



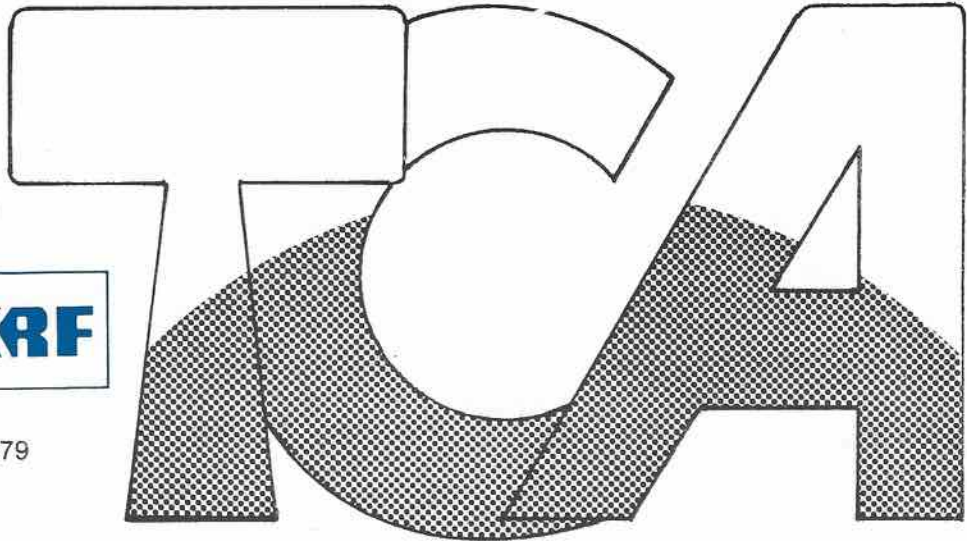
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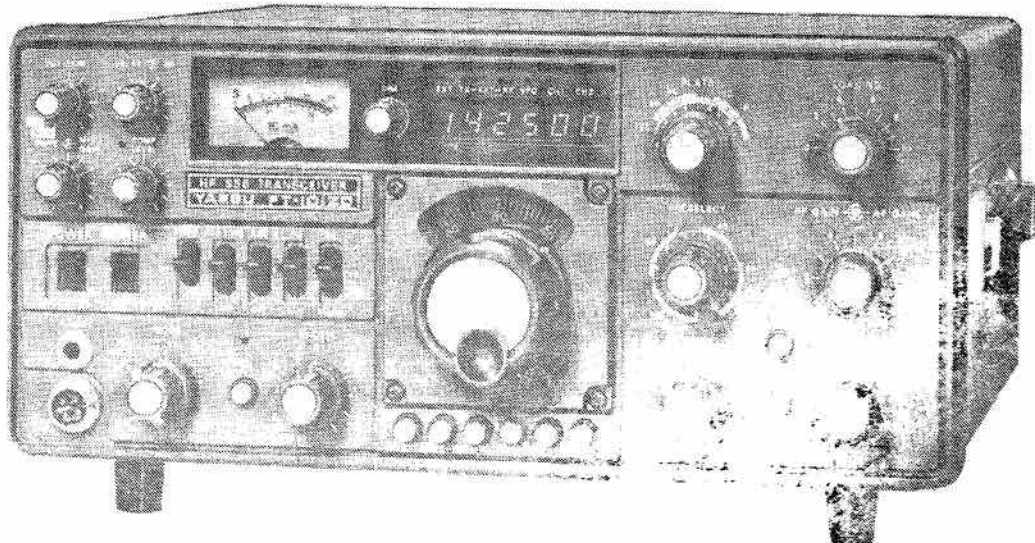
June 1979



THE CANADIAN AMATEUR



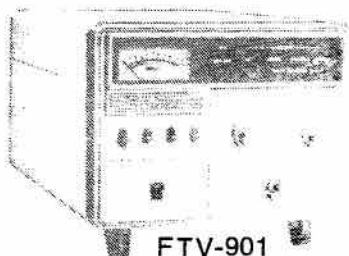
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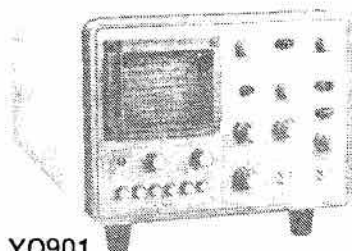
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## DRAKE 1525EM

### Push Button Encoding Mike



- Microphone and auto-patch encoder in single convenient package with coil cord and connector. Fully wired and ready for use.
- High accuracy IC tone generator, no frequency adjustments.
- High reliability Digitran® keyboard.
- Power for tone encoder obtained from transceiver through microphone cable. No battery required. Low current drain.
- Low output impedance allows use with almost all transceivers.
- Four pin microphone plug: directly connects to Drake TR-33C without any modification in transceiver. Compatible with all previous Drake and other 2 meter units with minor modifications.
- Tone level adjustable.
- Hang-up hook supplied.
- Complete instructions supplied for use with any transceiver.

#### SPECIFICATIONS:

- **Microphone Element Type:** Low impedance dynamic • **Frequency Response:** 300-5000 Hz • **Output Impedance:** 500 ohms • **Microphone Output Level:** -72 dBm per microbar. Approx 3mV (-47dBm) with average voice level • **Tone Encoder:** Single integrated circuit dual tone synthesizer
- **Encoder Audio Level:** Adjustable from approx 1mV to 5mV with internal potentiometer • **Encoder Frequency Tolerance:** Better than ±1% from -20°C to +60°C • **Encoder Supply Voltage:** 7.5 to 15 Volts (Obtained through microphone cable from transceiver) • **Encoder Current Drain:** 5 to 20 mA depending on supply voltage • **Encoder Keyboard:** High reliability Digitran® keyboard • **Microphone Hanger:** Hook supplied • **Dimensions:** 2.6" x 3.5" x 1.7" (6.6 x 8.9 x 4.3 cm) • **Weight:** 8 oz. (.227 kg)

Drake 1525EM, microphone with tone encoder and connector for TR-33C, TR-72, TR-22C, ML-2 .....

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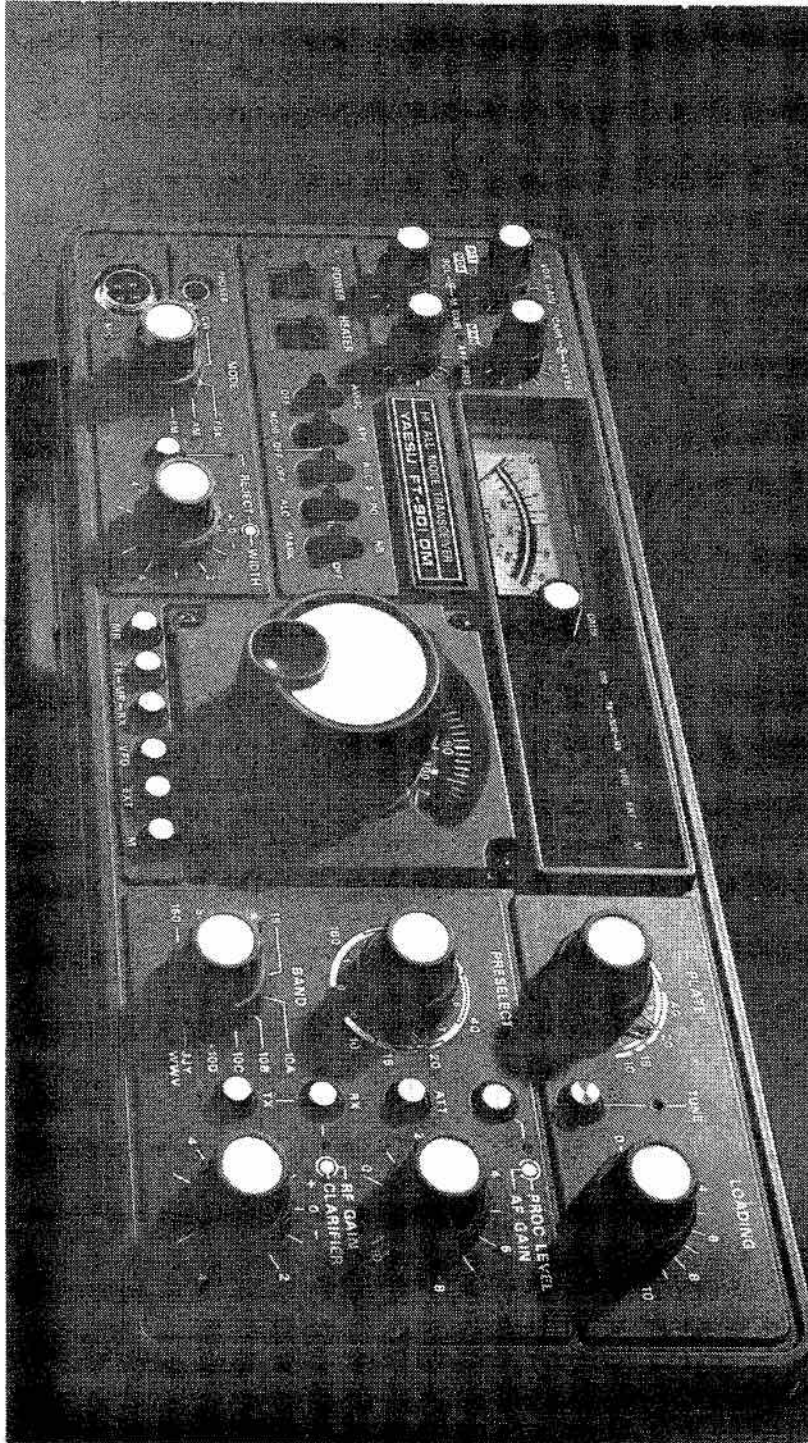
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COMPETITION-GRADE HF TRANSCEIVER



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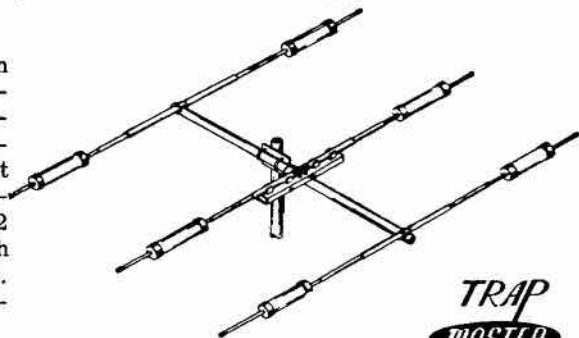
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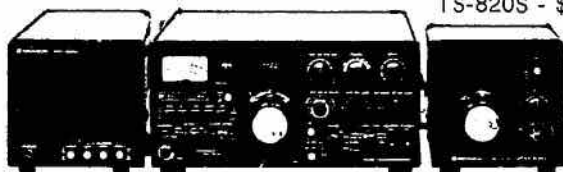
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# Kenwood's TR-7600 with optional RM-76



TR-7600  
\$599<sup>00</sup>

RM-76

\$179<sup>00</sup>

## TR-7600 WITH RM-76

- Store frequencies in six memories.
- Scan all memory channels.
- Automatically scan up the band in 5 kHz steps.
- Manually scan up or down in 5-kHz steps.
- Set lower and upper scan frequency limits.
- Reset scan to 144 MHz.
- Stop scan (with HOLD button).
- Cancel scan (for transmitting).
- Scan for busy or open channel.
- Select repeater mode (simplex plus transmit frequency offset, minus offset, or one memory transmit frequency).
- Select transmit offset ( $\pm 600$  kHz /  $\pm 1$  MHz).
- Operate on MARS (143.95 MHz simplex only).
- Display indicates frequency (even while scanning) and functions (such as auto-scan, lower scan frequency limit, upper scan limit, error, and call channel).

## TR-7600 (only)

- Memory channel...with simplex or repeater (plus or minus 600 kHz transmitter offset) operation.
- Mode switch for operating simplex or for switching the transmit frequency up or down...or for switching the transmitter to the frequency you have stored in the TR-7600's memory (while the receiver remains on the frequency you have selected with the dual knobs).
- Select any 2-meter frequency.
- Even without the optional RM-76, the TR-7600 gives you full 4-MHz coverage (144.000-147.995 MHz) on 2 meters; 800 channels; dual concentric knobs for fast frequency change (100 kHz and 10-kHz steps); 5-kHz offset switch, and MHz selector switch...for desired band (144, 145, 146, or 147 MHz).
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# IC-701

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The IC-701's single frequency control knob puts fully synthesized instant turning at a single finger tip. **Wide** bandspread, with 100 Hz per division and 5 KHz per turn, is instantly co-ordinated between the smooth turning knob and the synthesizer's digital read-out with positively no time lag or backlash (no waiting for counter to update: less operator fatigue). And at the push of the electronic high speed tuning button, the synthesizer flies through megacycles at 10 KHz per step (500 KHz per turn).

The computer compatible IC-701 LSI chip provides input of incremental step or digit-by digit programming data

from an external source, such as the microprocessor controlled accessory which will also provide remote band selection and other functions.

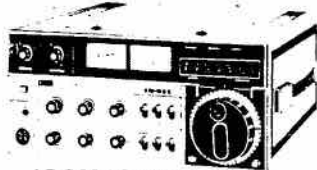
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Sold complete with the high quality electret condenser base mic (SM-2) and AC power supply/speaker as shown, the IC-701 is loaded with many ICOM quality standard features. Standard in every IC-701 are two independently selectable, digitally synthesized VFO's at no extra cost. Also standard are a double-balanced schottky diode 1st mixer for excellent receiver IMD, and RF speech processor, separate drop times for voice and CW VOX, optionally continuous RIT, fast/slow AGC, efficient IF noise blanker fast break-in CW, and full metering capability.



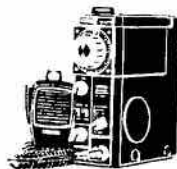
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Frequency 143.90-148.11 MHz • Power: 10 watts HI, 1 watt adj. Low • Power requirements: 13.8 VDC at 2.5 amps • Main PLL control head may be detached and remotely mounted • With microprocessor, stores 3 frequencies • Easy to read LED's



### ICOM IC-211 2m transceiver

• 144 to 148 MHz coverage • Modes: SSB, CW, FM • LSI synthesizer PLL • 4-digit LED readout • Pulse-type noise blanker • VOX w/adjustable gain • SWR bridge • CW monitor • Automatic power control • AC/DC power supplies • Antenna impedance: 50 ohms unbalanced • TX output: 10W PEP



### ICOM IC-215 2m FM transceiver

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Ohio Scientific offers you this remarkable new computer three ways.

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Fully packaged with power supply. Just plug in a video monitor or TV through an RF converter to be up and running.

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HG-10	HW16	<u>SB220</u>	<u>SB614</u>
HM102	HW22	<u>SB230</u>	<u>SB620</u>
HM2102	HW32	<u>SB301</u>	<u>SB634</u>
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w/DV21	w/P.S.		

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<u>250</u>	700	WM1500	WM3000
<u>300</u>	<u>1200X</u>		

## Tempo

Tempo I	2K Ultra	2020	K2000
Tempo I P.S.	2KD5	8010	RBF-1
2K3	2001	8120	T2000
2K4			

## Ten-Tec

276	252M	405	670
240	262G	505	KR5
242	262M	509	Argonaut
244	277	540	Century 21
247	315	544	Triton IV
252G			

## Yaesu

LL301	<u>FRG-7</u>	<u>FT901</u>	SP101
FC301	FRG-7000	FTDX560	SP401
<u>FC901</u>	FT7	FTDX570	SP901
<u>FL101</u>	FT101	FTV250	Ycom 80
FL2000	FT221	FTV650	YC355
<u>FL2100</u>	FT225	<u>FTV650B</u>	YC601
FLDX400	FT301	FTV901	YQ100
FP301	FT401	<u>EV101</u>	YQ301
<u>FR101</u>	FT620	FV301	YQ901
FRDX400	FT625	FV401	YPT50

## Miscellaneous

CDE	KLM	Signal I	Robot 400
Ham II	2700	CX7	Astro 200
Ham III	Force 5	CX11	
Ham X			

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FT 901 DM TRANSCEIVER	\$1879.00

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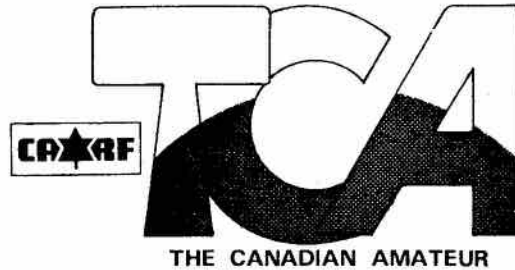
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# LETTERS:

## Amateur Exams

(A great deal of the mail we received still concerns the DOC exams and in view of what appears to be a sustained interest we are printing some of them which comment on the exams we published in April;)

After looking over the Amateur class exam my comment is that it appears fair enough with the exception of the question regarding SSB transmissions (Q.7) and the one regarding AM mode (Q.5). They properly belonged on the Advanced exam, I think. Most, if not all of the criticism heard here in VE1 concerns the Advanced class exam. At first glance it too, doesn't appear too difficult but sit down and try writing it...

The exam looked simple and even with my 13 years in communications and 29 years as an Amateur I had to stretch it for 70%; don't forget too, that people writing this exam have Amateur radio as a hobby and have not usually had more than a year or two experience.

It's not that it is so difficult, it's just that the emphasis has been shifted to areas where we, as instructors, have not been concentrating, e.g., modulation index on FM, power for AM mode at less than 100%, effect of resistance on an inductive circuit, etc.

I have said many times over, it's the instructors that have to adjust -- not the students.

Bernie Bonnar VE1UT  
Box 36, Hebron, N.S. B0W 1X0

I just received the April issue of TCA and the new format continues to impress me. I particularly enjoyed your presentation of the new examination questions, and would give myself a low pass at best if I were to have to taken them. Speaking now as a teacher, I  
June 1979 - 12

think the problem with the examination questions is that not enough attention was paid to clarity and lack of ambiguity. In question 6 (b) of the Advanced Theory Exam, I cannot tell whether the expression 'rate of change' is used in the literary sense or in the mathematical sense and if it is the latter, it would clearly be unfair to students who had never studied differential calculus.

That is the Revealed Word from Halifax this time.

A.P. (Peter) Ruderman VE1PZ

Thanks for forwarding copies of your very excellent magazine. They all contained information on the Amateur exams, which was much appreciated. I will say you people don't waste time! For my part I deferred replying as all my spare time was devoted to swotting for the exam on May 9th.

Now for the assault ... I first will admit that I tried the code too soon and that I need more time. I started on it in January and all my study has been by myself with the assistance of tapes. However, I like code and will continue until I can master at least 18 to 20 wpm.

My thoughts however are that I think that DOC should look at our neighbours and consider or settle for 7 1/2 for a starter? Just listen in for awhile -- very few -- excepting the pros send at a nice comfortable 10 a minute -- speeds vary like the corn in the wind!

I knew I'd missed the code -- one drawback was that I had never copied with 350 people in attendance -- but I'm not complaining over that -- I almost got the second run -- it's clear I need more practice.

However the written exam was something else. They gave 50 multiple questions on the Regulations -- but instead of straight questions, broke it up with attachments like -- try to fit in a,b,c,d, or try a,b, or what have you, -- just a gimmick as far as I'm concerned --

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TCA welcomes Letters to the Editor. For speedy processing, send correspondence directly to Doug Burrill VE3CDC, Editor TCA, 151 Fanshaw Ave., Ottawa, Ont. K1H 6C8.

---

why can't DOC talk straight? I thought I had to solve a crossword puzzle!

Then they quote an Amateur 'Experimental' Station. What exactly is that? In plain language I understand we are supposed to be budding Amateurs hoping to obtain the privilege of operating an Amateur Station. I may sound stupid -- but you are keyed up to start with so why throw in all these fancy phrases? For a start, I thought they referred to these lads up in the U.H.F. who really did the experimenting!

Anyways I ploughed through the 50 questions without the aid of a Philadelphia lawyer. The theory was to me on the same lines. The questions, bar a few, related to what I would consider a long-way removed to determining what a first timer on the air should be questioned on. Most equipment today is store-bought in the first place and nothing much was asked on installation, prevention of interference, grounding and such like. The whole thing smacked of the technological aspect just a bit much and I was not the only one with the same thoughts. I still think that they go rather deep for a first ticket.

Just for kicks I may say I've home-brewed quite a few radios and electronic gadgets and consider myself quite proficient in that respect so please give me a little credit. I'll just, as the saying goes, return to the drawing board.

Robert Ross  
4 Meadowland Drive,  
Brampton, Ont.  
L6W 2R4

As an Amateur about to write the advanced level exam, I appreciate the concerns and efforts of the Federation in keeping us informed of the problems being encountered and the developments occurring with the new exam format. Mr. Towner's article in the March TCA was of some benefit and now the publishing

of previous exam questions along with the article from the Slemon Park ARC in the April issue will be a big help in studying and preparing for May 9th.

I do, however, have a complaint to air. To start with I do not think it was necessary for the DOC to make the Amateur Radio certificates more difficult to acquire. But apart from that is the attitude and view being expressed by CARF, at times sarcastically, of one being pretty dumb if unable to understand and answer the exam type questions on such fundamental theory.

Mr. Towner in his March TCA article condemned almost everyone and everything except the 'perfect' DOC exams. Now the comments at the bottom of page 35 of April TCA imply almost a state of ignorance if the questions seem tough and the not-so-subtle suggestion that to tell anyone you think they are tough would be to reveal yourself as some sort of dunce.

Well I for one do not find all the questions so straightforward or the theory so basic and easy. Another thing, contrary to what you might think, there are many existing advanced Amateurs who feel the same way and breathing sighs of relief that they do not have to qualify under the new format.

With all due respect to the 'experts' when all the applied principles, and there are many, are fully known and completely understood the questions may very well be considered straightforward and easy. However, when one is not in the profession or has no previous related background of some sort -- I mean when you come into it almost cold after being out of school for 25 years or maybe 50 -- when you start out by learning there are such things as electrons and that they have some bearing on Amateur radio (don't laugh) then it's a damn long and tough road to thermal runaway, resonance and photomultipliers.

Becoming an Amateur used to require hundreds of hours of studying theory, attending classes, learning morse and reading regulations, I personally do not think making it more difficult was necessary. It will undoubtedly serve to eliminate some such as housewives, retired people and others who could have enjoyed ham radio and made their contribution to it. Maybe this is what is wanted? -- Surely not.

Believe me, I do very much appreciate the help and guidance being provided by CARF as I am sure it will prove invaluable come exam time. I guess I just didn't need the put-down to go along with it.

Keep up the fine job, particularly with 'The Canadian Amateur'.

Ronald E. Collins VE3KFA  
Bancroft, Ontario.

(Thanks for the frank opinions, Ron. Re your second and third paragraphs, opinions vary widely. Actually, some were taken from former multiple choice exams, only this time the answers had to be supplied by the candidate. Fred Towner did not use the term 'perfect' for the exams -- on the contrary, CARF is not entirely happy with the new exams nor their administration.)

I am certain that you will receive many letters about the sample examinations in the April edition of 'TCA'. I hope you print mine. I wish it could be delivered to every Amateur recently licenced, and certainly to any who criticize the examinations.

In March 1957, at 18 years old, I was licenced as VE3EMF after much more than a year of study in every spare minute. At the time I lived in Sarnia, Ontario. I went to Windsor and started to write the examination at 0900. At about 1200 I went for lunch. At 1300 I continued to write. About 1400 the morse, written theory, regulations and memorized 5 circuit diagrams were complete. By about 1530 the oral was finished. (I am still grateful for help from many but especially VE3IG and VE3AML).

Over the years I have held 9M8EB, VE3EMF/VP7 and now, VE8EJ. University and work have left me no time to stay current in electronics. Indeed I have felt very guilty for holding my licence without being compelled to keep current

June 1979 - 14

in theory. My code I do refresh every year or so to be fair to all licencees. I have feared, but agree with, regular re-testing as my flying requires.

When I saw your article I skipped over it, afraid of my reaction to reading it after 22 years without contact with theory. Finally I tried both the Amateur and Advanced. I could not answer the transistor questions ... nor any of the Digital Operators Certificate questions. Transistors and digital electronics are the new front. The rest were completed in 25 minutes total for both examinations, without even having to think very deeply. Score: 100%. These exams are a joke.

If this is the level of knowledge now required to a 'ham' licence, it is a disgrace to the hobby and the officers of the D.O.C. We may as well be lumped with the G.R.S. children, who abuse that privilege.

Ed. J. Brogden, B.A., L.L.B.  
VE8EJ  
Yellowknife, N.W.T.

I have just written my Advanced Amateur Certificate exam and found it too difficult for my amateur ability. I am wondering why it has become so technical? It is no longer a hobby for amateurs, but one for qualified technicians.

Since radios operated by amateurs are factory-designed and tested and repaired by qualified servicemen, why do we need electronic technology to operate them?

We also have equipment to check harmonics and other emissions; then basically all we need to know is how to operate our station.

I agree we must qualify for regulations and code as this is essential for us to go on the air, but the name of the game is Amateur Radio.

Ivan E. Tetlock VE7CRV  
Wynndel, B.C. V0B 2N0

#### CARF AND THE EXAMS

CARF officers will be meeting with DOC, probably this month to discuss its proposals to simplify the exam administrative procedure and review the exams themselves with the aim of making the success rate better than has been encountered so far in the new exam format.



## Awards

I would seriously question some of the statements in the article 'All About Awards' (May/79 page 16). QUOTE: "They have found that working towards such awards is an incentive to more and better operating practices" UNQUOTE, just doesn't wash. Frequent 'out of band operation', name calling, deliberate interference and jamming, and generally everything but good operating procedures are the rule...

The methods employed in getting some awards could be questioned ... To try to explain 'pile-ups' and contest operations to visitors just isn't worth it. Rarely, if ever, would you encounter good operating procedures.

Please spare us readers from too many articles written by award hunters. We all know what goes on and have the mental picture... The havoc they cause is well-known by all. A few articles on how they could clean up their act would be more welcome.

C.S. Nemeth VE1APO  
Antigonish, N.S.

## Ham Help

R.W. Scott of Melita, Man. writes that he is trying for his Amateur ticket and is studying morse and theory by himself. Being in the senior citizen category and not knowing any Amateurs makes it a tough task. We wonder if any Amateurs in the area might contact him and lend that helping hand which the 'fraternity' seems to extend when needed? His address is Box 332, Melita, Man. R0M 1L0.

## What's in a Name?

The name 'ham' or 'Amateur' was at one time an honorable handle; unfortunately it is now synonymous with others not so credible. My certificate mentions 'Experimental Station' --perhaps a name along this road might bring our hobby back into focus to many...

Roly Burley,  
Box 194, Bridgemouth, Ont.

(Agreed on the first word --well, ah, we hate to even type it again. It gets short shrift in this editorial office. Al-

ways seems synonymous with 'yahoo' or something like that; 'turkey', maybe?)

All Amateurs and Advanced Amateurs have to pass exams to obtain their certificates. In view of this fact, I submit the name of 'Certified Radio Operator' to be substituted for 'Amateur' or 'ham'. (What it cost me to print that word! Ed.)

I believe it would give us a distinction from CB and would not conflict with commercial operators as they hold second or first class wireless operators' certificates and not Amateur certificates.

Jim Pratt VE1ASW  
27 Birchfield Crescent,  
Halifax, N.S.

(Hold it, Jim! The use of 'certified' could, according to my dictionary, provide my XYL and others to verify what they already suspect; one meaning is "to attest officially to the insanity of a person". Also, the commercial certificate on my wall sez 'Certificate of Proficiency in Radio'. Nice try, Jim.)

Although I haven't obtained by licence yet (hopefully next month) I feel it most appropriate to replace the ambiguous names of 'ham' or 'Amateur Radio Operator'. My suggestion would be 'Trans-World Radio Service' for the following reasons: range over which we communicate (world-wide); mode of communication (radio); what we offer to the public (service). This, I believe, best describes our function.

Russel Nichols,  
RR4 Huntsville, Ont.

(To TWRS Operator Nichols, many thanks for the idea. We have just about beaten this question to death, but we are always willing to print your comments. Who knows, someday we might find a simple, distinctive and descriptive term acceptable to all.)

---

## TCA gets around

TCA gets around. From Wales, GW4 BIF, brother-in-law of Jean VE3DGG, our CARF QSL Bureau chief, sez he finds TCA "an interesting magazine and good reading".



Here is the Canadian repeater directory for Summer 1979. One last minute addition is a change in an Ottawa/Hull station: VE3MIC has been relocated to the Quebec side of the Ottawa River and is now VE2RBG. It is probably unique in Canada as it has an open access autopatch - \* for access and # for disconnect on the tone pad and is full duplex on 220 MHz. The receiver site is located some miles from the transmitter. Frequencies are 147.99 in, 147.39 out and 223.1 in, 224.7 out.

Errors and omissions in this list should be noted to Hugh Lines VE3DWW, CRAG Coordinator, 53 Monterey Drive, Ottawa, Ont. K2H 7A9.

The Porcupine Hills Repeater Association plans installation of the first solar-powered repeater in Alberta at Plateau Mtn, southwest of Calgary. Secretary of the group is Jim McKenna, CARF Prairie Director.

**NOTES:**

- A - AUTOPATCH B - BTY. POWER  
P - PROPOSED E - EMERGENCY PWR  
1 - LINKED T - TONE ACCESS  
2 - TEMP. CALL 9 - LINKED  
3 - RTTY/FAX

**NFLD/LABRADOR**

GANDER	VO1AV	146.46	147.06	P
GRANS FALLS	VO1 ?	146.34	146.94	P
LABRADOR CITY/WABUSH	VO2AD	146.46	146.94	
LABRADOR CITY/WABUSH	VO2AD	146.34	146.94	
ST. JOHNS	VO1GT	146.46	146.94	

**NOVA SCOTIA**

BRIDGETOWN	VE1BO	146.46	147.06	
DARTMOUTH	VE1PB	146.25	146.85	
GORE	VE1LHR	146.04	146.64	
HALIFAX	VE1CBC	146.34	146.94	
LIVERPOOL	VE1ASQ	146.46	147.06	
MT BLOMIDON	VE1AEH	146.58	147.18	
MULGRAVE	VE1RTI	146.22	146.82	
NEW GLASGOW	VE1HR	146.16	146.76	
NEW ROSS	VE1 ?	147.84	147.24	P
SPRINGHILL	VE1SPR	146.07	146.67	
SPRINGHILL	VE1SPR	448.30	443.30	1
TRURO	VE1XK	146.19	146.79	
TRURO	VE1ZG	146.31	146.91	P
YARMOUTH	VE1YAR	146.01	146.61	

Note: VE1SPR LINKED VE1AHC

**P.E.I.**

CHARLOTTETOWN	VE1AHC	146.40	147.00	A
CHARLOTTETOWN	VE1AHC	443.30	443.30	1
CHARLOTTETOWN	VE1HI	146.34	146.94	
SUMMERSIDE	VE1CFR	146.25	146.85	

VE1AHC LINKED VE1SPR

**NEW BRUNSWICK**

BATHURST	VE1PL	146.34	146.94	
DALHOUSIE	VE1 ?	NOT KNOWN	P	
FREDRICKTON	VE1GT	146.34	146.94	A
FREDRICKTON	VE1PD	146.16	146.76	
MONCTON	VE1CQ	146.13	146.73	
MONCTON	VE1RPT	146.34	146.94	A
MT CHAMPLAIN	VE1TWO	146.10	146.70	
PERTH	VE1KMT	146.46	147.06	
SAINT JOHN	VE1KI	146.22	146.82	
SAINT JOHN	VE1 ?	NOT KNOWN	P	
ST ANDREWS	VE1IE	146.25	146.85	
SUSSEX	VE1SMT	146.01	146.61	
WOODSTOCK	VE1EMT	146.37	146.97	

**QUEBEC**

ALMA	VE2RCA	146.07	146.67	A
ALMA	VE2RCM	146.25	146.85	P
AMOS	VE2KZ	146.16	146.76	
AMQUI	VE2KH	146.28	146.88	
ASSOMPTION	VE2RBB	147.81	147.21	
BAIE COMEAU	VE2PR	146.10	146.70	
CARLETON	VE2 ?	146.22	146.82	P
CHICOUTIMI	VE2ES	146.28	146.88	
CHICOUTIMI	VE2IU	146.16	146.76	A
CHICOUTIMI	VE2RCC	147.72	147.12	
DOLBEAU	VE2EFA	146.10	146.70	A 9
FRANKLIN CTR	VE2RBV	147.81	147.21	
GASPE	VE2 ?	146.28	146.88	P
GRAND FOND	VE2CTT	146.40	147.00	
GRANBY	VE2RTA	147.78	147.18	

HEREFORD	VE2RDM	147.96	147.36	
HULL/OTTAWA	VE2CRA	146.34	146.94	
HULL/OTTAWA	VE2CSO	146.10	146.70	
HULL/OTTAWA	VE3DBQ	146.61	52.525	
HULL/OTTAWA	VE3JGP	56.760	52.525	
HULL/OTTAWA	VE2KPG	147.96	147.36	A
HULL/OTTAWA	VE3MIC	228.58	224.18	A
HULL/OTTAWA	VE3MIC	228.58	147.48	A
HULL/OTTAWA	VE3OCR	146.25	146.85	3
HULL/OTTAWA	VE3OEA	146.07	146.67	A
HULL/OTTAWA	VE3ORA	146.28	146.88	
HULL/OTTAWA	VE3OTT	147.72	147.12	
HULL/OTTAWA	VE3TEL	146.43	147.03	
HULL/OTTAWA	VE3TWO	147.90	147.30	
HULL/OTTAWA	VE2CRA	443.30	443.30	
JOLIETTE	VE2RMA	146.43	147.03	
JONQUIERE	VE2EFB	444.00	449.00	
JONQUIERE	VE2VP	146.22	146.82	9
LA TUQUE	VE2EH	146.19	146.79	9
LAC ST JEAN	VE2SP	146.34	146.94	
LAVAL	VE2RVS	146.25	146.85	
MONT LAURIER	VE2RMC	146.37	146.97	
MONT LOGAN	VE2OE	146.16	146.76	
MONTREAL	VE2BG	146.46	147.06	
MONTREAL	VE2CGE	146.37	146.97	
MONTREAL	VE2DN	146.16	146.76	
MONTREAL	VE2ECM	146.04	146.64	A
MONTREAL	VE2HH	222.90	224.50	
MONTREAL	VE2MRC	147.72	147.12	A
MONTREAL	VE2PY	146.28	146.88	
MONTREAL	VE2RED	147.87	147.27	
MONTREAL	VE2REP	146.28	146.88	
MONTREAL	VE2RKO	146.04	146.64	
MONTREAL	VE2RM	146.40	147.00	A
MONTREAL	VE2RM	146.40	224.06	
MONTREAL	VE2RM	444.00	449.00	
MONTREAL	VE2RY	147.90	147.30	
MONTREAL	VE2VS	146.25	146.85	
MONTREAL	VE2XW	146.10	146.70	
MONT JOLI	VE2RAB	146.13	146.73	1
MOUNT CARMEL	VE2 ?	NOT KNOWN	P	
MT ORFORD	VE2TA	146.19	146.79	
MT ST JOSEPH	VE2IN	146.22	146.82	
MT TREMBLANT	VE2MT	146.13	146.73	
NORANDA	VE2ZS	146.16	146.76	
PARC DES LAURENTIDES	VE2ES	146.28	146.88	1
PERCE	VE2 ?	146.19	146.79	P
PLESSISVILLE	VE2CRP	147.13	146.73	
PORT ALFRED	VE2TG	146.43	147.03	P
QUEBEC CITY	VE2ASU	146.10	146.70	
QUEBEC CITY	VE2DB	146.28	146.88	A
QUEBEC CITY	VE2OM	146.34	146.94	
QUEBEC CITY	VE2RAQ	146.25	146.85	3
QUEBEC CITY	VE2RCQ	147.78	147.18	
QUEBEC CITY	VE2SRC	147.72	147.12	A
QUEBEC CITY	VE2UX	146.22	146.82	1
QUEBEC CITY	VE2UZ	146.46	147.06	A
QUEBEC CITY	VE2VD	146.16	146.76	
RIMOUSKI	VE2WM	146.34	146.94	
RIPON	VE2RBA	147.93	147.33	
RIVIERE DU LOUP	VE2OO	146.19	146.79	
RIVIERE DU LOUP	VE2NY	147.66	147.06	1
SEPT ISLES	VE2RSU	146.19	146.79	
SEPT ISLES	VE2RSI	146.34	146.94	
SHERBROOKE	VE2FX	147.93	147.33	
SHERBROOKE	VE2RAL	146.31	146.91	
SHERBROOKE	VE2RSR	147.72	147.12	
SHERBROOKE	VE2SS	146.25	146.85	
SOREL TRACY	VE2 ?	146.01	146.61	
ST JEAN	VE2RVR	147.84	147.24	
ST JEROME	VE2RMP	146.16	146.76	
ST ROSE	VE2AU	146.31	146.91	
TROIS RIVIERES	VE2AT	146.07	146.67	A
TROIS RIVIERES	VE2CTR	146.46	147.06	
TROIS RIVIERES	VE2QW	147.90	147.30	
VICTORIAVILLE	VE2RDF	147.75	147.15	

**ONTARIO**

BELLEVILLE	VE3IVL	146.43	147.03	A
BELLEVILLE	VE3KBR	146.40	147.00	
BRACEBRIDGE	VE3MRT	146.28	146.88	
BRAMPTON	VE3MRZ	146.28	146.88	
BRANTFORD	VE3TCR	147.75	147.15	
BROCKVILLE	VE3WXR	146.37	146.97	
BROCKVILLE	VE3BAT	146.46	147.06	P
BURLINGTON	VE3RSB	147.81	147.21	
CARLETON PLACE	VE3FXE	147.87	147.27	P
CHATHAM	VE3KCR	147.72	147.12	

CORNWALL VE3SVC 147.78 147.18  
DEEP RIVER VE3NRR 146.16 146.76  
FINCH VE3SDG 147.84 147.24 P  
FONTHILL VE3WCR 147.90 147.30  
FONTHILL VE3WFM 147.69 147.09  
GODERICH VE3GOD 147.63 147.03  
GEORGIAN BAY VE3MGB 147.78 147.18  
GEORGETOWN VE3IKK 146.22 146.82  
GEORGETOWN VE3IZU 53.130 52.130 P  
GUELPH VE3ZMG 147.96 147.36  
HAMILTON VE3DRW 146.16 146.76  
HENSALL VE3OBC 146.31 146.91  
KENORA VE3LWR 146.46 147.06  
KINGSTON VE3KER 146.34 146.94  
KINGSTON VE3KNR 146.19 146.79  
KITCHENER VE3KSR 146.37 146.97  
KITCHENER VE3XRX 146.19 146.79  
LONDON VE3LAC 146.46 147.06  
LONDON VE3NDT 146.34 146.94  
LONDON VE3OPR 147.60 147.00 B E  
LONDON VE3OPR NOT KNOWN P  
LONDON VE3RGM 146.16 146.76  
LONDON VE3TTT 147.78 147.18 A E  
LONDON VE3MIN NOT KNOWN P 1  
MINDEN VE3TAR 146.34 146.94  
NEW LISKEARD/COBALT VE3TAR 146.46 146.94  
NEW LISKEARD/COBALT VE3SVR 146.16 146.76  
MORRISBURG VE3NFM 146.34 146.94  
NORTH BAY VE3LSR 146.25 146.85  
ORILLIA VE3OSH 147.72 147.12  
OSHAWA VE2CRA 146.34 146.94  
OTTAWA/HULL VE2CRA 443.30 448.30  
OTTAWA/HULL VE2CSO 146.10 146.70  
OTTAWA/HULL VE3DBQ 146.61 52.525  
OTTAWA/HULL VE3JGP 52.760 52.525  
OTTAWA/HULL VE3KPG 147.96 147.36 A  
OTTAWA/HULL VE3MIC 228.58 224.18 A  
OTTAWA/HULL VE3MIC 228.58 147.48 A  
OTTAWA/HULL VE3OCR 146.25 146.85 3  
OTTAWA/HULL VE3OCR 223.34 224.94  
OTTAWA/HULL VE3OEA 146.07 146.67 A  
OTTAWA/HULL VE3ORA 146.28 146.88  
OTTAWA/HULL VE3OTT 147.72 147.12  
OTTAWA/HULL VE3TEL 146.43 147.03  
OTTAWA/HULL VE3TWO 147.90 147.30  
OWEN SOUND VE3OSR 146.34 146.94  
PETERBOROUGH VE3KRA 222.34 222.94  
PETERBOROUGH VE3PBO 146.34 146.94 A  
PICKERING VE3IL 146.07 146.67  
RENFREW VE3STP 146.46 147.06  
ROCKLAND VE3JLX 146.22 146.93  
ST CATHERINES VE3NRS 147.84 147.24  
SARNIA VE3SAR 146.34 146.94  
SAULT STE MARIE VE3SAP 146.46 147.06  
SAULT STE MARIE VE3SJ 146.28 146.88  
SAULT STE MARIE VE3SSM 146.34 146.94  
SAULT STE MARIE VE3YAK 147.75 147.15 A  
SMITH FALLS VE3RLR 147.81 147.21  
ST IGNACE ISL VE3 ? 146.34 146.94 P E  
SUDBURY VE3SNR 146.46 147.06  
THUNDER BAY VE3YQT 146.46 147.06  
TIMMINS VE3TIS 146.34 146.94 1  
TORONTO VE3RPT 52.760 52.525  
TORONTO VE3MHZ 146.28 146.88  
TORONTO VE3MOT 147.78 147.18  
TORONTO VE3RPT 146.46 147.06 A  
TORONTO VE3TDX 147.93 147.33  
TORONTO VE3TFM 147.87 147.27  
TORONTO VE3TOR 146.34 146.94  
TORONTO VE3TTY 146.10 146.70 3  
TORONTO VE3TWR 449.40 444.40 P  
TORONTO VE3UHR 449.25 444.25  
WATERLOO VE3 ? 147.69 147.09  
WINDSOR VE3HFR 147.72 147.12  
WINDSOR VE3IH 146.46 147.06  
WINDSOR VE3IH 146.28 147.06  
WINDSOR VE3RRR 147.90 147.30  
WINDSOR VE3WIN 146.40 147.00  
WAWA VE3WAW 146.34 146.94

SASKATCHEWAN  
ANGLIN LAKE  
GRENFELL  
ITUNA  
LAST MTN  
LLOYDMINSTER  
MEACHAM  
MELFORT  
MELVILLE  
MOOSE JAW  
MOOSE MTN  
MOOSOMIN  
NORTH BATTLEFORD  
PRINCE ALBERT  
REGINA  
REGINA  
ROCK POINT  
ROSETOWN  
SASKATOON  
SHAUNAVON  
SINTALUTA  
STRANRAER  
SWIFT CURRENT  
WATROUS  
YELLOWHEAD  
YORKTOWN

VE5 ? 146.16 146.76 P  
VE5 ? 146.31 146.91 P  
VE5ABO 146.31 146.91  
VESAT 146.25 146.85  
VE5RI 146.34 146.94  
VE5HVR 146.22 146.82 1  
VE5RPT 146.28 146.88  
VE5 ? NOT KNOWN P  
VE5CI 146.34 146.94  
VE5MR 146.22 146.82  
VE5 ? 146.16 146.76  
VE5 ? 147.28 147.88 P  
VE5EEE 146.46 147.06  
VE5KE 146.46 147.06  
VE5SS 146.28 146.88  
VE5RPR 146.13 146.73  
VE5 ? NOT KNOWN P  
VE5SK 146.34 146.94 1  
VE5 ? 146.16 146.76 P  
VE5 ? NOT KNOWN P  
VE5 ? 146.37 146.97 P  
VE5SCR 146.28 146.88  
VE5 ? 146.01 146.61 P  
VE5ESK 146.16 146.76 1  
VE5 ? 146.28 146.88 P

ALBERTA

ANDREW  
CALGARY  
CALGARY  
CALGARY  
CALGARY  
CALGARY  
COLD LAKE  
EDMONTON  
EDMONTON  
GRANS PRAIRIE  
HARDISTY  
LETHBRIDGE  
MEDICINE HAT  
MEDICINE HAT  
MILK RIVER  
PIGEON LAKE  
RED DEER  
ROCKY MT HOUSE  
SWAN HILLS  
THREE HILLS  
WILLINGDON

VE6 ? 146.04 146.64 P  
VE6AUY 146.46 147.06 A  
VE6RPT 146.34 146.94 1 A  
VE6RUM NOT KNOWN  
VE6RYC 146.25 146.85  
VE6OC 146.46 147.06  
VE6HM 146.46 147.06  
VE6MC 146.25 146.85 A  
VE6OL 146.46 147.06  
VE6WW 146.25 146.85 P  
VE6CAM 146.28 146.88  
VE6HAT 146.46 147.06  
VE6 ? 146.25 146.85  
VE6BRC 146.16 146.76  
VE6SS 146.34 146.94  
VE6QE 146.40 147.00  
VE6VHF 146.28 146.88 1  
VE6 ? 146.22 146.82 P 2  
VE6 ? 146.22 146.82 P  
VE6PP 146.22 146.82

BRITISH COLUMBIA

CHILLIWACK  
DAWSON CREEK  
FERNIE  
FORT ST JOHN  
KAMLOOPS  
KAMLOOPS  
KELOWNA  
KIMBERLEY  
MAPLE RIDGE  
MASSETT  
NANAIMO  
NELSON  
N VANCOUVER  
PENTICTON  
PORT ALBERNI  
PRINCE GEORGE  
SALMON ARM  
TRAIL  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VANCOUVER  
VERNON  
VICTORIA  
WILLIAMS LAKE

VETEKL 146.40 147.00  
VETDTE 146.34 146.94  
VE7 ? NOT KNOWN P  
VE7 ? 146.46 147.06 P  
VETNKA 146.25 146.85  
VETKAR 146.34 146.94  
VETROK 146.22 146.82 P  
VETCAP 146.34 146.94  
VETNMR 146.19 146.79  
VETDRZ 146.34 146.94  
VETISC 146.04 146.64  
VETRTU 146.46 147.06  
VETCOT 146.10 146.70 3  
VETOKN 146.34 146.94  
VETRAC 147.84 147.24 2  
VETAFG 146.34 146.94  
VETAPH 146.46 147.06  
VETCAQ 146.34 146.94  
VETESR 147.81 147.21  
VETOP 147.90 147.30 P 2  
VETRAG 147.63 147.03  
VETRPT 146.34 146.94 A  
VETVAN 147.72 147.12  
VE7 ? 224.30 222.70 P  
VETUHF 448.80 443.80  
VETURG 449.00 444.00  
VETWRS 448.85 443.85  
VETRWS 146.28 146.88  
VETVIC 146.25 146.85 A  
VET7SO 146.34 146.94

MANITOBA

BRANDON VE4AL NOT KNOWN P A T  
BRANDON VE4BDN 146.34 146.94  
FLIN FLON VE4 ? 146.34 146.94 P  
KILLARNEY VE4KIL 146.25 146.85  
MIAMI VE4 ? NOT KNOWN P  
PINAWA VE4PIN 146.34 146.94  
PORTAGE VE4PLP 146.25 146.85  
SHILO VE4 ? 146.25 146.85 P  
WINNIPEG VE4XK 146.46 147.06

YUKON/N.W.T.

WHITEHORSE VY1BR 146.34 146.94



Canadian Amateur Radio First



## Red River Flood

Manitoba Amateurs formed the backbone of the emergency radio communications in the Red River flood. In commenting on the operation, emergency authorities stated that the usefulness and effectiveness of Amateur communications in emergency situations was amply demonstrated and the training of the Manitoba ARES paid real dividends.

The net control station VE4BB operated from Fort Osborne Barracks using the two-metre nets as main communications links with the diked and flood-surrounded communities of Emerson, St. Jean Baptiste, Letellier and Morris. An HF station on 20 metres plugged in flood control HQ direct to Emergency Planning Canada (formerly Canada EMO) in Ottawa through the DOC Communications Research Centre station VE3DRC and a phone patch to the downtown EPC HQ office. The link gave EPC liaison officer Wiggie Wissles-

worth, who happens to be VE3YE, a back-up hotline right to the flood areas.

DOC HQ in Ottawa loaned Bob Carroll, its special communications project co-ordinator, to the flood control authorities to assist in setting up their emergency communications. Bob, who masterminds communications for VIP and royal visits, has had the help of Amateurs before in these tasks.

The eventual flood emergency communications ran the gamut from handy-talkie 2-metre units to Telex, facsimile, telephone and military radio.

During the long listening watches, the net ran some code practice to keep the boys alert.

Congratulations to the Amateurs of Manitoba and the Manitoba AREA, who did such a fine job. Full credit to Brian Lenius, AREA Co-ordinator and assistant Doug Fysh VE4JP who gave their full time and effort to the job.

## Fake hurricane upstaged

By Rowland C.E. Beardow VE3AML

It was to happen on May 12: an exercise to test Amateur Radio through the establishment of a Regional network of voluntary Amateur radio operators to transmit messages concerning the Hurricane and assistance required in various centres of Ontario.

Some 200 to 300 Amateurs from Windsor to Thunder Bay had been preparing to spend five hours assisting emergency authorities on Saturday, May 12.

The 'hurricane' was scheduled to come from the Gulf of Mexico and enter the Great Lakes Region, and hit from Windsor to Kingston. Damage was to occur in the cities of Windsor, Niagara Falls, Toronto, Oshawa, Port Hope and Cobourg.

'Hurricane Lucy' was then to careen through Copper Cliff, Lively and Espanola, with hurricane warnings preceding

her. The local officials were to send messages via Amateur radio to other centres for assistance or offer their services to the stricken areas.

What did happen? The town of Field, Ontario, was flooded, the Red River and the Ottawa River and others were in flood, so emergency authorities decided that a real disaster was sufficient and the exercise was cancelled. It may be re-scheduled at a later date. Through the experience obtained in setting up a communication network for the exercise, the Amateurs are now more prepared than ever to give their services in a real emergency.

The 'Comsont' Net is now established on 7190-7200 every Thursday and Saturday at 10:00 am for a period of one hour for traffic or contact and will be available if required for emergency use. It covers from Thunder Bay down to Windsor.



# Canadian QSL Bureaus

Bill Stunden VE4BJ,  
578 Oxford St., Winnipeg,  
MANITOBA

Bill has managed the VE4 Bureau for over a year now and during 1977 handled 9,000 QSL cards. He requests that the fourth call area hams send him 5x7" envelopes (ever try stuffing a 4x6" QSL

into a 3 1/2 x 6 1/2" envelope?), money or loose mint stamps (he'll keep track of your postage account). He can, therefore, fit the cards into the SAE and stamp accordingly.

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## Amateur Life Cycle

By Bill Skarstedt VE2DR

Most Amateurs seem to run through a certain pattern. Ask most Old Timers about their career and it might sound something like this: I got my licence way back in the early 30's and with the feeble equipment available (mostly self-built) my first effort was to establish as many contacts as possible and eventually pin my first glorious achievement certificate on the shack wall -- 'Worked All Sections'. While doing so, I also managed to become a member of the 'Rag Chewers Club' and I felt I was off to a flying start.

Then came the DX urge and, spending countless hours nightly trying to catch those exotic stations, I often had to try to put the eyeballs back into their sockets before departing for work. One might add, however, that all these sleepless nights pinned another award on the wall -- 'DXCC-220'.

Then came a period of TFC enthusiasm. I considered myself quite an advanced CW operator and therefore started hobnobbing with the elite, those expert net operators. After often spending hours trying honestly to deliver

messages to non-existent addresses and garbled names, I finally threw in the sponge and reverted to a more normal life.

I had now reached the stage in life when, due to age, I had been gently eased out of my accustomed professional life and sort of shunted into that land of green pastures (with the rest of the goats). Then, what was left? Oh, yes, that friendly P.L. (Professional Loafers) Net where cast-offs like myself met at stipulated times to brag about previous great achievements. Oh, what a wonderful feeling. If anything goes wrong in the old house, electricity, plumbing, heating, etc., someone on the Net would always have the answer, right or wrong.

Amateur Radio? It certainly has been rewarding and I guess the dear, long-suffering XYL will kindly slip the ol' bug and mike into the coffin when that time arrives!

-Bill Skarstedt VE2DR,  
62 St. John's Rd.  
Pointe Claire, P.Q.  
H9S 4Z1



PROPOSED **Regulation Changes**

As noted in our last issue, DOC proposes changes to the Radio Regulations, Part II. They would change the metering requirements to reflect modern equipment, permit phone operation expansion on 40 metres by adding 7050 to 7100 kHz for A3 mode, delete most of the picky regulations regarding portable and mobile operation, delete mobile logging, and permit F1 (FSK - RTTY) on 160 metres and extend Advanced Amateur RTTY privileges to Amateur Class Here is the official DOC notice, published in the Canada Gazette, Part I, for April 28, 1979:

The Department hereby gives notice and invites comments from amateur radio operators and other interested parties concerning proposed amendments to Part II of the General Radio Regulations governing the Amateur Experimental Service. The proposals were developed as the result of discussions held in Calgary with Amateurs at the Second National Amateur Radio Symposium as well as from representations received from individual Amateurs.

The proposals are as follows:

- 1) Deletion of the log keeping requirements for mobile stations.
- 2) The rephrasing of sections 61 and 62 to take into account the availability of transmitters with built-in measuring devices.
- 3) Deletion of the conditions attached to the operation of portable or mobile installations with the exception of the frequency requirement for operation on board pleasure vessels.
- 4) Amendment of Schedule IV to permit type F1 emission on frequencies between 3.5 MHz and 29.700 MHz.
- 5) Permission to use F1 emission in the 160 metre band.
- 6) Permission to use A3 emission in the 7050-7100 kHz band.
- 7) Amendment of Schedule V to per-

mit phone endorsement on 1800-2000 kHz.

Submissions in response to this Notice should be addressed to the Director, Operations Branch, Telecommunication Regulatory Service, Department of Communications, 300 Slater Street, Ottawa, Ontario K1A 0C8 and must be post-marked not later than 60 days from the date of publication of this Notice.

Dr. John deMercado  
Director General  
Telecommunication  
Regulatory Service

CARF asked DOC for a thirty day extension to the time for comments on the proposed changes to the Radio Regulations. The request was granted and the new cut-off date is July 28. Incidentally, the May 10 CARF Radio News Bulletin quoted the original date of June 28 in error when noting the extension.

CARF would like to have copies of comments sent to DOC by organizations and individuals; the address is P.O. Box 356, Kingston, Ont. K7L 4W2.

## **61% turnout**

The May 9th set of Amateur exams has come and gone but results from across the country were not available at press time. One fact was noted, however; out of the 2700 exam books which DOC prepared to meet the expected turnout, only about 61% were used due to the unexpectedly large number of applicants who did not turn up on exam day. In Ottawa alone where 150 people had applied to sit for the tests, only 81 showed up. There is no fee for the exam at present which might discourage the 'no shows'.

The next exams are slated for July 11. The fall schedule has not been announced yet.



## International News

DX fans should keep an ear open for Harry Beardsell VE7ZQ, who is currently sailing with world-traveller Willi de Roos. At last report, they were to leave Mara del Plata, Argentina, in the middle of April and, after sailing 2,000 miles to a South Atlantic Brazilian possession, Trinidad Island (not Trinidad), they hoped to operate from there using the call PY0HB ... note the suffix ... evidence of Harry's persuasiveness after CARF helped Harry to locate the right Brazilian authorities in Ottawa.

\* \* \* \* \*

The FCC in the U.S.A. has decided to defer action on the Communicator Class licensing, but it is soliciting the views of ex-CB operators who now have Amateur licenses on the "desirability of a 'codeless' class of Amateur license", according to its Report and Order of March 6. The last-minute inclusion of a proposed change to Article 41 of the ITU Regulations which appeared in the U.S. WARC '79 proposals and which would permit the elimination of code requirements for Amateurs lends an ominous ring to the FCC's promise to re-open the matter of 'codeless' licenses next year.

\* \* \* \* \*

Narrow band modulation ('folded audio') equipment for Amateurs is making its appearance on the U.S. market. Henry Radio is merchandising it.

\* \* \* \* \*

Attempts to pass up-to-date legislation on modern telecommunications seems to be having a hard time in both the U.S. and Canada. Twice introduced in Parliament and twice dead, the Canadian attempt to produce a new Communications Act never really got off the ground due to a low priority ... and an election in the offing at the time. In the U.S., there is not one, but THREE bills now before Congress to re-write the ancient Communications Act (U.S.) of 1934. Hearings will probably continue

this month in the case of the two U.S. Senate Bills and the House of Representatives Bill. One of them is particularly sensitive to the radio interference issue as well as point of sale control of Amateur rigs.

\* \* \* \* \*

The official U.S. WARC '79 proposals appeared in two parts. The part outlining the spectrum up to 27 MHz didn't appear until late in the game, due to U.S. broadcasters' last minute upset in their demands for more HF spectrum. Happily the U.S. proposal leaves 75 and 80 metres in their present state.

The U.S. proposal made 220 MHz a primary user over the Amateur Service as a secondary user but this has run into not only Amateur resistance, but the U.S. Navy is, to coin a phrase, up in arms about the switch because it operates sophisticated satellite tracking gear in and around 220-225 MHz. (HR Report)

\* \* \* \* \*

Operation LOREX, the two-month Canadian government expedition now on a polar ice floe, apparently did not include an Amateur operator, much to the disappointment of many Amateurs.

\* \* \* \* \*

Third Party traffic negotiations are under way with Australia, Haiti and Liberia. Reciprocal operating agreements with Spain, Italy, Liberia and Haiti are in progress.

## CW by Fone!

The instructor in Amateur Radio at Algonquin College in Ottawa, Dennis Clement, gives pupils and others a chance to practice their Morse through an innovative arrangement. One of the College's telephone lines gives a three minute practice period during slack evening hours and weekends. This gives those who don't have a receiver a change from their practice tapes.



## A CRY FOR HELP

Please submit your QSL cards per instructions, your Bureau staff works hard enough as it is without the unnecessary extra burden imposed each week by thoughtless or careless mailings of some members' QSL cards.

We ask you to put your membership number in the lower left hand corner -- not the upper left, lower right, back, nor inside the outer wrapping. The Bureau files and traces by membership number and the lower left corner of the outside envelope is where we look for it. Anywhere else gives us eyestrain, and we get enough of that from some members' illegible or tiny writing. Honestly, some members' calls appear to be written in hieroglyphics, cunieform or Mayan.

In the last sorting of over 52 lbs. of QSLs, for instance, 18% did not have their membership numbers, or omitted the letter prefix of their number, or wrote it in tiny illegible script.

These few non-conformists cost us more time each week for the initial sorting than the entire 82% who do try to follow bureau instructions.

To prove to you that we do log by numbers: In the first February mailings members A052 and E421 had their packets damaged in the mail, but their cards appeared to be intact. E104's parcel was far too big, we ask that cards be in a single stack with each parcel not over one pound, nor over one and a half inches high.

Then there are the other fellows who not only don't have their membership number in the proper corner, they also don't put their call sign in the upper

left corner. So we have to rip open the parcel and pull out the cards to see who sent them, so we can log them (reluctantly) by call rather than by number.

Please put your call in the upper left corner. Then if the other corner gets damaged in the mail, we can still log your parcel. Print your call clearly in large letters, please not in scripts unknown to us --just plain English in block letters will do.

Please don't staple your envelopes. The staples are H--- for me to get out and if overlooked by me, they spoil our YL sorters' manicures.

In writing this note, I was tempted to list the calls of all those who did not identify their envelopes properly: on the outside, with membership number in the correct corner, but I thought better of it; there are too many of them.

If you would really like to help your QSL Bureau in a major way, why don't you, after sorting any very large packs of your cards by country prefix, turn them all right side up and put a paper band separator around each prefix stack. If you would then print the national prefix on the paper separators, this would help us more than if you all suddenly appeared at the Bureau ready to donate one day's work per week sorting.

So please help us to help you in QSLing by following the above rules and suggestions. If you do all that we suggest, who knows, we may be able to find a little spare time to do some operating!

-Ken VE3CRL  
CARF QSL Bureau



# Expanded Frequency Coverage

WITH THE HEATHKIT HW-12C

Are you one of those Amateurs who has to say "Sorry, I can't go below 3,740 kHz and above, because there is a simple modification which will allow your HW-12 to cover the full Canadian 'phone band. You need to add only one part to your rig; a small trimmer capacitor in the range of 8-50 pf. The HW-12's A.F. (audio) gain control has a built-in push/pull switch which was intended to turn the optional calibrator on and off. Most HW-12's don't have the calibrator installed, so this control may be used to switch the 8-50 pf trimmer in and out of circuit. In the newer models, (HW-12A) the calibrator is turned on and off by the function switch, so you could either add a small switch to the front panel, or replace the A.F. gain control with a new one, having the push/pull switch, for switching the 8-50 pf trimmer in and out. This second method wouldn't require a hole to be drilled in the panel.

**MODIFICATION:** To make the modification, remove the two red wires from lug 4 of the A.F. gain control, then solder the ends together, tape them up and tuck them aside. Next, remove the blue/white wire from lug 5 of the control, tape this end and tuck it aside. Connect one end of a short wire to lug 5 of the A.F. gain control, and the other end to the nearest convenient chassis ground. Connect a wire from lug 4 of the control to one terminal of the 8-50 pf trimmer. Solder a wire to the remaining terminal of the trimmer, push the free end up through the slotted hold in the chassis beside the VFO tuning capacitor (C131a) and solder the free end to the stator lug of C131A. My trimmer had a square phenolic base, which was a nice 'jam' fit between the can of the VFO coil, and the chassis rail behind the coil.

**CALIBRATION:** Feed a signal generator or other stable signal source into the rig's antenna jack, and tune the generator

to 3,725 kHz. Pull the A.F. gain knob out, and set the rig's dial to 3,750 kHz. Using an insulated alignment tool, adjust the 8-50 pf trimmer until the 3,725 kHz signal is at zero-beat in the HW-12's speaker. Pushing the A.F. gain knob back in will restore normal operation. Although with the 8-50 pf trimmer switched into the circuit 3,750 has become 3,725 the dial scale is not quite linear, so you can't just subtract 25 kHz from the dial reading to find your operating frequency. However you can use your signal source to make up a tuning chart, which may then be taped to the front panel of your rig. My calibration turned out as follows:

Operating Frequency with trimmer switched in H.W. -12 Dial Setting		
3,725 kHz	.....	3,750
3,730	.....	3,757
3,735	.....	3,762
3,740	.....	3,768
3,745	.....	3,774
3,750	.....	3,779

Part of the Canadian modification to the HW-12, making it the HW-12C was a set of replacement driver coils, L2 and L3. These are factory adjusted and are quite broad-banded, and should allow good performance down to 3,725 kHz. If you find that your transmitter output at 3,725 kHz is less than about 75% of the output higher in the band, you may want to re-tune the driver coils. To do this, cut a hole in the 'bump' on the top of each can to allow access to the tuning slugs. Tune your rig to 3,760 kHz, feed in a signal, and adjust the slugs in L2 (2 slugs) and L3 (1 slug) for maximum S-Meter reading. You should now have good transmitter output between 3,725 and 3,925 kHz, and slightly less above 3,925 kHz.

I claim no credit for 'inventing' this modification, as it was passed to me by Bernie Bonnar, VE1UT, who had used a

june 1979 - 23

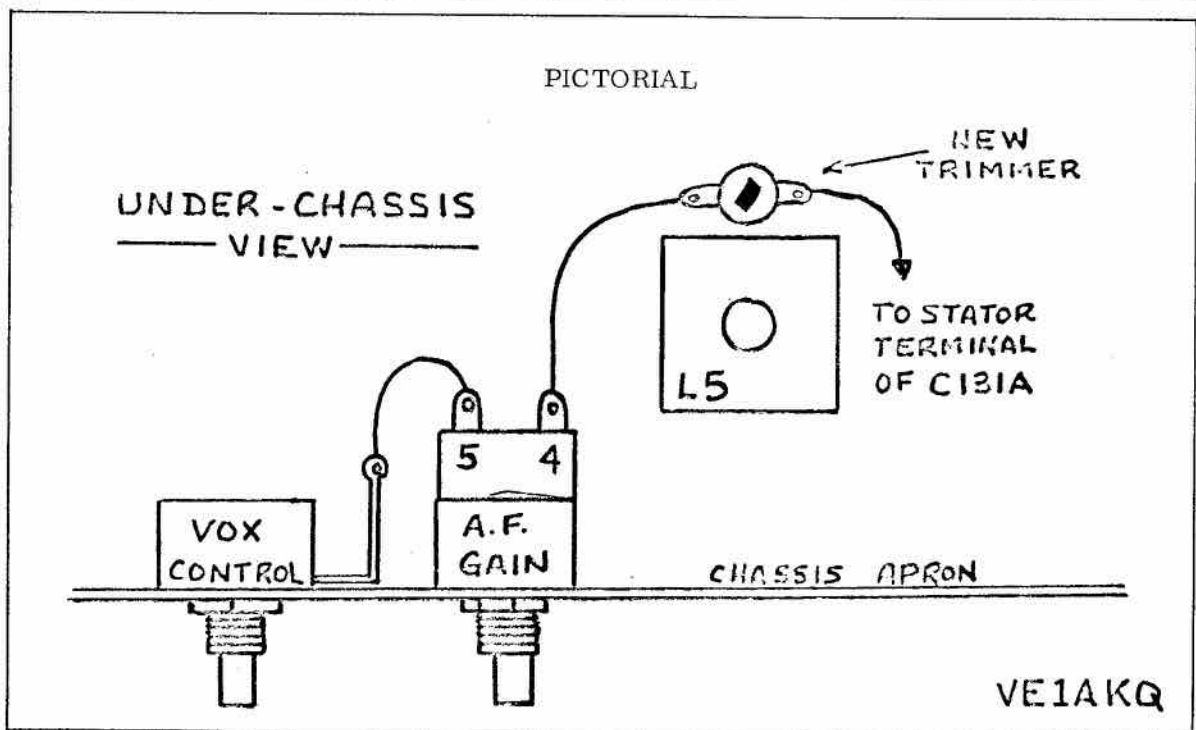
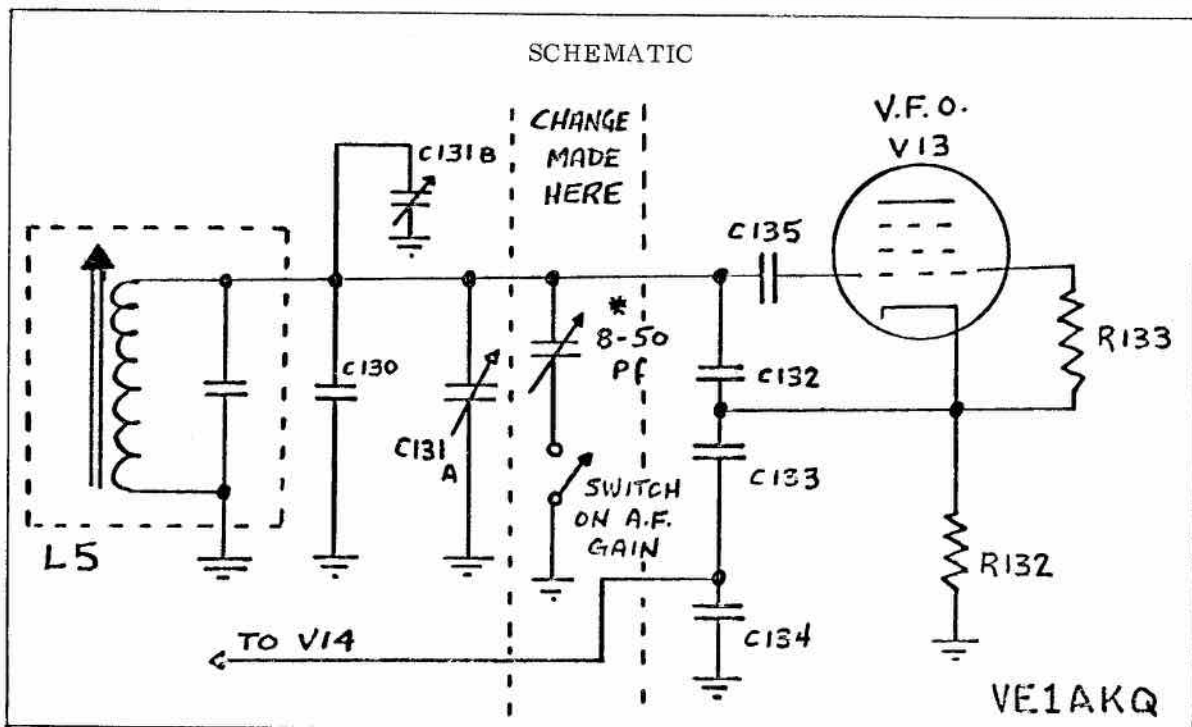
fixed capacitor to get the drop in frequency. It was my idea, however, to use a variable capacitor to get the exact 25 kHz drop at the 3,750 dial mark. So if you have been getting left out of QSO's on the low end of the 80 metre phone band, why not try this trick and get in on all the action.

The HW-12 will normally operate

down to near 3,740 kHz, so if anyone considers making this modification for a White Caner, I would suggest dropping the frequency by 15 kHz, instead of the full 25 kHz, so there could be no possibility of operation outside of the band at the lowest possible dial setting.

David Vail VE1AKQ

21 Southeast St., Yarmouth, N.S. B5A 3P4



# CONNECTORS

Over the years I have tried all types of connectors around the shack and the car. I now have a junkbox full of oddball connectors, but mates for them are either very expensive, out of stock or not made any longer. I needed something more uniform, so decided to take a look at the 2-pin moulded nylon type of connector.

These connectors are low cost (less than a dollar for the complete kit (Radio Shack 274-8001) as shown in Fig. A) and simple to use. They should be assembled as shown, with the female pins in the male housing and the male pins in the female housing. I will suggest a few ways you can use them to simplify your connector problems, your club might like to consider standardizing on these connectors to make life easier on field days, in emergencies, etc.

Fig. B shows how to use the moulded nylon connectors for audio. Put a female connector on your speaker or phones, the male goes on a short length of wire with a standard or miniature phone plug or an RCA type phono plug on the other end as required.

If you don't want to remove the present plug from your speaker or phones, you can make an adapter with a suitable jack on one end and the female nylon connector on the other as shown in Fig. C. A few adapters like this and like that of Fig. B will take care of all your audio mating connector problems.

Fig. F shows how to connect a cord to a car battery, either for use in the shack or in the car. In the car, the fuse should be installed on the engine side of the firewall. I soldered one end of the fuseholder to the solder lug on the battery post and put a double cord and connector on the battery. I have one connector under the dash for the rig and the other under the hood for my trouble light, etc.

Fig. E shows how to connect a light to the connector from the battery. It is useful as a trouble light in the car and also around the shack when the power goes off. My light is a 6 watt 12 volt fluorescent camp light, it gives about the same amount of light as a standard 40 watt bulb and draws very little current.

Fig. D is an extension cord. I made mine about 25 feet long so I can plug it into the connector under the hood and use it in the trunk. Note that if you install the connectors as suggested, you cannot plug the speaker into the DC or the light into the audio, though you can use the same extension cord for both.

Fig. G shows how to connect a cigarette lighter socket to the DC connector under the dash if you have a rig or lamp with a cigarette lighter plug on it.

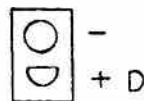
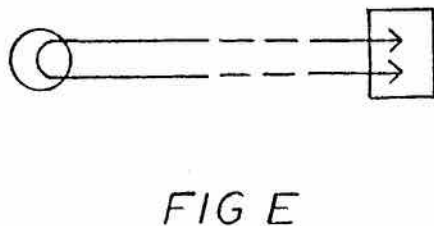
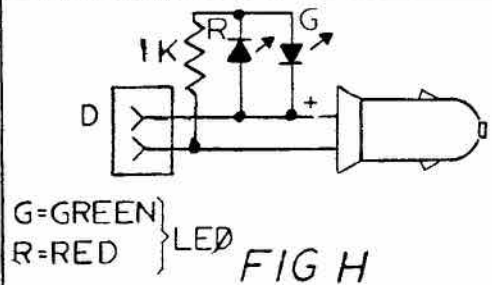
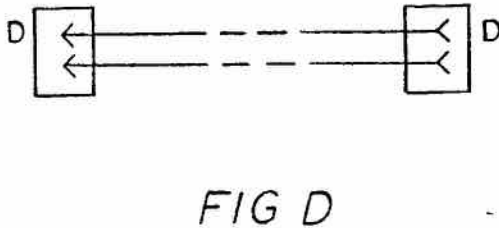
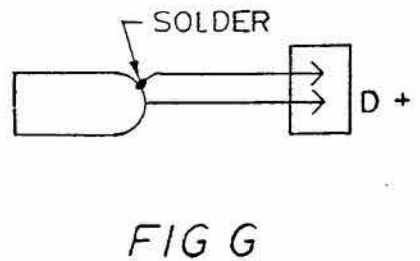
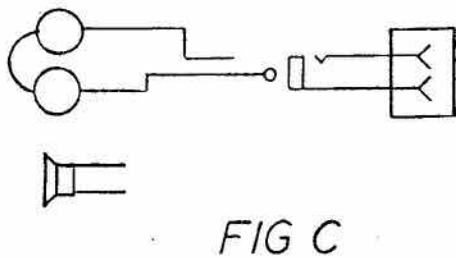
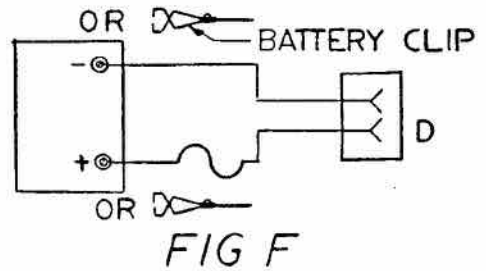
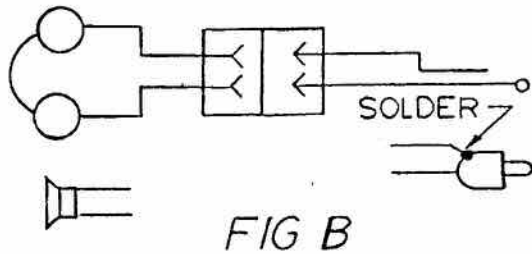
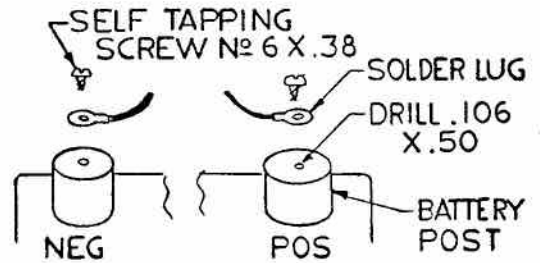
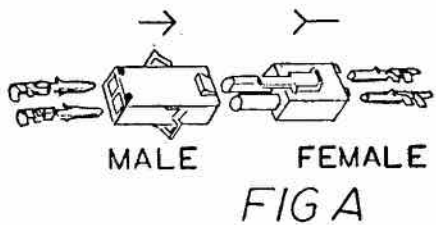
I have put a male connector on my battery charger DC cables. This saves time when I want to charge the battery. If you have completed Fig. F, you will always have the right connector and you don't even have to open the hood.

Fig. H is for the guy who wants to borrow his XYL's car. Note that cigarette lighters in some new cars have the centre pin grounded. If you add in the 1,000 ohm resistor as shown, you can check the polarity. If the green LED lights up, you are OK, the polarity is correct; but if the red LED lights up, the polarity is reversed.

Fig. J - Please use the 'D' shape for the positive battery lead so I can borrow your car or rig. Thank you.

By Bill Cousins VE3GPR  
Bill Cousins VE3GPR  
P.O. Box 562,  
Manotick, Ont. K0A 2N0

# POLARIZED MOULDED NYLON CONNECTORS





news briefs

With the inevitability of licence fees and taxes, Field Day rolls around once more on June 23-24. Your editor, with still-vivid memories of some years of nursing Wireless Sets No. 19 in trucks and holes in the ground in all kinds of weather, has only an academic interest in the event ... like let's see who can come up with the best story about it this year ... for a prize of \$25.00. Last year's winner was VE1BCN. The stories must reach CARF, Box 356, Kingston, Ont. K7L 4W2 before August 10.

\* \* \* \* \*

KANADIAN KOMMEMORATIVE KALL KORNER

Lakehead ARC will help locals whoop up the Thunder Bay celebration of the 300th anniversary of the founding of the first trading post at the lakehead. A special scroll is available to U.S. and Canadian ops who work five stations in Thunder Bay with the special VX prefix. Other stations can get it for three contacts and 2 IRCs. (Beaver skins not accepted.) Good for all of 1979. Send log info to Lakehead Amateur Radio Club, Box 2571, Thunder Bay, Ont. P7B 5G1. The club may have a station on the site of the restored post during the weekend of June 23 (Field Day) and June 30-July 2.

Bancroft, Ont. celebrates its centennial with the help of the local ARC station XJ3TBC. CW and phone on all bands except 160 metres. VHF operation on 146.52 MHz and VE3TBF 147.24/147.84 MHz. An award and special QSL card are available. For info write Bancroft ARC, Box 631, Bancroft, Ont. K0L 1Co.

\* \* \* \* \*

After 15 months of activity in the legal, technical and developmental areas, AMSAT Canada recently held a special meeting in Ottawa to review progress on its geostationary Amateur satellite. Design and development work on prototypes is all ahead and with the disappoint-

ing cancellation of its original plans to piggy-back on a Hughes test vehicle, the group, mostly Ottawa Amateurs who work in space communications, has gone ahead with the development of hardware which will be flexible enough to fit those launch opportunities which may arise in future. The group, headed by John Henry VE2VQ of Telesat Canada and a past president of CARF, has Box 7305, Vanier, Ont. K1L 8E4, as its mailing address. Telephone contact can be made through Henry McGee at (613) 560-3777 (days) or (613) 226-5269 (evgs.).

\* \* \* \* \*

The Hamilton ARC has installed a remotely controlled VHF rig in the dispatcher's office of the Hamilton-Wentworth Police Department. An Amateur control operator on the repeater can turn on the rig in the police station and allow another Amateur involved directly in an emergency to talk back and forth with the police. Control of the equipment is under the hand of the Amateur control operator, who will turn off the machine in the police HQ at the end of the emergency QSO. (TX Peel ARC)

\* \* \* \* \*

The Canadian Ladies Amateur Radio Association (CLARA) is running its AC-DC Contest for 1979 from 1800Z Saturday, Sept. 8, to 1800 Sunday, Sept. 9. Logs for winning a CLARA pin and certificate should go to Diana Vander-Sande VE7DTO, Jensen Road SS#3, Prince George, B.C. V2N 2S7.

\* \* \* \* \*

Overlooked in the general interest in 'packet radio' last year was the fact that the same issue of the Canada Gazette which put it into effect also removed the narrow band restriction on FM operations on the two metre band. Wide band (plus or minus 15 kHz) is now permitted on 144.1 to 146 as well as 146-148 MHz. Wide band is also permitted on 220-225 and 420-450 MHz and on 52-54 MHz.

# Canada & WARC '79

From 'Modulation' - a DOC publication

All users of the air waves, from Amateur radio operators to broadcasters, have a stake in the proposals recently approved by the federal government for Canada's participation in the World Administrative Radio Conference (WARC). The conference, to be held for 10 weeks starting Sept. 24, 1979, in Geneva, is sponsored by the International Telecommunication Union, the UN agency responsible for co-ordinating international telecommunications.

With more than 1500 representatives from 154 countries expected, this WARC will be one of the largest world conferences ever. WARCs are held periodically to review the international regulations governing the use of radio communications services. This will be the first general WARC held since 1959 and there may not be another until the end of this century.

The Canadian proposals for this WARC are contained in a 200-page document formulated by an interdepartmental committee after extensive public consultations with federal departments and agencies, the private sector and provincial governments. The committee

chairman is E.D. DuCharme, director of the Department of Communications' WARC activities division in the international telecommunications branch.

Among the main Canadian proposals are that:

- ★ additional spectrum be allocated for mobile communications in the UHF band;
- ★ the standard AM broadcasting band be extended to provide for additional channels to permit coverage of areas in Canada not at present adequately served;
- ★ the amount of shortwave spectrum employed for international broadcasting be substantially increased;
- ★ additional radio spectrum be provided for Canadian and international requirements for radiocommunications by satellites;
- ★ additional spectrum be provided for the amateur radio service.\*

The document containing the Canadian WARC proposals is available at DOC headquarters or regional offices. Copies have also been sent to provincial and industry representatives.

\*plus a bit of re-shuffling of some bands and deletion of 420-430 MHz and a chunk of 75 metres from 3900-4000 kHz ... Ed.

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## news briefs

For those who use CHU, the Canadian time standard station, for more exotic purposes than catching the 8:05 bus to work, the National Research Council announces a change in its coding of the signals in order to make a correction between Universal Time and its atomic clock. Commencing March 22, the new value of DUT1 as given by the BIH circular F 78 is now indicated on CHU by split pulses on the first to third second of each minute. As of that date, DUT1 equals UT1 - UTC will be plus 0.3 seconds (or just the time we manage to miss the 8:05 three out of five tries... Ed.).

\* \* \* \* \*

Seagoing communicators of past and  
June 1979 - 28

present, ahoy! The Halifax explosion of 1917 will be overshadowed by the hoo-haw which will be raised at the third reunion of naval communicators to be held in Dartmouth, N.S. on July 20, 21 and 22. Registration forms and details can be had from 'Naval Communications Reunion 1979, Box 2755, Dartmouth East, N.S. B2W 4R4! Special guest speaker is expected to be none other than Lord Louis Mountbatten of Burma.

\* \* \* \* \*

Prairie Amateurs will have their annual bash on July 27, 28 and 29. Called 'Particifest', the affair will be sponsored by the Moose Jaw ARC ... Write Box 150, Bushell Park, Sask, S0H 0N0.

# from the clubs

- The Calgary ARC has come up with a new twist for a special event station at the world-famous Calgary Stampede. They plan to operate a solar-powered rig during the period July 6 to 15. The call? What else? ... VE6SUN! (Air hours are 1600-0400 GMT) They also laid it on the Minister of Communications, via letter, about the absence of the sending part of the code test.

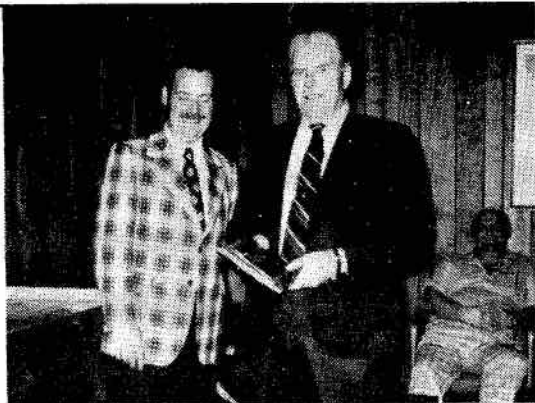
- At a recent supper meeting of the Ottawa Chapter of the Quarter Century Wireless Association (a worldwide society), Ray Thornton VE3RT received a certificate for his 50th year as an active Amateur. Ray, however, was outdone at the meeting by the speaker, Jim McIntosh VE3VI, who at 83 is still going strong.

- The New Brunswick ARA has been revived and is putting out an excellent bulletin. New exec is: Pres. Gord Morton VE1BKJ; Vice-Pres. Lionel Girourard VE1AXG; Sec. Gladys McLaughlin VE1BRA; Dick Clitheroe VE1XL has the moneybags. (Tx Halifax ARC Bulletin.)

- The Halifax ARC has established a 'New to Amateur Radio Committee' to answer questions which are always in the minds of newcomers like "What's a Contest?", "What's a net?". (Maybe the forthcoming CARF Communications Handbook might help, too!)

- The Sorel-Tracy P.Q. ARC is holding what it terms a northern Quebec 'DX expedition' near Misstassini Lake, north of Chibougamau, July 12-28. CW and A3 will be used. The club call is VE2CBS.

- The Lakehead ARC (Thunder Bay, Ont.) and the North Bay ARC, like an



Sarnia's North Shore ARC President Bob Miller VE3HNN presented the Amateur of the Year award to Harry Westwood VE3QG, who has served the NSARC over many years, aiding its progress with personal involvement and various activities. The NSARC has, like many other clubs, moved with the times and is now incorporated.

-Photo by 'One Shot Bernie' VE3ATI

increasing number of clubs concerned about the liability which could be engendered by the variety of activities in which Amateur organizations participate, are incorporating. The Ottawa ARC has also just done so

- The Cambridge, Ont. DX Society is one year old. For interested Amateurs, the address is Box 3566, Cambridge, Ont. N3H 5C6. It has a certificate for those who work Cambridge stations, signed by the mayor, no less. Club call is VE3UM.

- The Ottawa area has a new club, the Carleton ARC. This should not be confused with the Carleton University ARC, which is a separate club.

- The Victoria Short Wave Club is losing the editorial services of Vince Hlavac. The club publication 'ZeroBeat' has been one of the best in Canada and Vince's erudite and sly wit will be hard to replace. (Tx for the many chuckles, Vince!)

- Maritime Amateurs who have been conventionless two years in a row will be happy to know that the Sydney ARC has formed a committee to take on the 1980 clambake and has applied to the Maritime Convention Committee for the okay.

# Organization in the Shack

By Ed Meyer VE7CUE

Organization is common sense planning. You don't need talent to organize, only elbow grease. Yet organization can mean the difference between pleasure and frustration in your shack.

After you have been on the air and have a few hundred contacts in your log you'll probably pause and look around. Does the shack look like a station or is it just a bunch of electronic equipment on top of a table? Any Amateur wants his shack to be a bit on the pro side and have it look like a station. You can have your shack like that if you organize.

From the beginning, things should be done right. One of the first considerations should be the operating console. The desk, or the table you use and where your rig is placed. Many handbooks display typical operating consoles suitable for Amateur use. Usually they are made of wood and of simple construction, but dimensions are planned according to usage.

From experience, the right size for comfort, usefulness and practicality are noted. As a starting point in organizing your shack, read about consoles, look at consoles and then design a console for your shack. A saw, a hammer, a drill, a screwdriver, some sandpaper, maybe some paint, and that's all you need. The handbooks will give you the dimensions -- you give it the elbow grease. Do it right, do it to last -- it'll pay off in the long run.

The chair or stool or whatever you intend to use should be the right size and allow you to sit on it comfortably for lengthy periods.

Now you're on your way. If you believe in organization, you'll benefit. You will be the person organization will repay.

No doubt you know how to wire your shack. That AC in is all-important. It will operate just about all your equipment. It should, then, be a big point to consider and plan for in organizing your shack. If possible, find an appliance outlet (1500 watts or more) and use it. Hopefully, an outlet with just your Amateur gear on it and nothing else.

Some Amateurs go so far as to use  
june 1979 - 30

a 230-volt line into a transformer. That then puts out 115 at a more constant voltage level. At any rate, have some line switches in your AC line, and have wires and cables neatly routed and solidly anchored.

Two important contributing factors to having a good shack have been mentioned -- there are literally dozens more.

Key, keyer or bug placement means a lot. A device with a heavy immovable base is a boon. Then you can place it anywhere on the console top (a plate-glass console top is a worthwhile luxury. It's really a pleasure to write on the perfect surface of plate glass). The rig itself should be practically positioned. The rig, mike, keys are what you will use all the time; tuning, working and adjusting. Place them right once and for all.

You can incorporate your own design preferences into the shack if you like -- if you like your rig(s) on a bit of an uplift angle, build a sloping shelf. So it goes, too, with SWR-meters, tuners, power meters, dummy loads, antenna switches and so on -- design their placement to conform to organized operating.

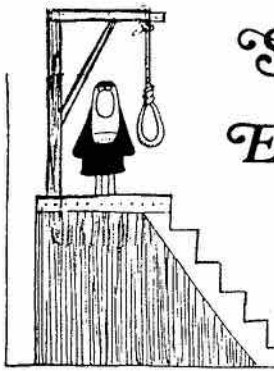
With a few relatively technical subjects under our belt, we can now look to organization in the paper work of the shack. Logs, QSL cards (in and out), call books, reference handbooks, manuals, clocks, thermometers, stationary supplies (Oh, the luxury of using a brand-new, soft, 'B' pencil to copy CW); all these should have their specific place where they are kept and available. A well-run office is clean, orderly and efficient. That's our goal in this facet of organization in the shack.

After months, even years, of working in your shack, you will from your own experience realize the importance of organization. If you can't figure out how to organize your shack, read, write and look -- read handbooks and look at other operating shacks.

'Semper Organization'.

-Ed Meyer VE7CUE,  
2345 West 6th Ave.  
Vancouver, B.C. V6K 1W1





## Social Events

July 7 - Ontario Hamfest at Milton Fairgrounds, Milton, Ont. Information from Box 836, Burlington, Ont. L7R 3Y7. Camping area available.

July 14-15 - Peace Garden Hamfest. International event for prairie Amateurs. (No other info received.)

July 20-22 - Naval Communication Reunion 1979. Primarily for naval communications types, past and present, but the proportion of Amateurs will be high. Follows the howling success of the 1976 event. Highlight will be Lord Louis Mountbatten of Burma as scheduled guest speaker. Info and application forms from Naval Communication Reunion, Box 2755, Dartmouth East, N.S. B2W 4R4.

July 21-22 - Glacier-Waterton Hamfest at Three Fork Campground, near Essex, Montana. This international event is sponsored by Hellgate and Missoula clubs. Info from Glacier-Waterton Hamfest, Box 2225, Missoula, Montana 59806. Phone 545-5033.

July 27-29 - Moose Jaw ARC sponsors the 'Particifest 1979'. Info from Particifest, Box 150, Bushell Park, Sask. S0H 0N0. Prizes, banquet and dance. Workshops, etc. Saturday and Sunday. CARF President Bill Wilson VE3NR is scheduled to speak on the Saturday.

July 28-29 - The Okanagan International Hamfest is back in Canada, this year at Gallagher Lake KOA campsite near Okanagan Falls. Information: Penticton ARC, 251 Dawson Ave. East, Penticton, B.C. V2A 3N4.

August 17-19 - Quebec's provincial organization, Radio Amateur Quebec Inc. (RAQI), annual convention at 'Le Château Montebello', Montebello, P.Q. Flea market, exhibits, ladies' program, technical workshops. Trailer park and

camping area. For info call Charles Savard VE2FKC at 819-770-1315 or write Apt. 901, 680 Blvd. St. Joseph, Hull, P.Q. J8Y 4A9. All Amateurs, coast to coast, are invited.

August 17-19 - Le congrès annuel de RAQI aura lieu du 17 au 19 août au Château Montebello, Montebello, Québec. Les activités comprennent un marché aux puces, conférences techniques et des exhibits de toutes sortes. Programme spécial pour les dames, danse et banquet. Pour de plus amples renseignements, communiquez avec Charles Savard, 819-770-1315. Tous les amateurs du Québec et de l'extérieur sont cordialement invités.

October 12-14 - Radio Society of Ontario convention, Skyline Hotel in Ottawa. Hosted by the Ottawa ARC. Info from Ottawa ARC Convention Committee, Box 8873, Ottawa, Ont. K1G 3J2. The club is sponsoring an award to publicize the event. The National Capital Award starts May 1 onward for contacts with VE3NCR. Highest number of contacts from May 1 to July 31, 1979 is eligible for prizes at RSO Convention. Details for SASE to the Committee.

## BIG SISTER IS WATCHING

Important news from DOC ... The Minister (as of May 21) suggests sex role stereotyping of women on radio and TV is in for a rough time. Not only will the full and mighty force of the CRTC be marshalled in this important battle, but the Minister (as of May 21 at least) will herself set up a committee "to monitor radio and television advertising". Shades of Orwell's 1984.

The money and energy devoted to this upgrading of Canadian mores might be better devoted to enforcing the Radio Regulations. If the Canadian public doesn't like what it views or hears, it can simply either (1) turn it off or (2) stop buying the offender's soap flakes.

On more important matters, DOC is pursuing the development and testing of fibre optics and two-way TV information retrieval systems. Industry and the Department are testing both subscriber drops and 'trunk' lines in an experiment in cable TV transmission in London, Ontario.

CONTEST CALENDAR

June 9-10 ARRL VHF QSO Party  
23-24 ARRL FIELD DAY  
July 14-15 IARU Radiosport  
1 CANADA DAY CONTEST  
Aug. 4-5 ARRL UHF Contest

This month we deal with a subject that is of interest not only to contesters, but also to traffic men, DXers and ragchewers. Canadian Amateurs have now been offered the opportunity to change the 40 metre bandplan so that it will be a more useful band for all facets of Amateur Radio.

Presently, 7050-7100 kHz is allocated for phone communication in every country except the U.S. and Canada. This is because countries outside North and South America cannot operate at all above 7100 kHz. On 40 metres, the present Canadian phone allocation 7150-7300 kHz serves to isolate the Canadians from the rest of the world. Canada is left out of all the good phone DX and clear frequencies below 7100 kHz.

The present phone band above 7150 kHz is virtually useless at night because of strong broadcast interference. Forty metres is potentially an excellent band for cross-country communications at night. The new interference-free phone segment below 7100 kHz would offer an effective means of handling Trans-Canada traffic, as well as DXing.

Forty metres is probably the most difficult band on which to work DXCC. On all the other bands you have a choice of working the DX on CW or phone, but on 40 metres you are essentially restricted to CW only. There are lots of phone DX stations on below 7100 kHz, but they cannot be legally worked with the present phone band. Working split-frequency is not a practical alternative. Most of the DX either doesn't have split-frequency capability or are unwilling to fight the broadcast QRM above 7150 kHz. The new phone segment below 7100 kHz will enable DXers to easily work many

DX stations that were previously out of reach. Forty metres will become equally attractive to both CW and phone operators, instead of being a CW-only band as at present.

The 40 metre CW band will still be 100 kHz wide (7000-7050 and 7100-7150 kHz). This brings it into line with the other bands. On 20, 15 and 10 metres, there is 100 kHz of CW only, so why not on 40 metres too. If 100 kHz is enough on 20, 15 and 10, then it should also be enough on 40. Granting this 50 kHz segment to phone does not mean that CW is prohibited there. CW will still be permitted in the whole band.

Opinions expressed by Canadian Amateurs indicate a definite support for this expansion. A recent questionnaire by 'CANAD-X' shows a very large (91%) majority in favour of allowing phone below 7100 kHz.

The new 40 metre phone band will be a tremendous boon to contesters for all international contests such as the CQ Worldwide. Here on the West Coast, we will be able to run JAs all night on 40 phone below 7100 kHz. In previous years we could only listen, get frustrated and work the occasional multiplier. Likewise, the East Coast could run Europeans all night with the new phone band. Forty-metre QSO and multiplier totals will go 'way up.

The proposed changes to the 40 metre band plan will be of immense benefit to contesters, DXers, traffic men and ragchewers alike. The CW op will still get his fair share of the band on 40 (100 kHz), just like on 20, 15 and 10. This is an exciting opportunity for all Amateurs to make 40 metres a truly useful band for all. Make sure to write the DOC to show your support for this change.

In the meantime, summer has arrived; time to build all those antennas that you wish you had last winter. The recent antenna articles in TCA by VE7BS, VE7CC and VE7WJ should give you plenty of ideas.

Don't forget to get on for the Canada Day Contest on the 1st of July.

# Canada Day Contest

CARF is sponsoring a new, one-day contest, called the 'Canada Day Contest'. Open to all Amateurs everywhere, the contest is to promote contacts with Canadian stations on all bands and to facilitate the working of Canadian stations for those Amateurs trying for the 'Canadaward', which is a separate contest.

The one-day event will mark the celebration of Canada's founding on July 1, 1867. Old-timers will remember it as 'Dominion Day'. The period is from 001 to 2359 hours UTC, July 1, 1979.

The 1.8 to 148 MHz bands, inclusive, may be used. Phone and CW are both counted and all entries are classed as mixed mode operation. Classes are: (1) single operator, multi-band, (2) single operator, single band, and (3) Multi-operator, single transmitter, multi-band.

Valid contacts are those between Canadian Amateurs and those between foreign stations and Canadians. The same station may be worked twice on the same band ... once on each mode. No CW contacts are allowed in the phone bands or vice versa. Working the same station again on different bands will count.

The exchange between Canadian stations should be the usual RST plus the

QSO number, but in the case of VE1 stations it should also include the province. All other contacts can use RST plus the QSO number. Scoring: Contacts with Canadians are worth 10 points, all other contacts are one point each.

Multipliers are: number of Canadian provinces or territories worked on each band on each mode; separate multipliers per band per mode with a maximum of 24 -- 12 phone, 12 CW. Other stations count for points but not multipliers.

CW frequencies are: 1810, 3525, 7025 kHz and 14.025, 21.025, 28.025, 50.1 and 144.1 MHz. Phone frequencies are: 1810, 3770, 3900, 7230 kHz, 14.15, 14.3, 21.2, 21.4, 28.4, 28.6, 50.1 and 146.52 MHz.

Suggested time for phone activity is on the even hour, UTC and for CW, the odd hour.

Send all logs, including dupe sheets and lists of multipliers to: CARF Canada Day Contest, Box 76752, Vancouver, B.C. V5R 5S7.

The CARF Canada Day Contest trophy will go to the highscoring single operator entry. Certificates will go to high score in each category in each Canadian province or territory, U.S. call sign areas and each country. Second and third place certificates will be awarded if scores are close.

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## WARC '79 Update

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Due to last-minute intervention by U.S.A. broadcasting interests, the U.S. proposals for WARC '79 prevented the complete brief from going to Geneva to the ITU early this year. The portion of the spectrum above 27 MHz was made public last December and was reported in TCA, but only recently did the HF portion of the proposal surface, after it belatedly followed the first part to Geneva in late April.

To summarize it, what better way than to take it from 'HR Report', that excellent weekly newsletter published

by 'Ham Radio'. Here is an excerpt from its May 11 issue:

"Proposed Amateur HF allocations did not suffer as a result of the late maneuvering that delayed the submission of the HF band portion of the U.S. WARC proposal. Still included in the U.S. position are an exclusive worldwide allocation of 1860-1900 kHz, with 1900-2000 shared; 3500-3900 exclusive with 3900-4000 shared; 6950-7250, exclusive; 10.1-10.2 MHz (new) exclusive; 14.0-14.35, exclusive; 18.068-18.168 (new) exclusive; 20.95-21.45, exclusive; and 25.11-25.21 (new) also exclusive...".

# New CARF Directors

Changes in the Federation's Board of Directors have been made as a result of elections and because some former Directors did not run this year.

Elected for Ontario are Marv Nash VE3FON and Ed Sheffman VE3FTO, both of Willowdale, replacing Fred Robinson VE3GCP. Peter Driessen VE7BBQ won out over Art Spence VE7DKY for the Pacific Region. Jim McKenna VE6HO and Nate Penney VO1NP return by acclamation for the Prairies and Atlantic Regions respectively. Retiring from the Board are Stella Broughton VE6VF, who was in at the founding of CARF, Martha Pankratz VE5YY, Eugene Lajoie VE2RA and Bob Rouleau VE2PY.

The vacancies for the Quebec Region and Directors-at-Large may be filled by the Board.

Joan Powell VE3FVO, who has done an excellent job as Secretary and whose innovative ideas for such things as Amateur Radio Week will be missed. She is leaving the position due to commitments with the Nortown ARC of which she is president.

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## LATE NEWS FLASH:

The CARF annual Board of Directors meeting on May 26 re-appointed Bill Wilson VE3NR as President; John Gilbert VE3CXL as Secretary; and re-appointed Treasurer Bernie Burdsall VE3NB and General Manager Art Blick VE3AHU. Lionel Bonhomme VE2SY was appointed Quebec Director. Lionel is also a director of RAQI.

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## RAQI to co-host Symposium

The Quebec provincial organization, Radio Amateur du Quebec, will host the CARF-convened National Amateur Symposium this fall. The club or clubs which will co-host the event and the place have not yet been finalized.

Planning for the Third National CARF Amateur Symposium this fall is now in progress. The Federation has asked the provincial societies for offers to host the Symposium and on the basis of discussions so far it is likely to be held in Eastern Canada, ie. east of Ottawa.

Clubs are now invited to propose items for the Symposium Agenda and to send in papers making recommendations for discussion and adoption. To start things rolling, it is proposed that the following items be discussed.

1. Antennas -- the powers of municipalities vs. those of the Federal Government (DOC & MOT) to control or prohibit Amateur antennas.

2. Interference -- the need for susceptibility standards for non-Amateur consumer radio, TV and other electronic equipment and the application of Regulation #48 in cases of interference with commercial stations.

3. Packet Radio -- the review and

updating of the technical characteristics of digital/packet radio and the establishment of protocols.

4. Examinations -- the improvement of training of prospective Amateurs and of the examination and review procedures as well as the possible assistance of clubs in the conduct of exams.

Suggestions from clubs and individuals for other topics to be included in the agenda should be sent to CARF no later than the end of June. The Symposium workshops will then be arranged and topics allotted to them in such a way as will enable the best discussions possible. Correspondence should be addressed to Symposium, CARF Inc., Box 356, Kingston, Ont., K7L 4W2.

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## New RAQI exec

RAQI's new executive, returned after the recent election is: President, Jules Provost VE2BDM; 1st vice-pres. Giles Blackburn VE2RD; 2nd vice-pres. Gillies Parrot VE2OU; Secretary, Robert Leulier VE2FKD and treasurer, Pierre Joron VE2DV.

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Larry Kayser VE3QB is one of the Amateurs who maintains the 'Experimenter' in the Amateur Experimental Service. He writes about

# VE3TEN

## A SOPHISTICATED BEACON

VE3TEN, Radio Beacon on 10 metres (28.17500 and 28.17415 MHz) frequency shift keying has been upgraded to facilitate more experimentation by Amateur radio stations around the world.

The beacon is now sponsored by Ottawa area Amateurs. The location has been improved by moving the transmitter and antenna to the top of a 100-foot tower. A digital radio link has been implemented from the home of VE3QB which permits 45 baud Baudot, 110 and 300 baud ASCII, and CW messages to be placed on the beacon by a microcomputer at VE3QB's QTH.

The microcomputer supports several other Amateur radio experiments as well as a commercial software development facility, so occasionally the regular call sign identifier is in service. Data transmissions are identified by a CW message to aid potential users to know what is currently in the system.

### Wanted: A Fellow Experimenter

A serious effort is being made now to locate a co-worker for a first in Amateur radio experimentation. An Amateur, resident between about 1000 and 2000 kilometers (600 to 1200 miles) from Ottawa and who has an adequate QTH, a microprocessor system with machine or assembler experience, and who can assemble a suitable 10 metre station. The objective will be to establish fully automatic digital error-free communications by meteor scatter. This project can be accomplished over a period of 12 to 24 months and would be a significant achievement. Serious prospective experimenters must be able to copy meteor bursts of the current beacon signal as a first step, then contact VE3QB for further information.

Last but not least, VE3QB occasionally operates through VE3TEN on CW. If you hear VE3TEN calling CQ, please give me a call 5 kHz up or down from the beacon -- I would like to work you.

### VE3TEN Highlights:

- VE3TEN has been in operation more than 7 years.
- VE3TEN supports scientific projects in Germany, England, Eastern Africa, Japan and New Mexico.
- Power output is 65 watts for an ERP of 100 watts.
- VE3TEN is located on a site provided by your National Research Council. It has received major support and assistance from VE3BNO George Roach of Ottawa.

Larry Kayser VE3QB  
24 Arundel Ave., Ottawa  
K1K 0B6

(More on 10 metre beacons in other countries in a forthcoming issue ... Ed.)

## Free!

### FREE SUBSCRIPTION!

If you exchange QSL cards and send more than 41 cards per year at the rate of 17¢ for first class mail and are a CARF member and use the CARF QSL Bureau ... you are, in effect, getting 'TCA' free!

To put it another way, by joining the Federation for a miserable \$7.00\* per year, your incoming and outgoing QSL service is free.

In addition, your hobby is regulated by federal legislation written and administered by DOC. To ensure that we as users have an adequate voice in the regulatory process, we need a strong and active group in Ottawa: officers and officials of the Federation to look after our interests with Federal departments.

Obviously if you are reading this you are already a CARF supporter, so tell your friends, on and off the air, about the Federation ... and the free QSL deal!

\*Hurry! Rates will increase soon.

# Your chance

CARF has put together ideas on the DOC proposals for changes to the Amateur regulations and they are presented here as a framework to assist individuals and organizations in commenting on them and as a starting point for a CARF brief to be submitted to the Department.

These ideas should not be construed as the eventual brief, but are those brought up by Amateurs at the 1978 National Amateur Symposium held in Calgary, and at subsequent meetings of various clubs.

It would be helpful in making out the CARF brief to have comments sent to the Federation even though they can, of course, be sent direct to DOC. In the latter event, it would be appreciated and in the interest of all, if a copy could be sent to the Federation before June 30.

The original closing date in DOC for comments and briefs was June 28, but a thirty-day extension was asked for by CARF and it was granted. The closing date is now July 28.

(Each proposal is reproduced and followed by the related Amateur comments.)

1) Deletion of the log keeping requirements for mobile stations.

Amateurs have found this to be quite impractical. Many other radio services are not required to keep logs for mobile stations. It is noted that Amateurs who want to keep logs for special reasons would not be prevented from doing so. The Federation feels that this change should be supported.

2) The rephrasing of Sections 61 and

62 take into account the availability of transmitters with built-in measuring devices.

Most HF Amateur transmitting equipment today is equipped with permanently installed, fairly reliable and accurate metering for measuring power input to the final amplifier. After allowing for efficiency and losses, the power output of a transmitter can be easily determined. Also, most HF Amateur transmitters now have automatic modulation limiting circuits which also indicate overmodulation on the transmitter meter.

As far as Amateur VHF, UHF and SHF transmitters are concerned, most are operated so far below the authorized limit that there is no possibility of it being exceeded. While the overmodulation of these transmitters is not quite so critical because they are operated on discrete channels, the distortion caused by over-modulation will inevitably cause comment by the Amateur at the receiving end and lead to corrective action.

Respecting frequency measuring, practically all transmitters now have direct reading frequency control circuitry based on crystal calibration or frequency synthesizers which are also crystal controlled. In both systems, the crystals are calibrated against an internationally recognized standard.

In recognition of these points, it is proposed that sections 61 and 62 be deleted and replaced by one section requiring that the licensee of an Amateur station shall be able to show that the power, frequency and modulation char-

# to comment

acteristics of his station's operation conform to the terms of his licence.

3) Deletion of the conditions attached to the operation of portable or mobile installations with the exception of the frequency requirement for operation on board pleasure vessels.

Regarding Regulation 64(a), we note that Regulation 50, which makes it quite clear that an Amateur is responsible at all times for the operation of his station, renders 64(a) which deals with this same subject and is more restrictive, quite superfluous. Its deletion is therefore recommended. For Regulation 64, see Appendix A.

Section 64(c) of the Regulations should be deleted for several reasons. Only Amateurs are required to use the terms 'portable' and 'mobile' on the air. Thus this regulation forces an Amateur to advertise to listening vandals and burglars that they are away from their home and that it may be appropriate to attack it. Then too, it is generally accepted in radio today that portable and mobile stations do not cause interference problems of the kind that required this kind of identification when it was introduced many decades ago.

Sections 64 (d) and (e) create administrative burdens for both DOC and the Amateurs which are unnecessary under modern-day conditions of Amateur operations. They should therefore be deleted.

4) Amendment of Schedule IV to permit type F1 emission on frequencies between 3.5 MHz and 29.7 MHz.

The present regulations are unclear in that Schedule IV now permits some

forms of RTTY. This proposal, which came out of the Symposium, has merit because it would clearly permit an Amateur class certificate holder to use radio teletype equipment, which is more readily available, in more modes\*. It would enable Amateurs to get a better understanding of one of the more advanced technologies and of the experimentation that is the purpose of Amateur radio. Its adoption is recommended.

(\* This change would permit Amateur class certificate holders the same F1 (FSK/TTY) privileges as Advanced Amateurs... Ed.)

5) Permission to use F1 in the 160 metre band.

The 160 metre Amateur band is suitable for medium distance communications and yet is not greatly used. The Regulations could be relaxed to encourage Amateurs to make greater use of it. This proposal, along with the proposal for phone endorsement discussed in Item 7 below, should help accomplish this by making the band more attractive and interesting. The adoption of this proposal is recommended, not only for the above reasons, but also for the reasons given under Item 7.

6) Permission to use A3 emission in the 7050-7100 kHz band.

At the Calgary Symposium, this proposal was unanimously supported when put to a vote. The following points were made at that time:

a) Canadian Amateur activity on 40 metre phone is almost non-existent compared to the other HF bands because of the severe broadcast interference and general absence of clear frequencies in

the present 7150-7300 kHz Canadian 40 metre phone band. This phone band is virtually unusable at night. Clear frequencies for 40 metre phone can only be found in the internationally recognized 7050 to 7100 kHz DX phone band. This is analogous to the clear frequencies for 20 metre phone in the 14100-14200 kHz DX phone band.

b) Only 7000-7100 kHz is available to Amateurs on a worldwide basis. The portion 7100-7300 kHz is shared with broadcasting and is not available to Amateurs outside North and South America. Thus, most DX contacts must take place below 7100 kHz in the worldwide Amateur band, on both phone and CW. At present, Canadian Amateurs using phone are denied the opportunity to work this DX below 7100 kHz because of the present phone allocation. Split frequency operation is highly unsatisfactory. Thus both phone and CW should be permitted below 7100 kHz in the worldwide Amateur band so that Canadian Amateurs can work the DX too.

c) CW activity on 40 metres will not be significantly affected by this proposal since 100 kHz are left for CW only (7000-7050 and 7100-7150 kHz). It should be noted that the CW bands on 20, 15 and 10 metres are also 100 kHz wide.

The implementation of this proposal would, for the first time, provide an equitable distribution of frequencies between Canadian phone and CW operations in the worldwide portion of the 40 metre band. It is anticipated that this proposal will be strongly supported.

7) Amendment of Schedule V to permit phone endorsement on 1800-2000 kHz.

The 160 metre band is grossly underused in Canada. The 10 metre endorsement creates a lot of activity on 10 metres which would not be there otherwise; thus a 160 metre endorsement should help to increase activity on this neglected band.

The 160 metre band provides short range regional coverage (100-500 km) not normally possible on 10 metres. This would allow holders of the phone endorsement to communicate within their own province on 160 metres, as well as to work DX on 10 metres, thus providing more scope, variety and interest to their operation.

During years of low sunspot activity, the 10 metre phone endorsement is not of much interest, since only groundwave communication is possible on 10 metres. Including 160 metres would make the endorsement useful regardless of sunspot activity.

# Appendix A

## REGULATION 64

64. The operation of portable or mobile installations is subject to the following conditions:

(a) the equipment shall be worked only by the licensee or by other persons who are licensed to operate a station performing an Amateur Experimental Service;

(b) mobile installations on board pleasure vessels shall not use the frequency band 1.8 to 2.0 MHz;

(c) operation shall be identified in radiotelephony by the call sign suffixed by the word portable or mobile and the indication of the call sign area in which the operation is taking place, that is "VE3XYZ portable 4" or "VE3XYZ

portable VO2"; radiotelegraph transmission shall be identified by the call sign followed by the oblique stroke and the indication of the call sign area of operation, that is "VE3XYZ/VO2";

(d) whenever portable operation is to extend beyond a period of 48 hours, a written notice shall be forwarded to the local departmental radio inspector in the licensee's home district and, if operation is under another call sign area, the radio inspector in that area shall also be advised; and

(e) portable operation shall not extend beyond 30 consecutive days without obtaining authority for continued operation.



# Antennas I have known

By Ed Brogden, Sarawak's First Amateur

Antenna articles in 'TCA' always intrigue me. Memories return of antennas encountered during my teenage Amateur activities in the late 50's.

I recall a field day with VE3BXI, VE3DPV, myself and Jack Warkentin, whose call I cannot recall now. We were sure we would make our mark. Five wavelengths to a leg, we erected a monster rhombic on the Workentins' farm. A storm built itself to the West. Soon six-inch arcs shot at us as we walked near the feedline. Before long, static sparks were lighting areas of the operating tent. Our great field day ended as the great antenna was lowered before we lost the gear to Benjamin Franklin's folly!

At home I had the miraculous good fortune to have VE3IG as a neighbour. In return for babysitting, he gave VE3 BXI and I our CW training. He also showed us how to haywire anything ... successfully. Vic had his 138-foot all-band dipole strung between our TV mast and his tree. My 138-foot dipole hung between the peak of our roof and his TV mast. My 19 set transceiver was in my bedroom. Homework finished, lights out, gear switched off I would go to bed, only to be awakened by crackling in the receiver speaker. Eyes open, I would see my S-meter and plate meter dancing all over the place. Vic was on the air!

If Vic was on 75 metres and I was working the 1958 sunspot peak on 10, tuning was a matter of luck and timing. We tuned each others antennas as we tried to tune our own.

SWR? It was a term in the textbooks for the laboratory types with rare test equipment. We knew what it was but few could afford to measure it.

In 1964 I went to Sarawak with CUSO and by chance obtained the first 9M8 licence in history. For about six weeks I was the only 9M8. Hallicrafters provided an SR 160 and superb support. VE3IG and VE3DFU (my QSL manager)

had identical towers and antenna. They lived about three miles apart in Sarnia. Their gear was different but of similar power and signal quality.

For months I looked daily for Sarnia while logging thousands of QSOs as the only 9M8 on the planet. The SEA net was fantastic. Finally as the band conditions let my 120-foot high dipole open to Vic's homebrew 40' high quad, contact was made. For the next several months, I had regular Q.5 contacts with Vic Olacke. Gil Finley (VE3DFU), my QSL manager, never once was able to QSO me. Occasionally, I heard Q-0, S-1 signals.

The difference? The difference is a lesson for all Amateurs, even today. Vic had placed many, many radials in the soil of his property. Gil did not have that opportunity. That alone made the Q-0/S1 to Q5/S9 difference ... and I was looking for VE3DFU above anyone else.

Ed Brogden  
VE3EMF/9M8EB/VP7/VE3EJ  
Box 398, Yellowknife, N.W.T.

WARNING!

## Going abroad?

A Canadian Amateur is in trouble in a Central African state because, when he went there to work, he took along his equipment thinking that he could get permission to set up and operate an Amateur station. The fact that Canada has a reciprocal operating agreement with a country is no justification for such action; consequently his gear was confiscated and he may be deported.

Amateurs are strongly cautioned not to take radio station equipment into a foreign country without having obtained a licence for that country in advance of their arrival. In most foreign countries, as in Canada, the mere possession of Amateur radio equipment without a licence is an offence under their laws.

# Swap \* Shop

Single insertion is \$1.00 (minimum charge) for 10 words and \$1.00 for each additional 10 words. To renew, send copy and payment again. Deadline is first of month preceding publication.

Put your membership number and call (not counted), if any, 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. CARF and The Canadian Amateur accept no responsibility or liability 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 CARF, Inc., Box 356, Kingston Ontario K7L 4W2.

FOR SALE: KLM Multi 2000 two meter transceiver. Offers?? Gord Woroshelo VE3EYW, 15 Grandmont Cresc., Sault Ste. Marie, Ontario P6B 3W1.

FOR SALE: Crystal Filter, Heath SBA-301-2, 400 Hz. CW filter for HW-101, \$35.00 post paid. J. Metcalfe, VE3HWW, 2222 Saunderson Dr., Ottawa, K1G 2G4. Ph. 613-523-4492.

FOR SALE or TRADE: 5 element 10 meter telrex beam 1 year old on a 23 foot boom. Don Dawson VE2DZO/3, P.O. Box 133 South Mountain, Ont. 989-2316.

FOR SALE: TS820 Transceiver Digital readout \$135.00. VE4NC, 20 Main St., Flin Flon, Manitoba R8A 1S4. Ph. 204-687-5185.

FOR SALE: Yaesu Monitor-scope YO-100, \$250.00 External VFO \$150.00. Both like new, match FT101E. Heathkit SB630 Console \$75. WANTED: CW keyboard and depth sounder. Brian VE7EJ, 5888 124th St., Surrey B.C. V3W 3W5. Phone: 604-596-9839.

QST SALE: 1959-1967 complete, 1958-April issue missing; 1968-December issue missing. Good condition. Price \$100.00., Joseph A. Kennedy VE1AJE, 85 Fatima St., Antiganish, N.S. B2G 1L8. WANTED: Heath HW-17A 2 M AM Transceiver, Send Price and condition to Lewis Roberts, V01CI, Box 155, Barenced C.B., Newfoundland, A0A 1W0

FOR SALE: Heath SB 620 Spectrum analyzer, \$125.00; Heath SB 610 Monitor scope, \$125.00; Heath HW 16 CW Transceiver, \$100.00; Uniden 2020 Transceiver, with AC & DC cords and mobile mount, \$800.00; KW 107 Tuner, \$150.00; Heath SB 230 Linear amplifier, \$550.00; Heath HD15 Hybrid phone patch, \$40.00; CDE Ham III Rotor and indicator, \$125.00; Heath TC 2 Tube chacker, \$50.00; Philco Frequency meter BC-906D, \$35.00. All of the above equipment is in mint condition. There are manuals for all of the above with the exception of the frequency meter. Cecil B. Murton VE3CZJ, 21-14th St., Toronto, Ont. M8V 3H8.

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\*Third Sunday of each month only.

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All frequencies are plus or minus a few kHz of the listed frequency if interference is encountered. VE3VCA is operated by volunteers from the Kingston, Ont. ARC.

# Readers:

Readers are asked to note that the next issue of TCA - THE CANADIAN AMATEUR will be the July/August issue, and should be in the mail at the end of July.

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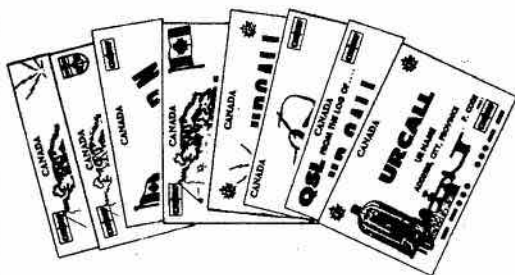
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<ul style="list-style-type: none"> <li>• Installs completely inside rig. No obtrusive external connections.</li> <li>• Scans the complete band or only the portion you select on the MHz switch of your rig (e.g. 144-148 or 146-148 MHz).</li> <li>• Scan frequency is displayed on digital readout.</li> <li>• Two miniature toggle switch switches supplied with kit (scanner: on-off, scan-lock may be mounted externally or on the top or bottom cover of the rig).</li> <li>• In the scanner off mode the TR-7400A behaves normally. In the scanner ON mode the scanner locks up on an occupied frequency, pauses for a preset time (3-30 seconds) and then resumes scanning. This means you can eavesdrop all over the band without lifting a finger. When you hear something interesting you flip the switch to the lock mode and the rig is ready to transmit.</li> <li>• Scans at the rate of 50 kHz per second.</li> <li>• Complete with detailed instructions (even for the beginner).</li> </ul> <p>Kit \$39.95          Preassembled \$59.95          add \$1.50 postage and handling</p>	<ul style="list-style-type: none"> <li>• Selectable sweep width (up to full band).</li> <li>• Scans <u>only</u> the portion of band you select.</li> <li>• Scans at the rate of 200 kHz per second.</li> <li>• Switch modification on mike allows you to scan past, or lock on, any occupied frequency.</li> <li>• Complete kit with detailed instructions.</li> <li>• Installs <u>inside</u> rig; no obtrusive external connections.</li> <li>• Rig can easily be returned to original condition whenever desired.</li> <li>• Scans to preset limits and reverses.</li> <li>• Automatic bypass of locked frequency in 3 1/2 seconds unless you press lock-on switch.</li> <li>• You can eavesdrop all over the band without lifting a finger.</li> </ul> <p>Kit \$34.95          Preassembled and tested \$54.00          add \$1.50 postage and handling</p> <p><u>IC-22S Scanner Kits</u> also available          Kit \$34.95; \$54.00 assembled          add \$1.50 postage &amp; handling</p> <p>Dealer inquiries invited</p>
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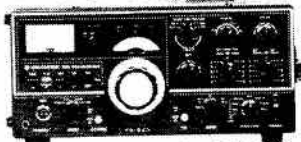


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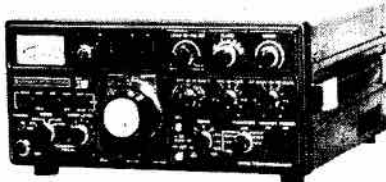
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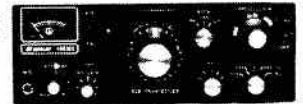
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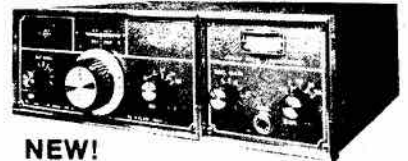
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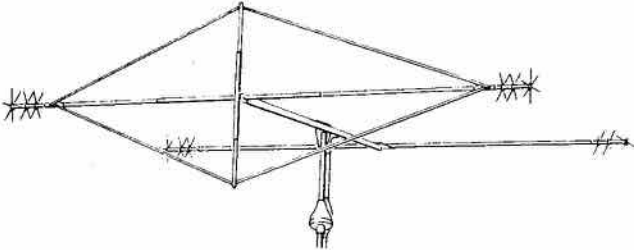
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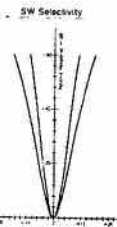
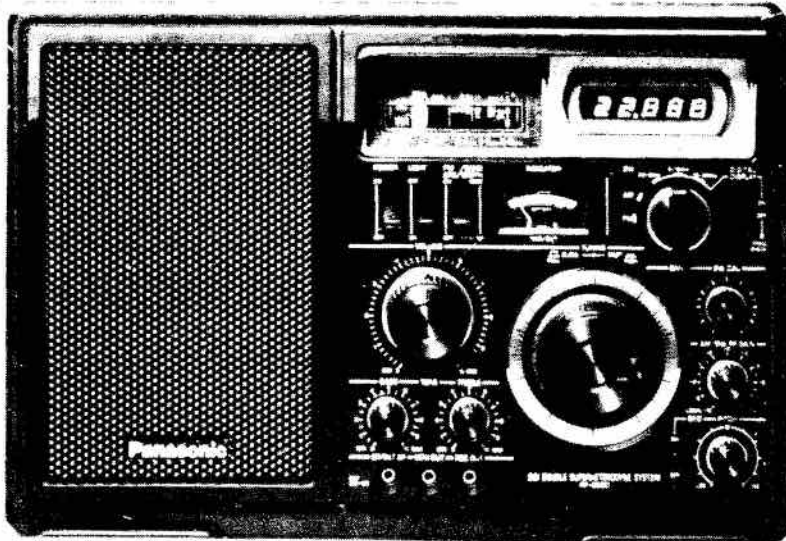
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The Canadian Amateur Radio Federation, Inc. is incorporated and operates under a federal charter, with the following objectives:

1. To act as a coordinating body for 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

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## 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.)

VE7BBQ Peter Driessen, 1946 York Ave., Apt. 203, Vancouver, B.C. V6J 1E3. 604-732-3298.

VE6HO Jim McKenna, Box 703, Ft. McLeod, Alta. T0L 0Z0.

VE3FON Marv Nash, 43 Bruce Farm Rd., Willowdale, Ont. M2H 1G4.

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VE2SY Lionel Bonhomme, 22 Cinq-Mars, Hull, Quebec J8Y 6B7.

VO1NP Nate Penney, Box 10, Shoal Harbor, Nfld. A0C 2L0.

## Notice:

If you are changing your address or renewing your membership, please send the change, cheque or money order to CARF Inc., Box 356, Kingston, Ontario K7L 4W2, where CARF and 'TCA' records are kept in the administrative office of the Federation. Please do NOT send them to the Editor, who happens to live in Ottawa. Re-mailing not only means a delay in your change or renewal but greatly upsets the Editor's digestion as he is already fully occupied with producing 'TCA' for your information and amusement. Tnx VE3CDC.

## WANTED:

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Technical articles are especially welcome. We can use simple construction projects, antennas, hints and kinks, explanations of the theory and practice of modern Amateur operations and equipment.

Photos should be glossy black & white prints although we can use colour prints. Written material should be typed, double spaced. Legible handwriting is acceptable. Finished artwork and drawings will add to the value, but sketches and rough drawings are acceptable.

Technical material only: Technical Editor, CARF Inc., Box 356, Kingston, Ont. K7L 4W2.

All other material: Editor TCA, 151 Fanshaw Ave., Ottawa, Ont. K1H 6C8.

(Please send address changes or renewals to the Federation at its Kingston office, NOT to the Editor in Ottawa.)

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1. Sort QSLs by prefix and stack face up in a single stack.
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6. Do NOT register parcel. This causes delay.
7. Check with Post Office for requirements if sending by Third Class Mail
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# Infosection

## CARF Bulletin Station sked

CARF Newsletters and News Bulletins will be heard over VE3TCA, the first official CARF News Service Station, utilizing the facilities of VE3OCU, Carleton University Ottawa.

The Sunday CW and RTTY frequencies have been changed from 14.080 and 14.070 MHz. Both modes are now on 14.075 MHz. Note also that for the duration of Daylight Time, the 3.775 MHz SSB and the 3.590 CW transmissions have been

shifted to one hour earlier Zulu (Z) time.

### Sundays

1745Z	SSB	14.140 MHz
1830Z	TTY*	14.075 MHz
1930Z	CW	14.075 MHz
2200Z	SSB	3.755 MHz

### Tuesdays

0001Z	CW	3.590 MHz
0030Z	TTY*	3.610 MHz

\*170 Hz shift, 5 level, 60 wpm

followed by ASCII--110 baud.

Carleton University ARC's three repeaters will transmit the bulletin simultaneously, using the club repeater call VE3OCR at 0001Z Wednesdays on 146.85, 224.94 and 53.15 MHz.

(Zulu time Tuesdays is Monday in Canada and also Zulu time Wednesdays is Tuesday in Canada.

## New Publications!

CARF will be publishing new editions of the Certificate Study Guide, Advanced Study Guide and Radio Regulations Handbook in mid-summer 1979. These publications have been completely revised and up-dated to make them even more valuable to students and instructors in Amateur Radio courses as well as first rate reference manuals.

Due to increased content and cost, these publications will be priced at \$8.00 each. RADIO SHACK will be selling these CARF publications through their several hundred outlets across Canada and attractive discounts will be made for bulk orders. Publications will also be available, as in the past, through the CARF office.

A comprehensive Instructor's Guide (\$5.00) will also be published this summer for the guidance and assistance of organizers and teachers of Amateur Radio courses.

### BANNED COUNTRIES LIST

Iraq, Khmer Republic\*\*, Libya, Somalia, Turkey, Viet-Nam, Peoples Democratic Republic of Yemen.

\*\* Station XU1AA has been authorized to exchange communications with Amateurs of other countries. Note: The calls 70A to 70Z are assigned to the Peoples Republic of Yemen.

### THIRD PARTY TRAFFIC AGREEMENTS

Bolivia, Chile, Columbia, Costa Rica, Dominican Republic, Guyana, Honduras, El Salvador, Israel, Mexico, Nicaragua, Peru, Trinidad/Tobago, USA (Territories and Possessions), Guatemala, Uruguay, Venezuela.

### RECIPROCAL OPERATING AGREEMENTS

Austria, Barbados, Belgium, Bermuda, Brazil, Colombia, Costa Rica, Denmark, Dominica, Dominican Republic, France, Ecuador, Federal Republic of Germany, Finland, Guatemala, Honduras, Iceland, India, Indonesia, Israel, Luxembourg, Netherlands, New Zealand, Norway, Nicaragua, Panama, Phillipines, Poland, Portugal, Peru, Senegal, Sweden, Switzerland, United Kingdom, U.S.A., Uruguay and Venezuela.

Note: As a general rule, DOC will consider licensed Amateurs of Commonwealth countries for reciprocal privileges in Canada if the other country does the same.



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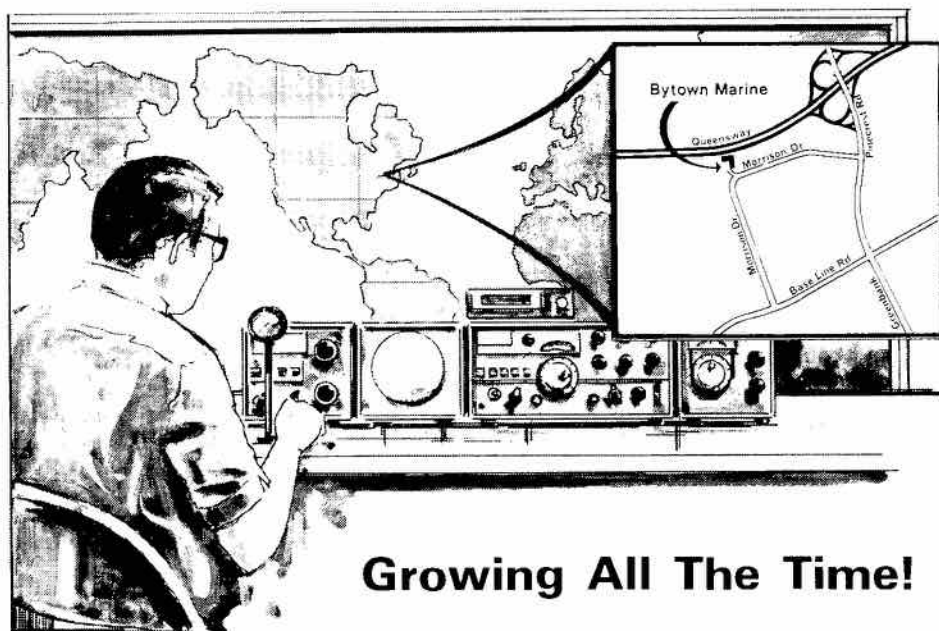
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