effective until they have been before Parliament for thirty sitting days without having been quashed by a resolution of either House.

The letters patent would provide that any service rendered by Telesat to and between points outside Canada will be subject to intergovernmental arrangement. Furthermore, in implementing its new powers, Telesat intends that the added business would be incidental and peripheral to its main enterprise which is the provision of services between points in Canada. Technically the service to points outside Canada is possible only because the satellite beam, which is focussed on Canada, spills over to also cover such nearby areas as parts of the United States (including Alaska) and Greenland.

Because any additional Telesat business involving locations outside Canada is likely to be obtained mainly from United States interests, discussions between the United States department of State and the Canadian departments of Communications and External Affairs, have been held, culminating in an exchange of letters setting forth the principles governing the implementation of any augmented powers by Telesat. These letters recognize the fact that the United States' 1969 guarantee of launch services for our satellites was given on the understanding that they would be used only for Canadian domestic services. In dealing with the arrangements for the expansion of Telesat's operations, the exchange recognized the obligations placed upon Canada and other countries who are signatories to the international satellite organization (Intelsat) agreements, expected to come into force shortly. Essentially these obligations have the effect of giving to the Intelsat organization a degree of economic and technical protection against separate satellite systems, especially those with international operations, which otherwise might weaken this important global venture.

Finally, the letters embrace reciprocally the conditions which would apply should a future United States satellite system propose the provision of service to or between points in Canada. Essentially they provide that service by either country across the border, such

Lets give this "Ham" credit now!

Verna H. Bohlender
VE3 BSF, Box 416,
Chesley, Ontario

So you know ham radio. Do you really? Have you ever worked Shorty Mac, VE7AZ? Here is one of our pioneers who deserve a little credit while he is still enjoying life. Shorty MacDonald listed in the call book as VE7AZ P. MacDonald, Burnaby, B.C.

Born in Morris, Manitoba at the turn of the century, moved to Moose Jaw, Saskatchewan in 1910 when he was 10 years old. Six years later he enlisted in the army in the 1st World War. Seemed only a few years and he was back at it again in the 2nd war but this time he was in the Air Force. He has belonged to the legion ever since.

Shorty has his doubts about the proper date of his first license as he has two. One dated April 1931 and the other dated October 1932. The two license have Moose Jaw as his place of residence. What ever the license date his first Log contact shows him working 4K8 while using his call 4VL, in January 1932. He was using equipment at the Armories for these early contacts while a member of the militia. Later on he said they got him a portable (?) unit. Took four husky men to move it. Shorty laughs when he tells how he used to get heck for using the gear and it took a while to convince the officer in Charge that he was actually licensed as a Radio Amateur who had passed his proficiency test in both theory and Morse code as needed in those days.

These early rigs he used were like most of us have never used or probably ever seen. They were called "SparkGap" transmitters and to hear them would not at all sound like todays clear, clean note as we know. The letter V would like sould Buz Buz Buz Buzzzz.

Young amateurs today complain of the difficulty in finding parts but can you imagine spending up to two weeks wages just to buy a tube. Those tubes ran hot too. This gave Shorty another chuckle telling me about his early rigs...the receiver used two 101A's and the transmitter used one 101A. In operation the transmitter tube

would get very hot and have to be changed for one of the receiver tubes and for this job Shorty said he had to use a very heavy mitt. Now none of us need a mitt as part of our operation equipment, Hmmm?

Many of his early ham friends made up for their own calls until the governments set proper standards. Likely you'll know someone who has told you of these early calls.

Our Shorty has friends all over the world. Retired, he now spends most of his day running phone patches to friends and relatives from all places that legally let them run same. I believe he is known by more of us than any other radio amateur in Canada.

It was about five years ago now that I was privileged to meet him in person. I phoned from Richmond to see if he was home and proceeded there by bus. T'was a dull and dreary day and almost cold enough for a parka but things warmed up when I got closer to his home. His home was not too hard to spot for it was the only one on the block sporting a four element twenty meter beam.

He lives not far east of the P.N.E.

and at the foot of a mountain. Inside his home was everything as I imagined it to be. Neat as a pin. Picture a typical day in Shorty's life. Morning. To the kitchen for breakfast but first turn on that old short wave receiver to monitor his frequency. Perhaps while having his coffee a call comes over the air from VE8RCS in Alert Shorty coffee in hand heads out the back of his kitchen through the back storage room and down stairs to his cosy ham room. (this room should be seen by all) He turns on his equipment and when it warms up calls VE8RCS this is VE7AZ what can we do for you this morning. So the day begins. He has worked VE8RCS over 3000 times. This is ham radio, a hobby for all ages and all colour and creeds.

These pictures show him in his shack with his files either side of him. He can always tell you who you last called even if you yourself have forgotten. He has a card for everyone he works and his files must hold thousands. Just look at the walls, the ceiling everywhere are cards and pictures of people he has talked to during his long career. These come from almost any place in the world you could





think of. I just wish I'd have more time to pursue them. My visit tho short was very enjoyable and I can see him yet as he waved me on to the bus back to Richmond and to my XYL. The weather had turned so warm that I was carrying my coat.

Shorty is alone now but actually never alone. Listen in sometime on his frequency 14148. Just note all the stations calling him whether it be Canada, Bermuda, New Zealand or just someone in Vancouver. He's loved by all of us. He claims to be bad tempered but when you know him . . . no way.

Formerly with the post office now retired these past few years he finds life far from boring. He

was helping with meals on wheels around the time I visited him. He still is an active member of the legion but never has time to sit around at the club house for his ham radio is his life.

Some local amateurs helped him celebrate his 28th??? birthday lately and presented him with a new call book of which he is very proud.

Have you worked him? Like me if you have ever needed a patch into the Vancouver area you likely have. THANKS SHORTY MAC there in your shack in Burnaby. You've done and are doing a wonderful job.

One of his friends,

CP★RF NEWS SERVICE

With the interference caused by cable TV systems using Amateur frequencies becoming more troublesome, Barc Dowsen, VE3TT, the CARF rep on the Electromagnetic Interference Committee of the Canadian Radio Technical Planning Board, and Bill Loucks, VE3AR, of the CRRL/ARRL Canadian Division brought the matter to the Committee's attention at its November 9 meeting in Ottawa. The Board, made up of radio user organizations, acts as an advisory body to DOC. The

Committee recommended that the Board ask the Department to maintain the present limits of radiation leakage now permitted to cable systems. It also suggested that the DOC exercise tighter control and enforcement of these limits. In another recommendation, the committee asked that when standards for the rejection of unwanted signals in TV and radio equipment are written that they meet the most stringent rejection requirement shown as Grade 3 level in the recent edition of the DOC publication on interference, EMCAB - 1.

A REMINDER

In case you need to know where to send your letters, regarding membership renewals or errors in addresses, corrections, articles, etc., I will include this column in TCA for the next couple of months.

MEMBERSHIP INFORMATION

Corrections:

Send to CARF, P.O. Box 356
Kingston, Ontario
K7L 4W2

Do not send this information to the Editor of TCA. He cannot help you.

TCA General Articles, Letters, - etc.

Send to Editor, TCA
P.O. Box 2610, Station D,
Ottawa, Ontario, K1P 5W7
Do not send them to the Kingston office. It delays the process.

TCA Technical Articles


Send to Technical Editor, TCA,
P.O. Box 356,
Kingston, Ontario,
K7L 4W2

Contests, DX, VHF/UHF, EMCOM, CRAG columns

Send to the appropriate columnist, indicated on page 1. You may send material to the Editor if you wish, but it takes less time, and costs less if you mail directly to the columnist.

Get that phone ringing!
Got some gear you'd like to move? Use the TCA Swap Shop and get action!

Swap Shop





**Canadian
Amateur
Radio First**

WHAT IS CARF?

The Canadian Amateur Radio Federation, Inc. is incorporated and operates under a federal charter, with the following objectives:

1. To act as a coordinating body of Amateur radio organizations in Canada;
2. To act as a liaison agency between its members and other Amateur organizations in Canada and other countries;
3. To act as a liaison and advisory agency between its members and the Department of Communications;
4. To promote the interests of Amateur radio operators through a program of technical and general education in Amateur matters.

OFFICERS

President	VE3BID	Don Slater
Vice-President	VE6XX	Fred Towner
Imm. Past President	VE3NR	Bill Wilson
Secretary	VE3KJW	Don Emmerson
Treasurer	VE3IWH	Lorna Hill
General Manager	VE3AHU	Art Blich

BOARD OF DIRECTORS

If you want to contact the Federation, write or call a Director in your Region or write to CARF, Box 356, Kingston, Ont. K7L 4W2.

VE7AB Peter Driessen, 13142-69 'A', Surrey, B.C. V3W 6N9. 604-732-3298.

VE5AE Norm Walther, 1547 Glendale St., Moose Jaw, Sask. S6H 7B3.

VE3HWN Craig Howey, No. 304 598 Silverbirch Rd., Waterloo, Ont. N2L 4R5 519-885-4545.

VE3KCE G.R. (Geoff) Smith, 7 Johnson Rd., Aurora, Ont. L4G 2A3 416-727-6672.

VE2BIE Raymond Mercure, 208 Bourque St., Hull, Que. J8Y 1Y4. 776-6495.

VO1NP Nate Penney, Box 10, Shoal Harbour, Nfld. A0C 2L0. 709-466-2931.

OPERATION INFORMATION

RECIPROCAL OPERATING AGREEMENTS

Canada has concluded agreements or arrangements with the following countries to permit licensed Amateur radio operators to operate radio stations while temporarily in the other country: Australia, Austria, Barbados, Belgium, Bermuda, Botswana (Republic of), Brazil (Federative Republic of), Chile, Colombia, (Republic of), Costa Rica, Denmark, Dominica, Dominican Republic, Ecuador, Finland, France, Germany (Federal Republic of), Greece, Guatemala (Republic of), Haiti (Republic of), Honduras (Republic of), India (Republic of), Indonesia (Republic of), Iceland, Ireland, Israel (State of), Jamaica, Luxembourg, Malta (Republic of), Netherlands (Kingdom of the), New Zealand, Nicaragua, Norway, Panama (Republic of), Peru, Philippines (Republic of the), Poland (People's Republic of), Portugal, S. Lucie, Senegal (Republic of the), Sweden, Switzerland (Confederation of), United Kingdom, United States of America, Uruguay (Oriental Republic of), Venezuela (Republic of).

Negotiations for the establishment of similar agreements or arrangements with the Republic of Bolivia, Cuba, Japan and Italy have been initiated.

How to use the CARF QSL Service

The CARF Outgoing QSL Service will forward your QSL cards to anywhere in the world. This service is **free to CARF members**. If you send a lot of cards, a CARF membership will soon pay for itself in view of the high cost of postage when cards are mailed direct.

Please observe the following rules when using the CARF Outgoing QSL Service:

1. Sort cards alphabetically by prefix.
2. Sort Canadian cards numerically by call area.
3. Place small lots of cards in strong, heavy envelopes and seal securely. Wrap heavier packages in strong paper or put in cardboard box. Tie securely. Do not staple!
4. Address your package as shown in the diagram.
5. **Do not register the cards.** This only delays them, costs more and is not really necessary.
6. If you want proof that CARF received your cards, enclose a self-addressed, stamped postcard or envelope with 'Receipt' marked on it.
7. If a package should be damaged on arrival (very rare), CARF will send you a list of cards received so that you can check if any were lost.

(For an explanation of QSL Bureaus in general, see the CARF Regulations Handbook chapter on QSLing).

Name, call Return Address CARF Membership No.	PRINTED MATTER	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> Correct Postage </div>
CARF National QSL Bureau P.O. Box 66 ISLINGTON, ONTARIO M9A 4X1		

BANNED COUNTRIES LIST

The following countries have notified the International Telecommunications Union that they forbid radiocommunications with Amateur stations under their jurisdiction: Democratic Kamuchea, Iraq (Republic of), Libya (Socialist People's Libyan Arab Jamahiriya), Somali Democratic Republic, Turkey, Viet Nam (Socialist Republic of), Yemen (People's Democratic Republic of), Zaire (Republic of).

THIRD PARTY TRAFFIC AGREEMENTS

Canada has concluded agreements with the following countries to permit Amateur radio operators to exchange messages or other communications from or to third parties: Australia, Bolivia (Republic of), Chile, Columbia (Republic of), Costa Rica, Dominican Republic, El Salvador (Republic of), Guatemala (Republic of), Guyana, Haiti, Honduras (Republic of), Israel (State of), Jamaica, Mexico, Nicaragua, Paraguay (Republic of), Peru, Trinidad and Tobago, United States of America, Uruguay (Oriental Republic of), Venezuela (Republic of).

Negotiations for the establishment of similar agreements or arrangements with Ecuador and the Federal Republic of Nigeria have been initiated.

Amateurs who wish to operate in Commonwealth countries other than those listed above should apply to the embassy in Canada or directly to the appropriate regulatory agency.

Infosection

CHANGE OF ADDRESS

Considerable time is wasted by having to search membership records of incomplete information sent to the CARF Office. For example, the Office has received requests like this: Have moved to B.C. so please change address, etc., to J. Blow VE7XXX (new call), 123 Jones Ave., Smithville, B.C. V9Z 1B6. Membership records are held in the computer system and a search can be made by *call, membership number or postal code only*. But, as none of the above is given for the former address, we cannot update label data until this information is received. The coding (first) line of your label contains this data, so please copy this out and send with your request for change, renewal, etc. so that an update can be made.

Swap Shop

Single insertion is \$1.00 (minimum charge) - 10 words and \$1.00 for each additional 10 words. To renew, send copy and payment again. Deadline is first of month preceding publication (e.g. Jan 1 for Feb. issue). Put your membership number and call (not counted) at the end of your ad. Print or type your ad and include your address with postal code. If using a phone number, include the area code. TCA accepts no responsibility for content or matters arising from ads. This feature is for use of members wishing to trade, buy or sell personal radio gear. It is not open to commercial advertising. Send to: TCA Swap Shop, Box 356, Kingston, Ont. K7L 2W2.

FOR SALE: Heathkit ET-3100 A Electronic Design Experimenter. Like new \$85.00 includes shipping.

John Benson VE3JJH - 628 Second St S., Kenora, Ont. P9N 1H 1. 807-468-5629.

FOR SALE: Kenwood TS520S with installed CW filter WH-3395c, remote VFO 520S, speaker SP520 and manuals. Original Packing containers. Price \$825 w.r. (Bob) Campbell, 1454 Woodward Ave, Ottawa, Ontario. (1-613) 7297536.

FOR SALE: Kenwood TS-520-s with installed CW Filter HY-3395c, remote VFO-520-S, speaker SP-520 and manuals. Original packing containers. Price \$885. Bob, VE3KLLK, 1454 Woodward Ave, Ottawa, K1Z 7W 3. (613) 729-7536.

FOR SALE: Heathkit Station. CB401 transmitter with crystal pack, SB30 Receiver, desk mike, all cables and manuals. Some spare tubes. All for \$425.00. VE3GTF, Box 100, Green Valley, Ontario, IOC 1 LO, Tel (613) 525-2092.

FOR SALE: \$5000 worth of radio equipment, incl. Yaesu transceiver, 2 Kw lin., and TH6 DXX beam, for \$3500. All current-

ly in operation. Moving, prefer to sell as one lot. For more information, detailed list, and possible sked, contact: Lear Warner, VE3CDA, 11 Lowther Ave., Toronto, Ontario M5R 1C5 or Road McFadyen, VE3HDQ at 1-416-929-0161.

FOR SALE: TRS 80 Computer and Macrotronics Terminal Interface complete cables and manuals - computer course - one package \$1100.00 VE3DAX Howie Vardon 36 Roosevelt Ave Apt 4 Ajax, Ont. L1S 2L4 - 446-683-7562.

FOR SALE: Attn Serious Homebrewers Clubs:- tubes, New, Jan, 3-500Z, 4-400A, 4-250A, 4-125A, 4-65, 4X150, Kit: 4-1000A (new), plate cap, chimney, socket, lp filter, fil xfmr-\$150.00 FOB Montreal; Hybrid Patch w/vu mtr, mon/mi;; sw. \$60.00; write VE8YQ, P. Mac-Dougall, 570a Ferry Rd., Winnipeg R3H0T7, or VE2KQ, 4656 Delormier, Montreal H2H2B4 for info.

"I am looking for an Amateur who can offer a monthly or by-monthly 2-way to the Hopewell Nova Scotia area exchange No. 923. Also looking for the same to

Prince George B.C. Please contact Jerry Daminato VE3 IX3, 262 Water St., Guelph, Ont., N1G 1B7, 519-821-5465."

FOR SALE: Health Kit, SB101, LM0-640, HP23A, Speaker \$350.00, SB-200 \$550.00. Jim Nazar 20 Main St., Flin Flon, Man., R8A 1J4.

WANTED: Collins 312B-4 Station Control and 30L1 Amplifier. VE3GCO Garry Hammond, 5 McLaren Ave., Listowel, Ontario N4W 3K1. 519-291-4813.

Sell Collection of thirty years new boxed receiving tubes only one dollar each. Send you lists of tube requirements for availability. Sell Mint Collins 75A-4 receiver with 3 filters only \$295.00 Milton Levy W5QJT P.O. Box 13151 E.P. TX 79912.

FOR THE SERIOUS HF OPERATOR: Mint, Collins KM-380, fully loaded, Features: 8Hz, 2.2KHz, 1.7KHz, 360Hz, 140Hz filters, speech processor, noise blanker, blower, desk mic, manual. Transmit capability anywhere up to 30MHz. Complete package only. Must sell. Contact Bruce, VE2QO Box 392, Dorval Airport, AMF, PQ. H4Y 1B1 (514) 472-2629.

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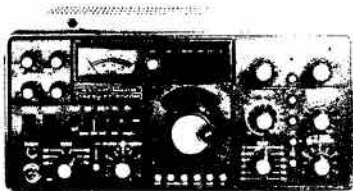
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Cardwell variable capacitors. Model 1200 us. In makers box, size 12x6x6. Capacity 1200pf, spacing 0.094 inchs. \$25.00.

Micromatch RF pwr indicators, MC Jones model 5724. Uses 1N21A xtal, with 200ua meter calibrated 0-200 watts. Removed from equipment. \$12.00.

17" Conrac video monitor type CM17. \$30.00.

Coax antenna changeover relays, Dow key type, 6Vac coils, coax fittings. \$15.00.

Aircraft ADF loops, motor driven, selsyn takeoff, Marconi type 710B. Approx. 12x10x7, wt 4.5 lbs. \$10.00.

Aircraft cockpit instruments, electrical type, Omni bearing indicators; DMET distance indicators; radio compass indicators. \$5.00 each.

Hewlett Packard VTVM model 400C 0.001 to 300 volts AC in 12 ranges. \$15.00.

5CP1A CRTs New \$6.00

Military transmitter/receivers type RT5010/PRC510. Covers 38-55MHz. Less battery box with telephone handset and 7 section vertical antenna. \$25.00.

Marconi marine DF loop, shielded crossed loop type, each loop approx. 3 ft. diameter. With mounting plate and coax cable. \$25.00.

Bird low pass 420MHz filters Coax N fittings in and out. \$1.00.

Filament xmfrs 110v 60Hz. Sec 6.0v at 9.2A, 6.0v at 0.75a, and 6.3v at 5.2a. Useful for 4cx250/150/300 tubes requiring 6v. \$2.00.

Centrifugal blowers 110v 60Hz. Sealed motor, double shaft. Squirrel cage one end with ducted housing. Approx 10x6, 3400 rpm 1/40 hp. \$10.00.

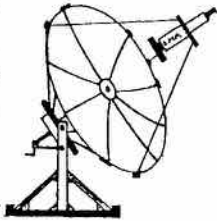
813 tubes, new \$20.00
4-400 tubes, new \$75.00

Roller coils for VHF. 2½ turns silver plated 3/16 wire. Coil 1x1¼D. Mounted on silver plated base plate with ¼ inch drive shaft. \$2.00

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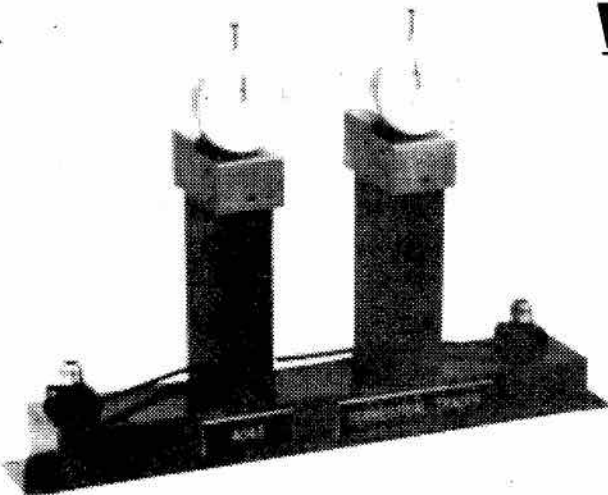
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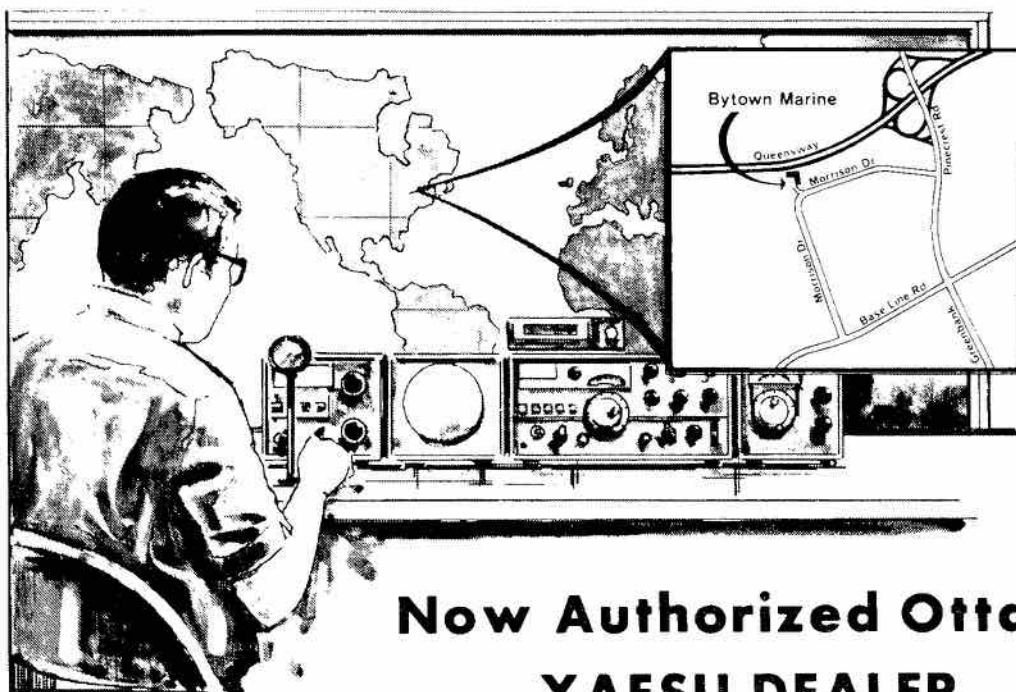
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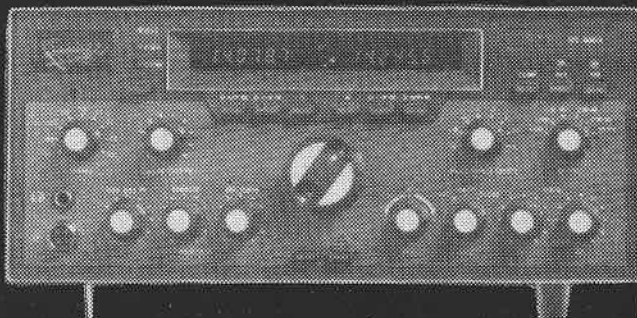
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