

The Amateur Radio League of Manitoba Inc.

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





Editorial.

The digital course for amateurs is now underway at Red River Community College and is well attended, with approximately 15 hams, including yours truly. The course consists essentially of: -

1. Logic concepts, symbols, gates, truth tables, expressions and boolean algebra.

2. Binary rumber systems, flip-flops (mono and bi-stable).

3. Counters and shift-registers.

Display methods (numeric).

5. Applications.

Those who could not make it to these sessions, and others who desire this valuable information, may have an opportunity this fall. If participation is adequate the course will be repeated at RRCC as part of the regular Evening School Program commencing in September.

I have also had requests for a course in linear IC's i.e. voltage regulators, operational amplifiers and frequency response, etc. If enough interest is indicated (contact yours truly) perhaps this course can also be inaugurated this Fall.

ARLM e ections for Directors in all areas of Manitoba are coming up soon. $\frac{\mathrm{Don't}}{\mathrm{torget}}$ to get in your nominations for your district (see elsewhere). Also, $\frac{\mathrm{don't}}{\mathrm{done}}$ to mail in your membership fee of \$2.00 for ARLM-1973 if you have not done so.

Having first read the February QUA I must accuse VE4SW of presenting several prejudiced editorials. In addition I must also accuse him of not being an ARLM member, if only to receive the Manitoba Amateur and be "up" on amateur news, a thing which I believe is necessary for any active and interested amateur in Manitoba. Moreover I must admonish him for not keeping an open ear at the last WARC meeting when, in no uncertain terms, he was informed that ARLM had advised members of the activities of CARF, a fact which did not investigate. Again, I must admonish Sandy for not taking a positive attitude towards the CARF/ARRL "growing pairs". He even admits in his editorial "we should have our own national body."

VE40L

ARLM NEWS



THE PREZ SEZ

By the time this issue is in the mail, all those who are associate members of G.A.R.C. small have received their copies of the newly revietlized manufactor. This publication will be the voice of G.A.C.C. and the support of a c.A.C.C. combers, can provide. Coordinately copies will be mailed to the executives of irrefrictal organizations, the class Globs.

As an associate membership scott of cA.C.C. - much less than the price of a promage of ciparettes we saly - we can receive a National Analeum agazine, which is long over me. It will contain information, news, technical orticles, recomberly, as well as bouguets, and editorial consent.

As VI4's, we should take pride in the fact that C.E.R.F. Started in Manitoba; as Canadians we should endwayour to make this pur voice of Va.

Do. VEGAI.

A.R.L. L. INFO.

An abore visted A.R.L.X. executive modifing was held in minnipe; (due to the instillty of the Fres. to make it to premion)! High on the agerca was the resignation of Rolly, V.ARS, for many years for stallers breasurer. All present felt that his long and nor itorious service in adir aching stalling, lotter writter, incoverping and careful heir to the rot of the avecative should not be unrecognised. The motor helly, what i took he all server as fa thirtly as you have.

Let, WHANG, is the rest Treatment and will be sufficient to take your dailing stip of the sufficient o

inclination of a commuter criedwood type of V.A Cast Book to in page and will, in the first instance, be called to all VoAta. Debeguent only be well only be well to A.R.L.A. members of record.

An "on the min's recentive meeting is proposed for 3%5% hz, after the traffic not accountry, 15th February, 1573. Round all executive members loss advice if this is convenient. In agenda will by smiles.

as dection of irectors teached as into school 1973. A soliciting Committee is required - sector recotive meaning, and self-as regular to sorp, please for any their resource to an suggestions for a time sufficient of meeting. By only thought a that the drawing dring Adealor signt be as speed a time and place an any. This can be also maded at our "operation air" meeting.

BETT OF FIRE DE YOUR LICENSE LATEST

Amateur Radio Teague of Manifolia

ARLM DIRECTORS - PLACTIONS

According to the ARM Constitution Article 73 - "Resinctions for Directors for each district such be substitted in writing to the Secretary not later than the "irst day of March in each year, and must been the signature of at least three (3) full members residing in the district for which resinction is made, as well as the consent of the resince".

Your present Directors are:-

lastern	1. Stave Gmishola	VC4AT 1 resident	
	2. Job Frawles	VD4JK V/Fresident	
	3. Torrillia	V645% License Flate.	3
	4. Let Herrington	VE4QL Transurer	
**	recordy replaced Rolly	Crull, ValaRS.	
Western	1. Ron Samehuk	VII4 <i>3</i> R	
	2. Dave Snydal	VENAXI.	
<u> horshern</u>	1. G.C. (Chris) Attwood	VE AND	
	2. W.C. Russenholt	VEARL	

Vn/40L.

INFILIATION FORM	
We hereby nominate	
as Director for the	area
Signed 1.	date
2	···
3	
Concurred (monines)	
Mail to ARLM, P.C. Box 475, Winnipeg, R3C-2J3 by Earch 1, 197	3.

FLIN FLOW NEWS - V -4NW

We have lost Percy Finault, VEAT, who has moved to Kamleops, B.C. but we have several others who have taken C? training with VEARH (who is let class CN operator) and theory with VEASC (Len Creighton) who has excellent training on theory. All some of thus tack is the guts to take the spam!

How do you get through that it is not that here, even if they fail the first time?

Rom, VS4QN, has given invaluable help in the phone catch in this area. works for Churchill Fower and spends so many days at Island Falls, north of here, where he has been heard working portable.

B.1. Kirkwood, VEAMQ, just returned from a 6000 mile round trip in a new car - Montreal to Vancouver and points in between. Bill will be retiring in about a year and expects to go to Coast.

Myself, I have been enjoying God's Country and the beautiful lakes up here with my 50 HP Marcury and trying to catch some of the Big Fish we have. Also working portable from my cabin at Baker's Narrows 20 minutes south of here. The 10-10 Club on 10 meters interests me and a lot of other people when 10 maters is open.

V.44SC (Len) is active on Amateur Radio Teletype - Len had a high wind blow down his been autenna this last summer but everything back to normal again.

V WHM is working contests and scoring points. Howard and Len (mairly) held a successful Field Day CV operation.

Harry, VEANW.

HI D-HALL TOBA ALSO DIPRO. DAUGHIN.

- Value Busy settling in to new quarters. Left a new house for a larger, old one so he would have more harming room. Also because there was a large, convenient maple tree trunk to tie his beam to.
- VEANA New addition to the retired list. Still works a few hours a week when it doesn't interfere with his wine making.
- VEARL Rigless for some time. Sporting a huge station wagon that should have room for another mobile.
- VEARZ Last we heard of him be was headed west but would bet we haven't heard the last of him.
- VELHP It was either a new rig or a trip to the eld country and he ended up with neither. Let's make it this year Larry.

 VELAW - Rig covered with cobwebs but he claims he LISTENS a lot!
- VELVL Barney, one of our patriarchs. Held the call VE4CU in Roblin in '46 and was VE4AEE before that in Swan River. Works 15 and 40 CM and doesn't turn down any DX.
- VEXUED Our newcomer. Formerly a VES and still trying to get his SRI50 on the bands.
- VE4S3 Our executive director. Does everything but operate.
- VEAPA There will be less QRM come spring.
- VEANB Ebullient Noel. We met him at Xmas time in that store and had a good yack with him and his XYL.
- VEADP The saint from Ste. Rose. Hasn't been heard from since November.

VEAPA.



OTTO H MEGINBIR VE60H 1170 BASSETT CRESCENT, N.W MEDICINE HAT ALBERTA TIA 629

WHF COILLICATIONS is a quarterly magazine published in February, May, August and November. Each edition contains approximately 60 pages of technical information. Most projects described are available in printed circuit board kit form. Normally, all furts the each in Germany, and had its beginning in 1969.

SUBSCRIPTION RATES

Corrent year, or 1952	\$4.70
almaail	5.95
All back issues, 1969, 1970, 1971.	
plus binder	12.00
single copies, any year	1.35
aimail	1.75

Airmail, postage on kits, customs duties, etc., are the responsibility of the subscriber. All items are sailed directly to you. A complete price list of all kits is in the making. The following kits and list is a sample of what is available:

Digital callibration generator - S 1.C.'s, ? diode, ? Mhz. crystal, outputs of 1 Mnz, 500 Khz, 50 Khz, 10Khz, 5Khz and ! Khz. Da4BG 001 \$40.00 There .s a DJ4BG 002, 100C.! marker and the power supply for above. Extra.

Band scanner - 5 transistors, 2 diodes %LyFX 001 \$7.95 Band scanner - 11 transistors, 4 diodes %L9FX 002 15.00

VFO 5-5 Maz, low pass filter, power supplies, 2 Never SSB transceivers, VXC's, phase-locked oscillators, 124-450 and 1296 convertors, electronic fuse, linear amplifiers for various VSF basis, four digit frequency counter, digital descriminator, 70 cm transmitter, speech compressor, transvertors. Also available are crystals and crystal filters.

Your orders and inquiries will be appreciated, and promptly taken care of.

HERE AND THERE

Heard Volid is now on 20's from Manitou. Also VOLEM, at miami, may be on soon!

The DX Callbook, plus supplements, are held by JARC for any members who need addresses for DX stations that they have explice and Jiso to QQ_{∞} . The callbooks are at the home of $V(QQ_{\infty})$ and a telephone call at a reasonable hour (339-4675) will get you any desired address.

A REFORT OF CANADIAN AMATEUR RADIU PARTICIPATION FOR COLOUING THE MARTEQUAKE IN MICARAGUA by Sandy, VELSW.

As this bulletin is being published, relief operations for thousands of homeless people in Managua, Nicaragua are still being carries out. However, one thing is clear - with Amateur operators to carry thousands of messages in and out of the disaster area, and starce to the people of Managua come quickly with foot, portable housing, recical supplies, a dical personnel and financial and stance being from 1% offered by the gov runnuts and algebras of many ecuntries. Here are a tex of the things that Canadian amateurs did to help.

The quake struck Managua on Saturday, December 23. On Sonday, Dec. 25 I used on to 14.170 at 15.25 GMT, where VESIG can usually be found. Emergency operations were already under way. By that time, Tony, WASCRO, had already mean authorized by FCC to operate on 14.137. From about 19.00 to 22.30, 16.170 was used solely for an emergency traffic not, with net control, Andy, MEMSC. Tony cleared his frequency at 23:18, when bank conditions were going out. This was the only day, to by knowledge, that Tony occupied this frequency.

The energercy net functioned from that Forday until Serday, Dec. 31. In that time, stablers from all the YR call ereas checked in. The response from tagedian amateurs was transmious! It's impossible to know how many stations were waiting in the background in case they were needed. At one point a rollical was taken, with 50 stations iterat.

Frobably, many of those "old-faithfuls" who showed up day after day just somitoring 15.170, will bever receive credit for their work. I recorded some of their calls - Velace, Velace,

The following YN atations used 14.170 for traffic in and out of Managua: Y.1AL, Mike and Allen, Y.1RB, John, and Y.1RBD, Jamle. Stations from all Y10 call areas encoked in as well.

Credit must also be given to the hundrado of US and DX anatours who assisted in relief operations. Several XC Meter ret frequencies were established and reld until the band closed each day, at which time, stations shifted to AC and SC meters. I must applegize at this time to any stations that I had to ank to QSY because they were unknowingly transmitting on or near one of the net frequencies. In all cases, stations were very obliging.

Ored tomust also be given to the Caradian radio, press and television systems for their co-operation. In north radio cities the media announced names and plane numbers of hams who could be called and also interviewed many hams. Ron, Vh3AUM, was shown on the CBC National News and several others made the local news shows. In minnipag, thanks to CZY and CJOB for their efforts. Somebody common sed "It's a phame that we have to wait for an emergency to arise before Canadians can be made sware of our capabilities."

In summary teen, I think that it would be a good id-a for the US and Canadian governments to allocate certain frequencies within the present lands as "Energency Frequencies". In this way, all anatours wisning to assist in energency communications would know exactly onere to lock. I might also mention that MalaSJ did a tremendous job. For a while Anay was nampered by several phone calls at 2 and 3 A.A. and lost much sleep because of it. As well, Andy cancelled a brip to South Africa and a DX pedition to ZD9 because of the cartinguage.

Yes, it is unfortunate that disasters such as this do occur but I think that it is a good thing that anatours are ground who will freely give their time to assist if they are record.

to the EDITOR

3rd December, 1972. Laredo, Texas.

Amateur Radio League of Paritoba, Box 475, Winnipeg, 1. Hardtoba. R3C-2J3 Dear OM,

Enclosed is my chaque for \$5.00. If intent is that a portion of this amount be used to cover membership fees for 1973.

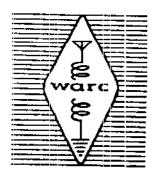
Pleace use the balance of the amount to bedy toy for the high postul rates to get your "Manitoba /mateur" to my QTH, or for whatever other head that arises. I feel that \$2.00 is hardly more than a nominal fee for the service that you supply and I would encourage a membership for increase since it would lead to the stronger representation that he would like to have, especially in light of recent FCC appropriations.

Thank you for a professional publication. It has done well to keep me in touch with the outlook from Valland, 73.

Sincerely, Don Sharkey, Voy.0, ab 22 A Thromat to man, Land to Kin for the ed., Tanka, Tromb.

FOR SALE

813 Matr A / Ca 500 atta, VFO SX-71 Recor Hallider Johns Gera Coverage .5 Es - 56 EEz Double Conversion (I.F. . 455 and 2.075 Ellz) Xtal Filter, AE, Cl and NSET Detectors Phono Input, Noise Lietr, Tone Con. Socket for Ext, Foster Supply. Self contained 117 VAC lower Supply. Ant. Input 50-500 oims Bal. or Umbal. 3.2 or 500 ohms amaio out. Draws 90 whits from H17 VAC U.S.A. used price (1963) has \$125. Marmafactured 1950 - 1965. All Band VFO, A5% Mait! Products Robile Xmar 50% compiste with All Hami Whip Ant, and Fower Supply. Mary Ram items too runerous to list. Contact: - Charles Creek, VE4KG, Box 1, Finnedosa, Manitoba.



winnipeg amateur radio club

WARD . LIS RUITE (AS OF UALLE 1973)

The following ops and non-ops have full memberships in the dirmpeg Amateur Radio Club - Cept. 1, 1972 - Amgust 31, 1973.

TEAT 3:	CQ FP JO	CR EQ Kri	CU GL KQ	GH DB	DV HE LX	EA HI UH	ED HW MP	FC JA UL	FH JC R∂
	R√ VJ	S10	SN UZ	ST- Y∷:	SR	5:/ 7.6	TC 20	ΤX	VВ

<u>ALBO:</u> G. Brailley

D. Capbell J. Descouteau A. Eavidson

T. Boln H. Irwin

L. Latozke

J. Foferran

4. Milner

D. Susselwhite

E. Prairie

L. Steele

H. Taylour

M. Jatson

J. Rogan - A. Millets - M. Wolynec

Temberuhip ones may be paid at any time to VALCG and are utill \$2.00.

EAF OF RATOR PLAYS BIG ROLD WITH BATTLICTS (from The Simming Tribune - Recember 16, 1972)

CFTAdA (Gr) + I anowators in the United States has made an Oltawa anateur radio operator vitally important to the operation of an American acceptance radio specifies.

Larry Mayaon, a local respondence operation, it hasping to displaced, assigned each wise local trailed in corning order smile a primary operating station at Talcott hountain Science Centre, Avon, Corn. is idebound.

The satellite, until by the radio Ameteur Sauvilite Corp., was launched Cot. 15 from London, Calle. It rode 900 miles up on the back of a satellite sent up by the Mational Adronautics and Space Admiristration (NAMA).

On reaching crait, it broke off from the MAGA satellite. The 4C Found radio satellite has solar calls which recharge the batteries.

Mr. Payser is one of several operators around the world controlling the satellite so that the batteries are not used up. This means that the satellite must be turned on for use by radio operators only three days a week.

Mr. Kayser said he happened to write a letter to the U.S. operators of the satisfile and about 10 days ago, they telephoned him to request his help in

controlling the satellite.

The U.S. group sent him the control information - the key to operating the satellite radio system, he said.

The primary operating station at Talcott Mountain has been unreached of for three days following a snowstorm. This makes Er. Kayser an important factor is keeping the satellite running.

The satellite is the sixth sent up by the $U.S.\ group.$ It is being used to transmit radio signals around the world.

"It is the first time ever that they have allowed control of an ameteur satellite outside the 0.5," said Mr. Eayser.

RST REPORTING CODE

Thinking of a QSO overheard recently, "You're Q5, Sy here but I missed your name and $\rm QTH^{n}$, makes no think of a review of the RST code that was printed many years ago in QST:

(Readabitti sy)	 8 5 Got everything, somehow. 4 QRM chopped you up. Got a little. 5 Got practically nothing but squeaks. 1 I am trying to be funny.
(Strength)	S) Strong as beck, (or please QSL). 3 Above everage signal. 7 Average signal (also only correct report to use in contests).
	5 Below average signals. 5 Weak as the devil (don't want your QML). 4 I think that's yet in the mud. 6 Never use this report (no receiver can be this punk). 7 (Obsolete: has not been used since 1938). 7 Given to 59 locals as a joke).
(anc)	T 9 Your signal sounds as if you have a DC plate supply. 3 Your note is very rough. 7 Your note is terrible - better QRT before the DCC catches you.
	<pre>5 (Insult - mever use this report). 5</pre>
	DON'T KNOW WHAT EACH OF THE R, S ARD T SIGNALS REALLY STAND SECUL, SEND A LITTER TO THE ARREAND ASK FOR OFTRATING ALE

NOW - IF YOU DON'T KNOW THAT EACH OF THE R, S AND T SIGNALS RESELY CTANT FOR, MAYBE YOU SECOLD SEND A LETTER TO THE ARREAND ASK FOR OF TRATING ALE #14 - this is free of charge, and please enclose a self addressed, selfstamped envelope (SA Me).

the canadian amateur radio federation

STATEMENT OF OBJECTS

- To act as a co-ordinating body for Amateur radio associations, societies and organizations representative of provincial and territorial divisions of Canada;
- To act as a lisison 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 licenced in respect of radio stations performing an Amateur Experimental Service through a program of technical and general education.

December - 1972. EDIATIONI DEL ARKS CROMIC. A. A. C.

To re seems to be a belief in some quarters that the Mederation took "precipitate action", did not adopt a "state-scandike" attitude, allowed no ceriod for "discussion and decision making" and based our request for expansion of Consda's phone frequencies on "retaliation against US expansion". I also get the distinct impression that semenor C.PM is brong in putting forward the Consdien viewpoint because of its "possible effect on Juture Saradian/U.SA relations and on US Comparations".

To mard against those impressions gaining wide creatence the Pederation has prepared a full report that gives the full facts, figures and reasoning schind our letions. This report has be n circulated down to the club level and any club that has not received a copy is asked to write to CARF, Box 356, KHIGHTOI, Ont., I trust that it will be read and discussed by the club members infore the DOC belief on phone expansion is distributed so that all Ameteurs will have a proper knowledge of the recessity and justification for send adjustment.

this serve of two, albedden declaration as who estimates in or more two CARP 10.7, 10.74 and two which publicated, rot one individual or organization excepted a "atatesmanline" attitude and sought "discussion and recision making" in the five month period prior to the F.C.T. announcement in October, 1972. "Trecipitate action" was taken after this announcement by those individuals and organizations that conducted polls, circulated newsletters, etc., without full knowledge why adjustment is recessary for continued viable Canadian phore operation.

There is also the argument that Canada saculd not seek expansion until the 'fill effects" are noted. This raises the interesting point of what guide limes are to be used to get make the near for expansion. Any Amateur clothered by QF, while publing through a patch will i mediately feel that a djustment in necessary; the toys helding a local rag-chew will probably feel they curlive with the interference. Sensibly proper reasoning should be a survey of the facts and figures such as CARF presented - all else is a play to individual emotions ... and this is no very to determine if a change in the regulations is necessary.

CAR (FILL)

Acting on a request from the Austrian metional eventy, the Tellingther has created a Canadian acceptance entral G.J. Burean - bon do., "Edilitate, the receipt of error by the lacive acting relative cards from DX bureau, and directating them to the existing area bureauc. The Canadian Central G.Z. Bureau is operated by the sheet Chair Assteur Radio Group under the same execut of Lem Suince, Visjock.

CARF has requested that the requirements for Amateur cobile logging be applished or a skyleton log only be required.

Gormerein, January, 1973, the Federation will publish a nontrly magazine to be called The Caradian Amateur. This publication will primarily be used to circulate topical news and information on Canadian and international Amateur and related communication activity.

The Bolton-in-Chief is Gil Stevens, VESBBQ, (15. Johnson Road, TRENDE, Ont) form or editor of the Onterio Amateur. A column - Ve 1883 - till be supplied by Road and, VESACL, and several correspondents across Canada have expressed interest in commitating articles. Gil hopes to include calcums of the various facers of manteur activity such so RTTY, Slow-Jose FV, Auto-Repeaters, VEF/USF, On agency Planning and Consumptations as contributors can be located. Deadline for inclusion is the 15th day preceding yelligation.

No publications are scheduled for the months of only and mugnest but special building will be readuced that reco. By.

The Cantolan Arateur is simple does a condition of Associate members hap in the description with the individual called a Supporting Patron to avoid any confusion that any orise with membership in a provincial association. The contribution to large per year $(\text{As.}(C) + m) + \text{operiod certificate will be instead to all who a backibe prior to the publishing of the first issue.$

ARREST AND A TRANSPORT OF A TRANSPORT OF THE PROPERTY OF THE PROPERTY OF THE SECTION OF THE PROPERTY OF THE PR

Treasurer, CARF, May 300. FIEGSTON, C Enclosed find theque/money order for	nt. K7L //2 /4.00 to inroll seles a SubJCX_BLNG FATROM.
MAMe:	CALL:
ADDRESS:	
\$180888888888888000 0.004 1000088989800	onosti on XII in Line - na numera, essente este se en en en m aria se nte

FROVINCIAL MEANS

NOW TEAL J - XARA ancomness that it was one achieved yeth we be rather of the Amateura of that provides ACM

ONTARIC - The R.S.C. arrequirees the following executive for 1972/73:-

Problems - U. (Bill) Looks, VOBAR, V/Producents - Ton Bruce, VOBSET Similators, VOBGEY

TRIVA SCOTIA - NUARA anabumers the following ox cutive for 1972/73:-

Frechishet - Tan R. Macleod, Wilde V/Iredid ets - Stee Brooks, VIIALB Gerry Harris, VeIAAC

Fig. Treat: - Christing Long, Volge the every water Radio Constant in Love to the LOARA intending lastic about the to every water Radio Constant in Love Scotla advising them as the mas (CARA) publication, the content remains and loop and the bard changes. It is practically injectable to get all the information as messive from (CARA) to ever our eventual earthings they will be ining themselves a convice by subscribing (to the new CAR) publication).

Mr. Arthur E. Blick, President, Canadian Amateur Radio Federation Inc.

Dear Mr. Blick.

This refers to your letter of September 29 and the meeting held with representative of the CARF and ARRL on October 25 concerning the expansion of the U.S. radiotelephone 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 October 25, it was considered that

- a) there appears to be some doubt as to exactly how many Canadian radio amateurs are represented by the CARF and ARK.;
- 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 <u>all</u> Canadian amateurs plus courtesy discussions with the F.C.C.

It was therefore decided that

- a) the Department will take no action pending receipt of further reports after November 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 <u>all</u> concerned will be consulted.
- c) consultation with the 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 ARRL, CARF or other amateur organizations.

This will enable us to make a decision based on facts rather than conjec-

ture. We will keep in touch with your association throughout the whole process.

Yours truly,

(signed) W. J. Wilson,
Director General,
Tedecommunications
Regulation Branch.

Mr. A.J. Wilson, Director-General, Telecommunications Regulation Branch, Department of Communications.

Dear Mr. Wilson:

f am surprised at the attitude expressed in your ! teer
6202-2 (Ri-2) dated 31 October, 1972. Specifically I refer to:a) there seems to be some doubt as to exactly how many Canadian radio Amateurs are represented by the CARF and (the) ARRIT.

I had thought this hoary chestrut had been suitably interred as a result of several discussions with yourself and other efficials of the Department. The Federation represents sight of the ten provincial absociations but to saits with <u>all</u> those organizations prior to any representation - a situation unique in Canada. These associations are diversely constituted. Some are an association of clubs, some have individual membership with some having affiliated clubs in addition; but all have the ability to contact the Amateurs in their provincial areas and I know of more that make membership of any degree a condition for representation.

The Tederation is governed by a Board of Directors (recely elected by the provincial members at the annual general meeting of the corporation. The Poard sets the polities of CART and supervises the day-to-day administration and activities managed by the Executive committee. The monthly Newslitter and frequent bullet as of the Executive committee. The monthly Newslitter and frequent bullet as of the Executive committee directly to the provincial expectations, to editors of Canadian and Interactional Amateur publications and, on a subscription basis, to individuals and clubs. They are also published in VE NOAS which has a while circulation to clubs and individuals. The Poderation has recently received a letter from the publisher of a major US Amateur magazine offering "use of a page of the magazine to present news of Canada to Canadians - and to the US." If this offer is accepted by the Board, can CARF then claim to represent all the subscribers to this magazine in Canada?

b) there appears to be a difference of opinion between the two pressuzations as to the obtain that should be taken.

My recollections of the meeting are that the Federation requested that action by taken and made a written and oral presentation based on research of the FOC documents and accumented approval from the provincial members received, and fully publicized, five ments prior to the meeting. The AERL, however, admantly refused to consider that any action was recessary or dealerable and has no approval from its Canadian membership on this stand.

c) "I. could not be desirable for the paper and to should the regulations on the basis of that may happen in the future and certainly not before advance consultation with $\frac{a}{a}$ Caradian Analetes plus courtesy discussions with the F.C.C."

I cannot ambritand this statement. By abbritanding was that discussions had already been held with the F.C.C. and, while I have no knowledge of what form these discussions took, would assume that the probability of Canadian expansion as a direct result of US expansion would have teem a win topic. Also remember that your office had no prior knowledge of the contents of the F.C.C. report and order ambunding the US expansion so again assume that "courtesy discussions" between the F.C.C. and OCC ture lacking before the F.C.C. took action.

As to what cay happen in the future, the facts and figures presented by the recoration leave little doubt of what the future holds if no action is taken by too Department. The research considers that edvance consistation with all Canadian Amateurs is meaningless unless, or until, all are fully aware of the reasons why CASF requested expansion and way the ARE. Reals no expansion is desirable.

The occisions detailed on page 2 are confusing. The collot meditioned will be of little use in determining CARF membership as this membership is presently given only to provincial associations. This has been explained to officials of your department on at least three sequente occusions.

The statement "all concerned will be consulted" is open to question. That Anatours are concerned? Only Caradian phons and CV operators that normally operate on 75 and 40 metros? U.S. Amateurs on these frequencies? And Anatours of radio contificate held? The Publishing thus requests that the ballot include the query: "that % operating time do you use (a) Ch. (b) There on the (1) 75/60, (2) % metro bands?"

The Faderation coes stress that our representatives came ammed with facts, not conjecture, to substantiate our request for action. The use by the Extra class of 3775-3800 Maz because of the incentive to operate "or frequency" with the increasing number of DX stations therein is a fact; the compancy ratio is trained by the F.O.C. for an equitable distribution of Sub and Cx frequencies for use by the US Amateurs is a fact; the immobility to conduct visible phone car sunfaction on frequencies used by the US Novice operators is a fact. The action of the F.C.C. to particularly point out the effect of US expansion in their Report and other — that Caroliar voice operation bould undoubtedly be seven to 3650-3700 Maz in order to avoid lay be interpreted. — to a fact; and, from the Addl representatives at the meeting, the admission that US CO into operating better a 3650-3740 Maz would have been remainly moved below 3650 Maz if the US Device base had been lowered in Prequency is a fact.

Conjectures here each on the possible effect Camedian expension eag have on possible future neutrions to the F.C.C. requesting further changes to the US sub-bands; the possible interference from US Camedian power operation between 3050-3700 Khm; and when the risk expension of the US phase sub-bands soons occur.

I so enclosing, for year information, a copy of its expendence by the secretion on the initial request for action and the outcome of the resting.

Yours truly, Arthur T. Click, TRAK, Fresi & mt.

(MOBILE NEWS - March 1972)

LIST OF TWO METRE F.M. REPEATER STATIONS IN WEST GERMANY ON 17, 31,72 CHANNEL LIST

	Number	Receive freq. MHz	Transmit freq	, MHz
	R2	144.150	145,750	
	R3	144.175	145.775	
	Ft 4	144.200	145.800	
	R5	144.225	145.825	
	Rt	144.250	145.850	
	R"	144.275	145.725	
	R8	144.300	145.700	
 <u>-</u>	2	3		
Ch.	Rep. call	Location	QTH loc.	Licensee
 R2	DBDWF	BERLIN (Funkturm)	GM47A	DL7UG
R2	DBDYC	CHAM	GJ74C	DC6YC
R2	DB∂XA	COBURG	FK55C	DJ7WH
R2	DBAWW	DUISBURG	DL44C	DC6WR
R2	2.55 (,	FELDBERG (Rhein-Main)	EK63H	DC8VC
R2	DBAXH	HAMBURG	EN40D	DL6FX
R.2	DBDWH	HANNOVER	EM49D	DJIUY
R.2	DB#ZF	KAISERSTUHL (Freiburg)	DI79	DJ8PK
R.2	DBDXE	KASSEL	EL57E	DJIXJ
R2	D.B IWK	KONSTANZ	EH26 D	DKIMW
R2	DBJWL	LAHR (Later R6)	D160A	DL9QD
R2	DBIZM	MUENCHEN-STADT (Later R6)	FI78A	DK5MZ
R2	DBDZN	NUERNBERG	FJ47A	DK2YV
R2	DBWZD	OSNABRUECK	EM61	DJ7ZS
R2	DBAWR	STUTTGART	EH7D	DK4SU
R.2	DBWB	WINTERBERG (Au/Inn)	G162J	DCIMT
RZ	2.50 1.2	WOLFSBURG (Only Europa-Treffen)		DJ7GS
R.3		BAD KOENIG (F35)	EJ15D	DLZWN
R3		BOCKSBERG (Harz)	FL12B	DJ3JW
R3	DBØWG	GOEPPINGEN	EI30G	DJ4LY
R3		KARLSRUHE	EJ72	DL9VQ
R4	DBØWA	AACHEN	DK11	DL6IM
R4	DBØYB	BAD HERSFELD	EK19A	DK2RH
R4	DBOXB	BAEDERSTRASSE (Ostsee)	FO74B	DK6HD
R4	BByAL	3AMBERG	FJ05A	DCINY
R4		BENTHEIM-LINGEN	DM56C	DJ8RI
R4	DBOWC	BREMERHAVEN	EN33C	DC8FD
R4	22,110	DARMSTADT	EJ24A	DC6FG
R4	$DB\emptyset XD$	DEGGENDORF	G115	DJ3SF
R4	DEOWD	DEISTER	EM58	DJ6JC
R4	DBØZR	DORTMUND	DL47C	DJ4VR
R4	DBØXR	DREILAENDERECK (Loerrach)	DH30A	DJ4QR
1.7	70 m 8 m 6			

1	2	3	4	5
Ch	Rep call	Location	QTH loc.	Licensee
R4	DEOZZ	GRAB	EJ78C	DL8XY
R4	DBØXG	GREDING	FJ77C	DL8ZY
R4	DECYK	HOMBERG-KAISERSLAUTERN	DJ47E	DC8DY
R4		KOBLENZ	DK49J	DK4PW
R4		LEER/OSTFRIESLAND	DN68A	DJ9ZW
R4		LINDAU-NORTHEIM (Hann)	FL21G	DL9AO -
R4	DBOZL	LUECHOW/ELBE	FN65J	DC8XT
R.4	DBØYS	SIEGEN	EK01F	DL8KV
R4	DBØWX	TRIBERG	EI72A	DJ8MY
R 4	DBØZW	WEIDEN	GJ22C	DJ9HO
R .5	DB∅XM	HOHER MEISSNER	EL70A	DC6EE
R 5	DBØWN	OCHSENWANG	E138J	DJ2GO
R6		ANDERNACH-MAYEN	DK47B	DJ5GU
R6	DBØZA	ASCHBERG (Rendsburg)	ED49G	DC8CB
R6		BREMEN	EN75G	DC6CA
R.6	DBOWT	DETMOLD	EL05G	DK3RC
R.6	DBØWE	ESSEN	D L45D	DJIHT
R 6	DBØWS	GOSLAR-STEINBERG	FL03F	DJ4JI
R6	DBØZH	HEIDELBERG .	EJ44E	DL!LS
R6	DBØYH	HOECHENSCHWAND (Hochschwarzw)		DJ9ZK
R6	DBØWV	HOECHSTEN (Oberschwaben)	EH17C	DJ3CH
R6		KOELN-BERGHEIM	DK04A	DJ3RO
R6	DB∜XU	KNUELL	EK08F	DL8MC
R6	D BØXS	MERZIG/SAAR	DJ43C	DKIMG
R6	DBØWM	MUENSTER/WESTF	DL09H	DC6EH
R 6	DB0ZB	OCHSENKOPF	FK80F	DJ7EW
R6	DBOWZ	WUERZBURG	EJ20J	DKZDT
R 7	DBØZU	ZUGSPITZE (Z. ZT. NOCH R6)	FH46G.	D39HJ
R.8		KALMIT	EJ51J	DL8UX
R 8	DBØYY	LUDWIGSBURG (Later R3)	EJ76F	DJ4XO
R8	DB∅XA	ALTENWALDE AUGSBURG	EN14F	DJ9CR
		BERLIN-SPANDAU		DL7HD .
		ELM		DL6NB
		KOELN-STADT		
		PIRMASENS	DJ69G	DJ6EW
		RAUM VERDEN/ALLER		DLIGF
				- -

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General cov rage 10 Receiver expublic of SSB. Fined one law Hatchy, purchase or rest.

David W. was twhice, V aut, *

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* Tanks for the form the companied thems David!

Technical Topics

CONVERTING 43-GGV TU-117 POWER SUPPLY TO 117 V.A.C. FOR BASE STATION USE

M. Renald VE4RE

It is a relatively simple job to convert the 43-GGV vibrator power supply to 117 V.A.C. A comparison of the schematics for the TU-117 (6/12 V.O.C.) and the UT 189 (117 V.A.C.) supplies shows that the rectifiers, filtering, and relay switching are identical. So it is merely a matter of replacing fusing, transformers and doing a small amount of rewiring.

To start conversion remove the following:

- Remove Vibrator El and socket. Remove fuseblock and Vibrator transformer Tl.
- 2. Remove resistors R2, R3, R4, R5.
- 3. Remove Capacitors C2, C3, C4, C12, C13 and C19.

To complete conversion, do the following:

- Mount fuse holders for F1 and F2 beside L0/H1 power switch.
- 2. Move fuse lamp holder to vacant hole beside relay Kl housing.
- 3. Mount T2 next to relay housing and T1 between T2 and fuseholder mount. Space transformers as much as possible to aid cooling (k!')
- Mount terminal strip for CRIA and CRIB (Use 1 amp 50 P.I.V. diodes in place of Motorola rectifier assembly.)
- 5. Hook-up transformer wiring, etc.
- 5. Rewire RL3 and RL5 ir place of R6 and R7 (added on TU-189 schematic)
- 7. at TBI: run 6.3 VAC to pin 9 ground pin 4.
- at TB2: run 6.3 VAC to pin 11 ground pin 12.
- 8. Complete 117 VAC fusing and wiring. Hook-up control head as desired.

PARTS LIST

	OTOROLA 25-800144) OTOROLA 25-835532)	\$18.60 \$20.38	
CRIA,B	2- 1 amo 50 p.i.v.	\$1. 0 0	approximate
	- Fuse holders (panel mount)	1.50	prices
	- Fuses (1.6 amp 1.0 amp)	.50	
1	- Terminal strip (3 bug)	.25	
Misc.	- wire, etc.		

This conversion makes a very compact hase station when applied to the sleping front mobile unit. Of course a trunk mount unit can be converted into a good looking base station by flush mounting the control head over the cable plug hole on the front of the transceiver. The cost of the above conversion is no more than a regulated D.C. supply and it also eliminates the vibrator with its frequent breakdown and annoying hum.

VE4RE

JEAN FALL - WINTOR SCHOOLS

The American Radio Rolay Langue, using ALA), transmits code practice according to the following schedule. The approximate frequencies are 1.205, 3.58, 7.08, 14.08, 21.08, 29.00, 50.00 and 145.500 MHz. For practice purposes, the order of words in each line may be reversed. Each practice tape services checking references. These frequencies and times are good only from (ct. 29, 1972 to April 29, 1973.

TTT : 1		
<u>TI (* ".</u>	<u>SP FEDS</u>	<u>DAY3</u>
- 0030 ETT - 0230 ETT	10-13-15 5-75-10-	DAILY
1 4xc PiT	13-20-25 5-7½-10	M/FSn
023C QMT	13-20-25 35-30-25-	$M_{\rm F}/R$
140C GMT	20-1.5 35-30-25-	TThS
	20-1.5	TT a

FOR SALE

R3G 1.V2.

B and L Low Foss TVI Filter
75 ones Kilewatt Ratings
First condition - little use - original carton Instruction sheet missing,
French shipment in Canada.
Current U.S.A. Not \$20.90
Asking \$15.00 (cash, Honey Order).
Curtist:
VARS, Roland Crubl,
536. Beverlay Street,
Minnipeg, Maritoba.



"I need half a dozen thinga hajigs, a comple of do-funnys, and three or four whatchemacallits."

88 and 73

The numerals 88 and 73 have been a tradition in communications language for almost 120 years. The older of the two, 73, appeared in 1853, meaning "My love to you." In 1857, the first official definition made it a "fraternal greeting between operators." Two years later, 1859, Western Union made "73" a part of their "92 Code" to indicate "Accept my compliments." The final change came in 1895, when "73" meant "Best Regards" for the telegraph, and later for radio operators.

"88" never received the formal ty of an official listing until it was adopted as one of the "Ham Abbreviations." It had been one of the telegraph operators' traditional terms since well before the turn of the Century. During the First World War, "88" was used by the U. S. Army Signal Corps, again strictly as an operator's abbreviation in unofficial communications. At the close of WWI, "88" achieved official status as a part of amateur radio terminology: "fove and kisses." Louise Ramsey Moreau, WB6BBO/W3WRE

THE AMERICAN RADIO RELAY LEAGUE

Mod B. Maton, VF3CJ. P.C. Rox 560, Haterdown, Ontario.

December, 19, 1972.

THE AMERICAN RADIO RELAY LEAGUE REPORT OF THE CAMADIAN DIVESTON DIRECTOR FOR 1972

GentDienens

Since year-end membership figures are not as yet available, it is impossible to comment on recent trends. However, the increase during 1971 was 5.7%, whereas the increase in the number of station licences was only 3.7%. The League is therefore attracting a growing percentage of the amateurs of Canada. Largely as a result of the recent dues increase, there has been a marked increase in the number of Life Memberships; the increase itself and the recessity for it, seem to be well understood, even if regretted.

Relations with the Department of Communications are as excellent as ever. However, the growing size of the Department, the de-centralization of authority to the Regional offices, and a rather extensive change of personnel have resulted in a somewhat more formal relationship than heretofore. While Ottawa still sets policy and writes regulations, interpretation and enforcement are the responsibility of the Regions, and it is often necessary to head with them rather than with Ottawa. In such instances several Assistant Directors have been most helpful, since the size of the Mivision makes it impossible for me to make such visits personally.

Several of the charges in our Regulations forecast in my 1972 Report have now been made; we have lost the small portion of 11 metres (2696)-27000 KHz) which we still held, the age limit on anateur licences has been removed, and the charges in our 160 metre allocations have been formalized. No further steps have been taken, however, to institute some form of beginner's licence. One additional reciprocal agreement has been signed with Brazil.

Harly in the year the Government of Canada becoured Pavid S. Lloyd, VEBAN, for his work with the blind amateurs of Canada, by conferring upon him the Medal of Service of the Order of Canada. Hany other amateurs share in this work and the award brings become and credit to all of them.

This year also saw the production of "Fire Business", a film on amateur radio produced by G.E. Sparrow, VEBBON, with the help of The Radio Society of Intario. The League has purchased six copies of this film, two for Headquarters and four for the Division.

It has already been booked for many showings to amateur clubs and is additionally distributed commercially to T.V. stations, schools and service clubs.

Undoubtedly, the item of most concern to members of the Division during 1972 was the release by the F.C.C. of its Final Report and Order on Docket 19162. Canadians were, of course, intimately concerned,

since any expansion of U.S. phone privileges would be in to those portions of each band remaily employed by Caradians. There has been considerable relief that no expansion was granted on 14, 21 and 28 MHz but, particularly in the case of 75 metres, some amateurs have been calling for immediate expansion of the Caradian phone frequencies.

During the few weeks following November 22nd, there has been in the portion 3775-3800 KHz, an outbreak of unfortunate bad manners on the part of both Americans and Canadiers. This has been most regrettable but it seems to be lying down, as the necessary adjustments are made in not frequencies and operating habits. One good result has been the increase in across-the-border contacts, a somewhat rare event before the change. But it is still much too early to say what the final result will be, since it is unknown at the moment whether any changes will be made in our own phone allocations.

Party in October, the Department of Communications asked the Director of the Division and the President of The Canadian Amateur Radio rederation to altered a meeting in Ottawa to discuss the impact of the American changes on Canadian amateurs. At that meeting, C.A.R.F. submitted a request to have Canadian phone privileges extended to 3650 KHz, by November 1st, three weeks before the U.S. changes. By own attitude was that any comment would be undinformed before experiencing the impact of the changes, and that I would prefer to gain such experience before expressing an opinion. Department of ficials pointed out that the mechanics of making any change would involve a felay of 6-8 weeks, and he action by November 1st would, In any event, be possible.

As a result of this mooting, the Department advised both organ rations that it proposed taking no action immediately but that early in LyT3 it would pell every ameteur in Conada asking for opinions on the various alternatives. In addition, they will take the opportunity to ask questions on other matters, such as bonds operated, nodes employed, etc., in order to generate some statistics on smatter radio in Canada. The Department made no commitment on action to be taken to reafter, except to say that it would coust the with F.C.C., as F.C.C. had done with it some months ago regarding Docket 19162.

The members of the Division are again indebted to all those League officials both elected and appointed, who contribute so much time and effort to running day-to-day affairs in Canada with no thought of personal gair. To them, I am most grateful, as told as to the Headquarters staff for their ever ready willinguess to help in any way requested.

Respectfully subsided.

Moel B. naton, Director, Camadian Evision,

206_5/L5

Ladystone Receiver 770 R. 1; to 155 Mhz. AL/ET (Narrow and Jide) Controllers for a Science of 50.00.
Also 770 U 130 to fat this. Original Receiver price 2000.00 to 2000.00 in good booking order. Control ValAT - Tel. 657-6558.

The Assicur Radio League of Mari who whiches to express its accepts sympathy to dest, VEqA, and his family in the recent loss of train con Rollin.

Test of Linstein Theory

Scientists at the space agency's Marshall Space Flight Center plan to put a clock into orbit in late 1974 to test a portion of Einstein's theory of relativity.

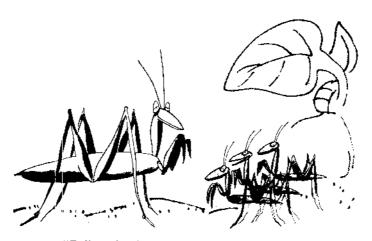
The hydrogen master clock, selected because its stability rate varies only a few parts in one quadrillion, is being especially designed for the test by the Smithsonian Institution Astrophysical Observatory.

Scientists of the National Aeronautics and Space Administration said the device will be pushed into an elliptical orbit 11,185 miles high.

In its simplest terms, Einstein's theory is that two similar objects - in this case clocks - in different gravitational fields would appear to operate at different rates because of gravity's effect on the geometry of space and time.

If that is true, the orbiting clock, to be monitored by telemetry, should appear to be operating more rapidly than a similar instrument to be stationed at NASA's Bermula ground station.

Courtesy SARC.



"Tell us that bit again where you are Daddy."

Kindness is like a boomerang - it always comes back! Ignorance is when you don't know something and someone finds out!

A proverb is a short sentence based on long experience!!

LITTLE KNOWN HEROES OF AMATEUR RADIO - (Courtesy of the Ottawa "Groundwave").

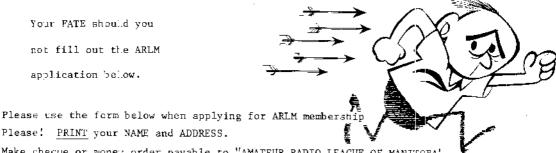
A very real and vital facet of amateur radio in Canada is the "TOPSTAR" net which keeps servicemen and civilians in the far north in touch with their farilles. Few of those outposts in our Arctic have commercial telephone facilities and the phone patches provided by the TOPSTAR operators are a link between these mon and the wives and children or sweethearts from which they are separated for many months at a time.

The southern end of the link has been handled for many years by a number of volunteer operators in Ottawa but, with the relocation of the servicemens! home base from Ottawn to Kingston, the traffic load is changing to the latter city. Kingston is served by VE3RCS at the Signals Base (Viry Barracks to those old enough to remember the Royal Canadian Corps of Signals). In Ottawa the net is manned by a rotating crew consisting of VEBINH (who has done his bit in the Arctic), Ron Haines, VanBDO, Doc Haycock (an old Northern hand himself), VENTY, Vern McCcurt, VENCT, Charlie Grove, VENAUM, Ron Belleville (who is also familiar with the tundra and ice country) and VEBANT, Al Stinsor.

The TOPSTAR net is on every night except Sunday and can be found on 14.165 Mnz at 2000 to 2300 Zulu time. Its success is due to the devoted interest of these operators and the others who from time to time in the past participated at this end.

At the other end of the link, TOPSTAR takes in regular callers from Alert, Eureka, Isaacson Island and others. There is an intercom not between these posts stretching from Inuvik to Frobisher. The "ARCTIC" net operates 141.125Mhz, Wednesdays at 2000 hrs Zulu time. Control is VESAE.

Your FATE should you not fill out the ARLM application below.



Please! PRINT your NAME and ADDRESS. Make cheque or money order payable to "AMATEUR RADIO LEAGUE OF MANITCBA".

Please make all cheques "Plus Exchange".

f
ARLM MEMBERSHIP APPLICATION FORM
Detach and Mail with \$2.00 Fee to: ARLM, Box 475, WINNIPEG 1, Manitoba.R3C-2J3
Name:
Address:
Area: Eastern, Western, Northern, (Check one)
\$2.00 Membership pand by: Cheque, Money Order, Cash, (Please include exchange on cheques.)

198 Best THE CT THE TRANSFER

doiloring J. 1.2, research togan in lyap at relitate oneer to direction of william important led to an understanding of the objected properties of sollis, particularly germanium and silicon. This had to a proposed structure of a scalecommentar amplifier and demonstration by the researchers of such a device for amplifying speech or income 13, 1947. John mardeen, stated decotals and filliam shockly had sorted as a team to achieve this great technological breakthrough.

The newcomer, which just about spelled the death knell for conventional vacuum tubes, who a piece of germarium wafer with two pointed gold contacts placed less than two thousandths of an inch apart on one side of the wafer.

J.R. Lierce of dell Labs named the fledgling device a transistor as a contraction of transfer and resistor, because the resistance effect was transferred from one point to the other.

30 significantly recognized was the invention of the transistor, that less than a decade following its discovery, Shockley, Bardeon and Brattair were awarded the Nobel prize.

Uners are those famous inventors now? William Shockley is a professor of engineering sciences at 3Canford University; John Bardson traches graduate physics at the University of Illinois and Walter Brattain teaches undergraduate physics at Whitman College in Walta Walla, Washington. John Fierce, who named the transistor, teaches at Cal Tech, John Bardson just won another Nobel prize for work in superconductivity.

FROM ARLM, POB 175, Winnipeg, Manitoba, R3C-2J3

TO AMATEUR RADIO STATION

WARTEL

Information on free room space where several interested people may meet to increase code opend to gain either the required 10 w.p.m. or 15 w.p.m. Contact the writer with information as to time (day(s) available, facilities and availability of 117 VAC.

Phone of write to:VS4RS, Reland 3. Crull,
Sim. Reverlay Street,
Jisripag, Jan.
R3G 1V2.