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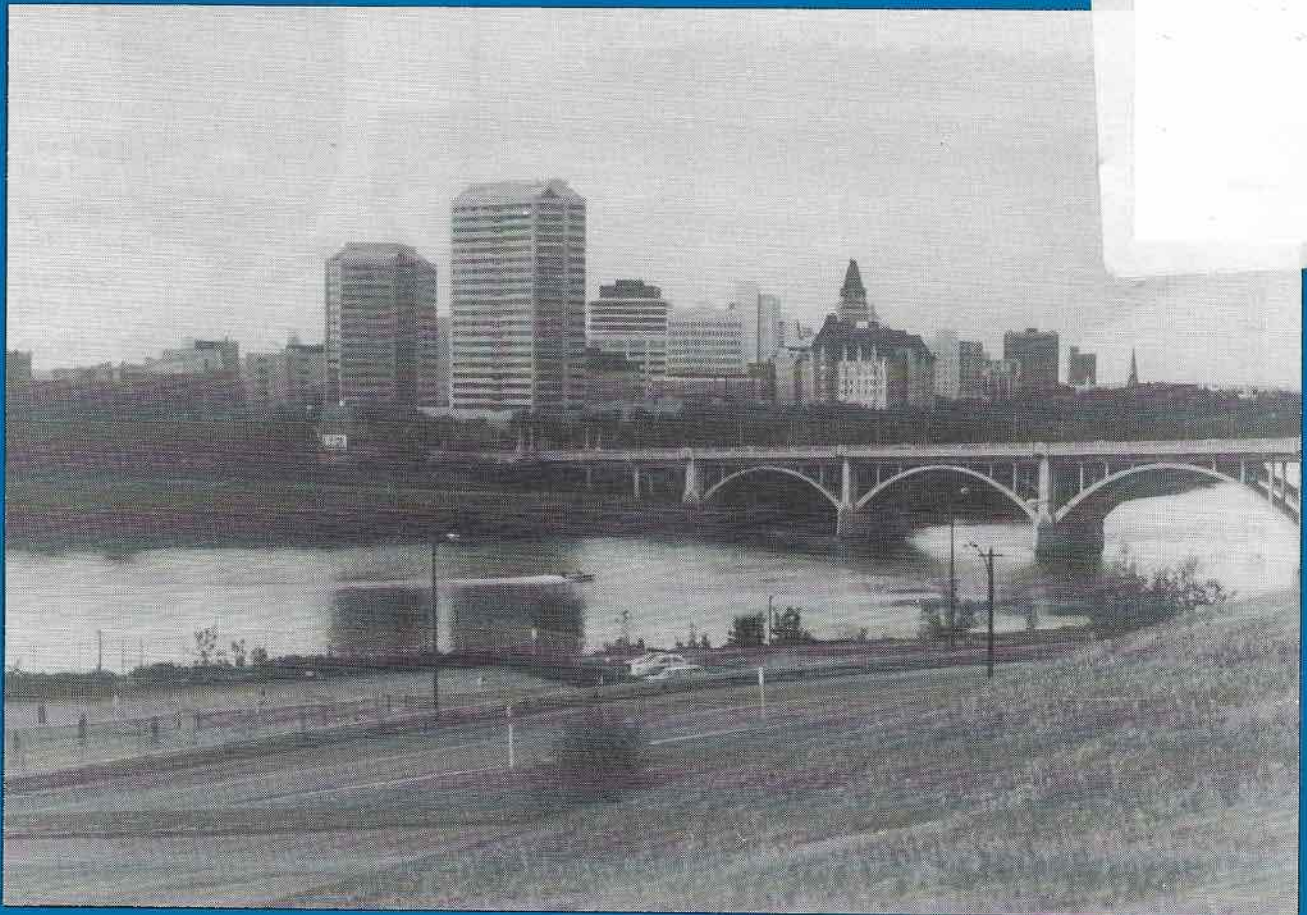
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THE CANADIAN AMATEUR

Canada's Amateur Radio Magazine

La Revue des Radio Amateurs Canadiens

JULY/AUGUST 1987



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

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WHAT IS ?

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

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

EDITORIAL

The AGM that was

BY GEORGE SANSOM
VE3LXA

The CARF AGM is history, and this year's affair held more meaning than usual. Not only were we afloat for most of the meetings but we celebrated 20 years of Federation existence at the birthplace of CARF and of our great nation.

With the passing of the AGM, we now have a new President, a new director in British Columbia and two new directors in Ontario. Our congratulations to the incoming and kudos to the outgoing for a job well done.

CARF has been extremely well-managed over the past few years and it is people like Ron Walsh, Jim Voight and Geoff Smith who, in their respective areas, have made it work. From the grand scale of EXPO '86 to the smallest Flea Market, these dedicated officials, and others like them, have shown the flag. Their professionalism in handling delicate situations like 'The Merger' or dealing with a member's subscription problem while attending a Flea Market is evident and appreciated by all Canadian Amateurs. We wish them well in their future projects.

On a lighter note: The Kingston QSL Bureau chief, Ferd VE3CPB, celebrated a birthday during the AGM and was treated to the 'old YL in a cake routine'. Of course the routine is old, not the YL. Ferd loved it, almost as much as the office staff loved planning it.

CARF BULLETINS

Dino Moriello has asked for my assistance in getting more items included in the bulletins. Clubs and/or individuals can send news to: CARF News Service, P.O. 241 Pierrefonds, Quebec H9H

4K9 or: ENVOY 100 - id= Moriello.Dino or: CNCP Dialcom -id= 23:DMQ001 or Compuserve -id= 76120,1472.

As well as the mailbox mentioned elsewhere in this issue, the CARF bulletin is found on the VE2RJM MSO at 3.6050 MHz. Access by sending '//VE2RJM'. The VE3NWV MSO may be found on 3.6427 MHz. Access by sending 'NWVIB' for instructions. VE3LXA transmits the bulletin on 3.640 MHz three times a week: Sunday, Monday and Tuesday at 7 p.m. Eastern. Relay stations are required for a 20 metre sked. Contact Dino or the editor if you are interested.

FEATURES

This month's feature articles come from Bernie Burdsall VE3NB, and Norm Waltho VE6VW. Bernie zeros in on the history behind our offices and station in Kingston and some of the evil spirits that have resided here in the past. Norm gives us an insight into this year's symposium in Calgary. Both articles 'a must' for regulars. For the tongue in cheek fans, there are a couple of letters to the editor regarding a certain antenna system. 'Nuf said.

NEW FEATURES

The response is good to our 'Shack of the Month' and 'Ham of the Month' features. Keep those cards and letters coming in!

Our directors are on the lookout for a provincial correspondent to prepare a feature article about YOUR province once a year. Please help them by volunteering! The province of Newfoundland has the distinction of being first to find someone. Who will be next?

LETTERS

AWARDS INFO

Enclosed you will find the information package on a new award which has become available on April 15 of this year.

We would appreciate it if you would include the information enclosed in your publication, *The Canadian Amateur*.

As always, it was my pleasure to receive my copy of *TCA* on time this month and I must congratulate the staff for a job well done. The quality and variety of articles just keeps getting better. Keep up the good work!

One suggestion for a column would be on the different awards that are available to radio Amateurs. I know that there are many hams from all over the world that inquire of me, about some of the Canadian awards. There are many available from both local and national clubs and organizations and I feel certain that your many members and other readers would appreciate further information on the Canadian awards that are available to them.

Tom Arsenault VE1GB
for The Wiltshire DX
Association, VE1WDX

Your award information is printed elsewhere in this issue. My answer to your excellent suggestion is:

"We'll print it, if we have it!" How about collecting the information, Tom, and submitting a list for publication? Any clubs or organizations that offer awards may send their information packages to The Canadian Amateur at the Kingston offices.— Editor.

COHERENT SPREAD PHASE MODULATION

I congratulate VE3BBM on his excellent report on the above new mode of communication but I think, indeed I know from my own experiments, that some points require further clarification. This is not to detract in any way from the value we will all, as Radio Amateurs, derive from all of this experimentation. My observations are as follows:

1. Reference to 'no moving parts' of course excluded the transcendental baffles. To reduce friction losses in these and to optimize quasi-piestic stresses in the gremlin studs the holders are fabricated from pregrabulated amulite with hydro-coptic marzlevanes.

2. My experience has shown that should the suggested hardware actually be mounted outside of the transceiver the pigtail losses become

unacceptably high, this will instantly be recognized as a well-known effect of nichrome single arms (See Proceedings of the Peruvian Academy of Science, April 1 1987).

3. Simple alignment referred to by 3BBM likely refers to maintaining the spurzle peak whilst at the same time constantly fromaging the bitumogenous spandrels. This method is vastly superior to the earlier method using standard nivelsheeyes which Amateurs will remember always suffered from binding girdlesprings and off-scale grammeters.

4. This type of emmission is expressly prohibited by the DOC. (See DOC Publication DL-204-1998, Page 17 "Naughty things Radio Amateurs Mustn't Do".

Again, I offer my congratulations to 3BBM for his work on this new system

of communications and also for the pioneering work referred to by 3BHW and 3KLI.

Peter VE4OK

It was with great fascination that I read the dissertation on 'Coherent Spread Phase Modulation'. Because of the extremely complex nature of the article, I decided that I had better contact my old family friend and 'near genius'— Prof. Lirpa Sloof. Prof. Sloof carefully appraised the data in the piece and solemnly advised that, indeed it could be built. With great enthusiasm we proceeded to collect the necessary parts and slowly and painstakingly assembled our unit. Well, after much perspiration and double checking of our assembly, we were ready to test.

Much to our amazement, the device

Silent Keys

GEORGE SLON HOLMES

George Slon Holmes, born at Carlyle, Sask. on April 16, 1914, went to Provost when the family bought the *Provost News* in 1929. His formal education included nine different public schools in four provinces. He took his high school at Provost.

He served in the north Pacific Ocean, Aleutian Islands in World War II, and returned in 1944 on the death of his father Edward. When *The News* office building was rebuilt following a fire in 1946, he kept his life filled with a variety of activities and interests.

He was busy in the Community Chest, Chamber of Commerce, Boy Scouts, was awarded the Silver Cross for Gallantry at an incident at Dilberry Lake, enjoyed boating expeditions, served two terms as mayor of Provost, was Alberta Weekly Newspaper Association president and taught square dancing. A life-long love was his ham radio operation with the call letters VE6YN and the handle 'Pudge'.

After leaving Provost in 1970 for Medicine Hat to expand the printing business he was involved with organizations in that city. At age 65 he decided to go flying - bought an airplane and did just that.

WILLIAM SPLETT VE4JW

On April 11, 1987 at the Beausejour Hospital, Manitoba, Bill Splett, aged 66 years.

Born in Beausejour, Bill served in the RCAF from 1940 to 1945. After demobilization in 1945 he established a radio and appliance store in Beausejour. He is survived by his son Kenneth of B.C., his daughter Karen of Alberta, his grandchildren, his brothers, Harold, Leonard, Leslie and Gordon, his sisters, Myrtle, Violet, Linda and Dorothy.

Bill was a well known character around Beausejour, and, as an Amateur, was always prepared to lend a hand in a project. Bill was a founding member of the Pinawa Repeater Group and was a member of the Beausejour Amateur Radio Club.

CHARLES KILGOUR VE3HPR

At Cobourg, Ontario on March 26, 1987.

Charlie was very popular and respected in all circles. He was one of the founders of Heritage Amateur Radio Club (HARK) and made a great contribution to Amateur radio, as well as the community he lived in.

He will be remembered and missed greatly by all who knew him.— VE3PBR

LETTERS (cont'd)

did considerably negate the spatial effects on our test bands, which effect of course, is of enormous help in this current solar minima. Prof. Sloof, the 'consummate improver-upon,' decided to go one better than the 'stereo array' suggested. For third dimension effect, he added four arrays in 180 deg. phase reversal. The feedback is not only present, but absolutely 'quadraphonic'.

Prof. Lirpa Sloof and I send our most sincere congratulations on your accomplishment!

Richard J. Phillips VE3MFN

The Technical Editor and I were very pleased at the response to the Coherent Spread Phase Modulation (CSPM) article. With pioneers such as VE4OK, VE3MFN and Prof. Lirpa Sloof on the job, I'm sure this relatively new mode will become the communications standard of the future. — Editor

MERGER

I was pleased to see four pages of April TCA dealing with the prospect of CRRL-CARF merger.

I would like to offer two corrections. Both have to do with points that appear on page 8. First CRRL did not withhold permission to reprint the 1987 February OST 'Canadian Newfronts' column in TCA. When TCA

HELP WANTED

The CARF Office needs the current addresses of the following Amateurs, listed by name and last known address:

J. Rieberger VE7CRJ, Box 2007, Inuvik NWT XOE 0T0

Werner Winkelstein VE3HNN, P.O. Box 2273, Scarborough, Ont. M1N 4A3

George McKenzie VE2YE, 1540 Du Mont., St. Bruno, Que. J3V 4L5
Wijnand Romijn VE3IWJ, P.O. Box 116, Maitland, Ont. KOE 1P0
M. Forcier VE2FPZ, 10556 Rue Laverdure, Montreal, Que. H3L 2L7

C. Stephens VO1BB, 12 Howley Ave. Ext., St. John's, Nfld. A1C 2T4
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Please tell Debbie if you have any information. Her address is P.O. Box 356, Kingston, Ont. K7L 4W2.

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Editor Hughes telephoned me to request permission, he was told, "If you think it will be helpful, go right ahead and print it." Second, the CRRL membership figure given in Art Blick's editorial is somewhat out of date. Current CRRL membership is just under 5600.

Speaking of membership figures, I was pleased to learn that CARF's membership is again on the rise. The stronger both our organizations are, the stronger the new organization will be if we are able to effect a merger.

Harry MacLean VE3GRO
Secretary

BULLETINS

Received my first copy of *The Canadian Amateur* this a.m. Enjoyed reading it!

I would be very thankful if you could send me the weekly bulletins, as I now receive them via two metres. Our main repeater is coming down soon, for relocation, and I will be unable to tape them for broadcast.

I receive the CRRL bulletins via packet radio and cannot understand why CARF bulletins are not sent in this manner. VE4 AFO at Selkirk runs a BBS and would handle them.

Frank J. Bussell VE4ANA

Good point! How about it Packetters? Take up the challenge! Barry VE3NWV in Kingston runs a BBS on packet, HF and 2 metres. The CARF bulletin is uploaded to it by yours truly. If the packet fraternity or RTTY gang can get it to VE4AFO or other stations, we'll keep it on the BBS. Barry's frequencies are 147.57 MHz, 3640.6 kHz (Mark) and of course 145.01 packet. Enter 'NWVPCARFNEWS' for the bulletin. If enough interest is generated we'll get it on 20 or 15 metres a couple of times a week. 'NWVIB' will give you brief instructions or for a complete list write to: Barry Smith VE3NWV, 606-283 Parkway Ave., Kingston, Ont. K7M 7J5. The BBS operates in 60 WPM Baudot. — Editor.

UGANDA HAM NEEDS HELP

(Part of a letter to the DX Editor referring to Gerry Kambites 5X5GK, see DX Column.)

Gerry asked if anyone might have old magazines of a practical nature i.e. woodworking, home improvement projects, plumbing, electrical projects, building projects related to brickwork, fireplace and chimney construction, anything along such lines would be gratefully appreciated and is much wanted. Also any magazines (old ones) related to 'Back to the Earth' such as *Mother Earth News*. Subjects such as organic gardening, compost, windmills for pumping water, etc.

He now has a VHS player and would be very grateful to receive tapes of children's educational programs such as *Sesame Street*. He offers to pay

towards the cost of the tape but I think we could pass that on. These would be of great value in children's education on the island in Lake Victoria where he lives.

5X5GK is Father Gerry Kambites a medical doctor, missionary, ordained minister and Canadian working in Uganda. As he says, he remains the only licensed ham in 5X5, with no further licences to be issued at the moment.

Also Gerry mentions that anything sent should be by registered mail, otherwise things tend to 'get lost'! His address is: P.O. Box 287, Entebbe, Uganda.

Reg Mallory VE1BNN

NEWS FROM VE7TG

Here is a little news from my recent trip to Asia:

The RAST secretary, Bangkok, denies that Thai Amateurs have been registered as a 'banned country,' in spite of being so listed. The club station, HSOB, is in regular operation, and special stations, including HSOHS, for contests. Other stations will be licensed as soon as suitable examinations can be held. Previously Amateurs operated by arrangement with the radio club, but this loose arrangement is to be formalized by a government agency.

Indonesian Amateurs holding YC prefix licences will now be allowed to operate on 20 metre CW.

Roy VE7TG

SPECIAL PREFIXES

This is to inform your organization that the Department has authorized the use of special Amateur call sign prefixes as follows:

Saint John, N.B. VD1; 200th Anniversary of the forming of the Militia in the province of New Brunswick.

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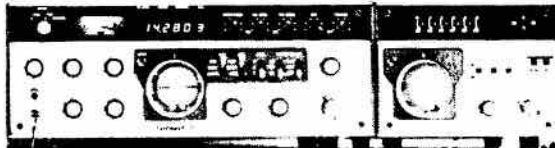

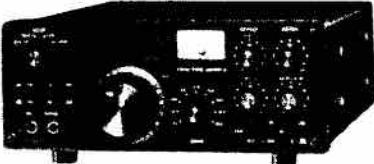


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		1140	DC Circuit Breaker, for Models 580/560/561/546/585	29.00
	MODEL 561 CORSAIR II	561	CORSAIR II HF Transceiver, 200 W/SSB/CW, 1.8-30 MHz	2195.00
	MODEL 263G REMOTE VFO	960	Power Supply, 115/230 VAC, 13.5 VDC, 22 A with built-in Speaker	389.00
		263G	Remote VFO	389.00
		282	250 Hz 6 Pole Ladder Filter	119.00
		285	500 Hz 6 Pole Ladder Filter	119.00
		288	1.8 KHz 8 Pole Ladder Filter	119.00
		705	Desk Microphone, Electret, with Cord and Connector	125.00
		700C	Handheld Mic., Electret with Coiled Cord, and Connector	59.00
		603	KR1B, Dual Paddle Memory Key	108.00
		1140	DC Circuit Breaker, for Models 580/560/561/546/585	29.00
	MODEL 425 TITAN	425E	TITAN Linear Amplifier, 1.5 KW output, 1.8-31 MHz, with Power Supply (For Export Only)	4495.00
<p align="center">- SPECIAL - \$999.95 -</p> 		525D	ARGOSY II HF Transceiver, 100 W/SSB/CW, 3.5-30 MHz	1195.00
		225	Power Supply, 115/230 VAC, 13.5 VDC, 9 A	235.00
		217	500 Hz 8 Pole Ladder Filter, for Models 546/525	119.00
		218	1.8 KHz 8 Pole Ladder Filter, for Models 546/525	119.00
		219	250 Hz 6 Pole Ladder Filter, for Models 546/525	119.00
		220	2.4 KHz 8 Pole Ladder Filter, for Models 560/525	119.00
		222	Mobile Mount	50.00
		223A	Noise Blanker, for Model 525 above SN 0824	69.00
		700A	Handheld Mic., Electret with Coiled Cord, Phone Plug	59.00
		705A	Desk Microphone, Electret, with Cord, Phone Plug	125.00
		1125	DC Circuit Breaker with Cable	37.00
	MODEL 229A 2KW ANTENNA TUNER	229B	2 KW Antenna Tuner/SWR Bridge	499.00
		4229	2 KW Antenna Tuner/SWR Bridge Kit	389.00
		3229	Balun Kit	29.00
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	MODEL 579 CENTURY/22	579	CENTURY 22 HF CW Transceiver, 50 W./CW, 3.5-28.5 MHz	699.00
		979	Power Supply, 115 VAC, 13.5 VAC, 5 A	180.00
		225	Crystal Calibrator	60.00
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CARF Headquarters, Kingston

BY BERNIE VE3NB

370 King Street West, Kingston. A place of history and good spirits.

In 1831 on Lot 21 of the 1st concession in the Township of Kingston, Upper Canada, James Morton Esq. established a brewery and distillery the north half of the property. The land was originally owned by Robert Drummond who settled here at the time of the building of the Rideau Canal 1827-1832 and died of cholera in 1832.

The brewery buildings were frame, and fire was a constant risk as the brewing kettles were heated by open wood fires. In 1835 fire destroyed the premises and they were rebuilt in 1844 of limestone, which is plentiful in the Kingston area. The beer and whiskey (made from the distillation of stale beer) made "Morton's Proof" a well known and popular brand in Upper Canada and the U.S.A.

Morton, who originally had worked for the Molson brewery in Kingston, became a rich man, but the depression period starting in 1857 caused his credit, but not the booze, to dry up and by 1859 he was broke and died in 1862 owing \$250,000. The brewery was going at least until 1900.

On the south half of the lot, 440 King Street West, a large stone house was built in 1837, originally called 'St. Helens' but changed to 'Mortonwood', 'Ongwandada' and 'Ringwood' by successive owners. In 1919 the entire property was deeded by the estate of the late Edward Pense, owner of the newspaper *British Whig*, to the Federal Government and it became 'Sydenham Hospital' for WWI veterans and general headquarters for Military District No. 3. The name 'St. Helens' was reinstated. The street into the brewery buildings is still called Morton Street.

In 1924 the Department of National Defense took over the complex and it was the Eastern Ontario Military Headquarters until May 1971 when the brewery buildings were purchased by the City of Kingston for \$120,000. The house 'St. Helens' was taken over in 1970 by the Solicitor General for use as offices by the Penitentiary Service and is now Regional Headquarters (Ontario) for the Correctional Service of Canada.

The City now had a U-shaped complex of three large stone buildings which they partitioned into offices and rented at very low rates to non-profit organizations.

In October 1976, CARF with the help of KOTARA (Kingston Old Timers Amateur Radio Association) and a New Horizons grant were able to rent one room in the East Block and set up station VE3VCA and have its very first paid employee, on a part-time basis.

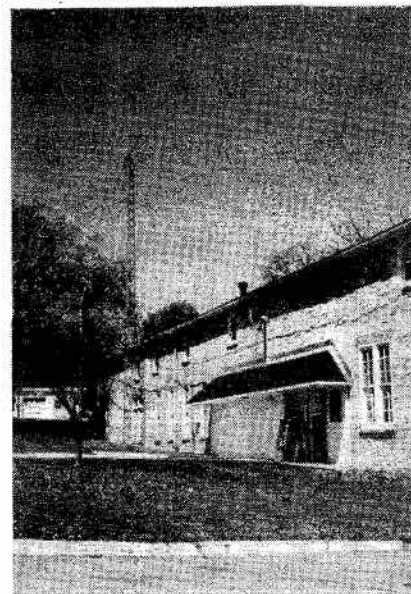
The one room soon became three and, with the help of many fine volunteers and part-time staff, CARF was able to expand into publication of study guides and other handbooks. In September 1979 the CARF offices moved to the West Block and nicer rooms with windows. The staff now was larger and mostly full-time.

The station VE3VCA is still operational and in the original room. The old windowless office is a workshop and our current office manager, Debbie Norman, can gaze at Lake Ontario from her windows in the West Block.

Kingston has many fine limestone buildings and, together with its 13

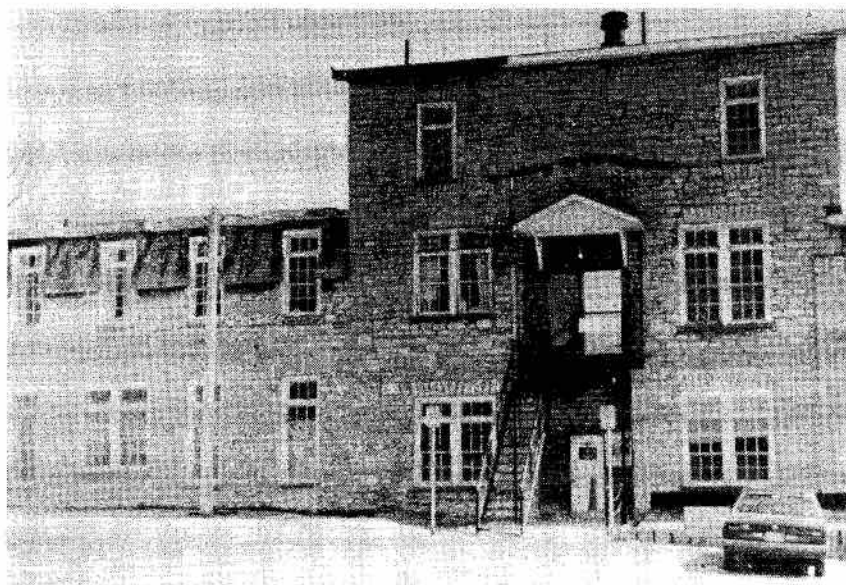
museums, boat tours, islands, and a multitude of good restaurants, bars and downtown shops, is a fine vacation city. Do visit us and make CARF Headquarters part of your tour.

Call the Kingston Area Visitor and Convention Bureau at 1-800-267-9490 for information.



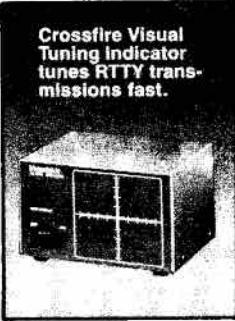
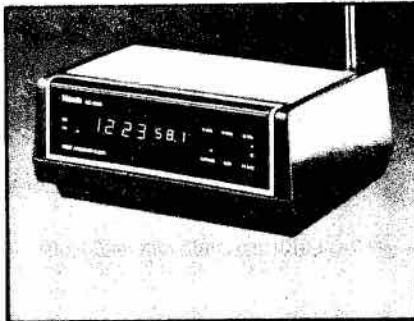
Above: East Block showing VE3VCA tower and antennas.

Below: West Block. The CARF Offices are on the second floor, on the left.



Photos: Bill VE3NFU

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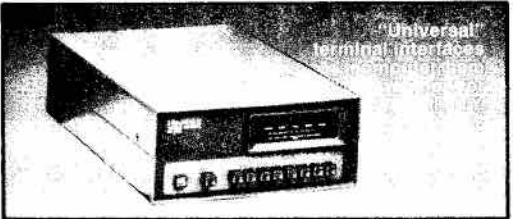
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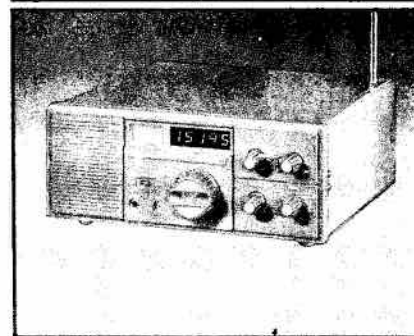
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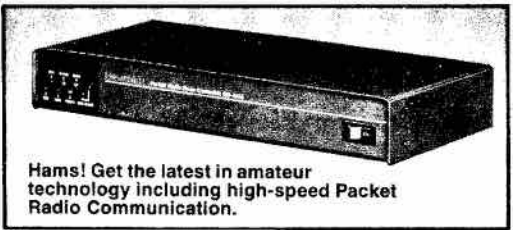
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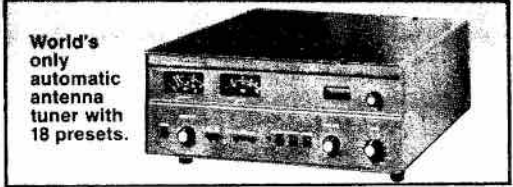
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1987 CARF/DOC/CRRL National Symposium

The 1987 CARF/DOC/CRRL National Symposium will be held Aug. 1 and 2, hosted by the Saskatoon Amateur Radio Club.

The National Symposium was instituted by CARF in 1977 at the request of the DOC. These events have proved to be the most effective method of contact between the Amateurs of Canada and the Federal Regulatory authorities. Results of discussions held during forums and plenary sessions plus written submissions made by Amateurs and Amateur organizations to the symposium have played a major role in obtaining changes in regulations, guidelines and procedures.

All symposiums are 'open', i.e. support or membership in CARF, CRRL or any other organization is not a requirement. A small fee may be charged to each attendee who wishes to obtain a copy of the proceedings.

FORMAT

The format of the symposium will consist of four separate special interest sessions and a common plenary session to wind the symposium up. Choose the session of greatest interest to you. You will have an opportunity to speak on all subjects at the Plenary if you wish. There will be morning and afternoon coffee breaks.

ITINERARY

Sat, Aug. 1, 1100 hours: Registration in Theatre 417/312; Informal gathering of participants in Theatre; Introduction of officials; Agenda presentation.

1300 hours:
Workshop 1: Spectrum Management, Room 410
Workshop 2: DOC, Room 418
Workshop 3: EMI, Room 423
Workshop 4: The Future of Amateur Radio, Room 424.

1500 hours: Break.

1530 hours: Back to Workshops.
Sun., Aug 2, 1000 hours: Plenary Session in Theatre 417/312; Final synopsis by the moderators; Selling Amateur Radio.

The following topics and other areas of concern will be discussed in each workshop.

1) Spectrum Management:

A. Deregulation of the HF bands, gentleman's band planning? Will it work?

B. Contests, RTTY, ATV, prefixes; should there be band segment limits?

C. Radio Spectrum utilization policy for the 30 MHz to 850 MHz bands?

2) DOC:

A. Administration— can we do that ourselves?

B. Regulations— should they be enforced more? Banned countries— should they be enforced more?

C. Examinations— how can we improve them?

3) EMI:

A. DOC involvement— can we help?

B. Industrial noise— can we do something about this?

C. Interference to and from electronic devices?

D. Political concerns to the radio Amateur?

4) The Future of Amateur Radio in Canada:

A. A National Organization— should there be one? What should it be like?

B. Liability Insurance for Amateurs?

C. 6 Metres— how do we add new life above 30 MHz?

D. 2 Metre Linking— should we link nationally? Should the repeater councils work together?

5) Selling Amateur Radio:

A. What can be done by everyone to promote the Amateur Radio Hobby?

B. To whom should it be promoted and how?

Please send any comments that you or your club have regarding the above workshops, or your own concerns, to: 1987 CARF-DOC-CRRL Symposium, c/o CARF, P.O. Box 356, Kingston, Ont. K7L 4W2 OR CARF Mid-West Director, Norm Waltho VE6VW, P.O. Box 1890, Morinville, Alberta T0G 1P0.

W1AW Schedule

April 5-October 25, 1987

MTWThFSSn = Days of Week; Dy = Daily

W1AW code practice and bulletin transmissions are sent on the following schedule:

UTC

Slow Code Practice	MWF: 0200, 1300; 2300; TThSSn: 2000; Sn: 0200
Fast Code Practice	MWF: 2000, TTh: 0200, 1300; TThSSn: 2300, S: 0200
CW Bulletins	Dy: 0000, 0300, 2100; MTWThF: 1400
Teleprinter Bulletins	Dy: 0100, 0400, 2200; MTWThF: 1500
Voice Bulletins	Dy: 0130, 0430

- Code practice, Qualifying Run and CW bulletin frequencies: 1.818, 3.58, 7.06, 14.07, 21.08, 28.08, 50.08, 147.555 MHz.

- Teleprinter bulletin frequencies: 3.625, 7.095, 14.095, 21.096, 28.095, 147.555 MHz.

- Voice Bulletin frequencies: 1.89, 3.99, 7.29, 14.29, 21.39, 28.59, 50.19, 147.555 MHz.

Slow code practice is at 5, 7½, 10, 13 and 15 WPM. Fast code practice is at 35, 20, 25, 20, 15, 13 and 10 WPM.

Code practice texts are from *QST*, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds. For example, "Text is from February 1987 *QST*, pages 9 and 85" indicates that the main text is from the article on page 9 and the mixed number/letter groups at the end of each speed are from the contest scores on page 85.

On Fridays, UTC, a DX bulletin replaces the regular bulletin transmissions. Teleprinter bulletins are 45.45-baud Baudot, 110-baud ASCII and 100-baud AMTOR, FEC mode. Baudot, ASCII and AMTOR (in that order) are sent during all 1500 UTC transmissions, and 220 UTC on TWThFSSn. During other transmission times, AMTOR is sent only as time permits.

CW bulletins are sent at 18 WPM.

South Pickering ARC receives Xerox Canada Grant

BY TOM ROSEBUSH
VE3KZE

Large corporations often support worthy community causes. This support can take many forms, from providing facilities in which events may be staged to lending its employees to organize and run charity drives such as the United Appeal.

Frequently these projects are high profile so that recognition of the corporate efforts is widely known within the community where it conducts business. Xerox Canada goes one step further, however, and encourages their employees to take an active part in volunteer organizations in their own communities. Through the Xerox 'Support' program, these employees can request financial support for projects or organizations in which they invest their personal time and talents.

Emergency Communications has always been a justification for our 'hobby'. We buy sleek, miniaturized UHF/VHF rigs that fit in a shirt pocket and justify their expense to our friends and family by saying, "If ever there was an emergency, I am prepared to handle communications on behalf of my community." We install 'state-of-the-art' HF rigs in our shacks and use the same phrase to excuse their expense. Even our cars are equipped with mobile UHF/VHF



Left to right: Ken Pyke VE3OGM, Xerox employee and member of SPARC, Jim Wilson VE3KQM, SPARC Secretary, Howie Vardon VE3DAX, Treasurer, Pat O'Neal VE3MKK, President.

rigs capable of being used for emergency traffic handling. Not to be left out, our club also gets in on the 'emergency preparedness' act and maintains an HF station as well as a UHF/VHF repeater.

But what if the emergency that we are preparing for involves loss of 'power' to an area that includes our repeater or HF station? Granted, our 'shirt pocket' marvels run on batteries and our mobile rigs are powered from our cars, however their usefulness is very limited without an ultimate hookup to a repeater or HF station. These stations require something a little more substantial than a 'catch-all phrase' to keep them on the air and operating during a real emergency.

Ken Pyke VE3OGM, who is an employee of Xerox and a member of the South Pickering ARC, identified this need within our club and applied to his employer for financial support to alleviate this need. Ken was successful in his application and SPARC has received a grant from Xerox Canada's 'Support' program in the amount of \$950.

No binding restrictions apply to this grant. SPARC does not have to match it dollar for dollar or provide any further justification for its use other than be willing to purchase and put

into use a 'back-up power source' for community use in an emergency. The donation is given by Xerox in recognition that Xerox employees have the support of their employer in local community projects.

Currently SPARC is looking at obtaining a portable generator for use at either our HF station at the Dunbarton High School or the UHF/VHF repeater located at Myrtle Station. Due to the distance separating these two facilities, conditions at the time of an emergency would dictate where the generator would be of the most benefit.

We would also be able to use the generator for Field Day or any other exercise that would provide expertise in 'emergency preparedness'. The fact that alternative power would be available to SPARC is certainly a giant step in the right direction toward full emergency preparedness.

Xerox Canada is to be congratulated on its Community Support program and the willingness of its employees to participate in local organizations. It is gratifying to see big business working hand-in-hand with non-profit groups to provide a caring community.

VE3PNK

VE3PNK suggests you use your driver's licence number to ID your equipment. Police recognize the number and can quickly compare a suspect's story with the output of their computer.

SPARC GAP

CORRECTION

In the Silent Keys in the May issue, VE3ATM's name should have been Geoff Hervey, not Harvey.

MOVING?

If you're moving, please let Debbie know your new address. Write her at P.O. Box 356, Kingston, Ont. K7L 4W2.



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Vimy Commemorative

BY ALEX DESMEULES
VE2AFC

Many Canadians visiting France feel compelled to visit the beaches bordering on the English Channel where Allied troops landed in 1944 and where numerous cemeteries show the terrible losses suffered by our troops at Dieppe and during the final offensive.

After 70 years one tends to forget the 'Great War', as it is known, and the thousands of Canadians who fell on the soil of Artois between 1914 and 1918 and who mingled their blood with that of the Allies who came to liberate France from her oppressors.

In 1936 the French government authorized the erection of a huge granite monument at Vimy in honour of the Canadian troops who gave their lives for France. The Vimy Memorial is situated on a ridge near the town of Arras which is about 200 km from Paris.

To commemorate the 70th anniversary of the battle of Vimy in 1917, the radio Amateurs from Pas-de-Calais, in which Artois is located, set up a station near the Vimy Memorial and which was in operation on Feb. 14 and 15, 1987 using the call TV6CNA.

Their objective was to contact as many Canadian Amateurs as possible and this goal was reached with more than 300 VE QSOs. The special call was issued due to the geographical situation of the station which was on Canadian soil. This area, where the Vimy Memorial is located, has been given to Canada by France and is considered to be part of Canada.

There were more than 15 operators taking runs at the mike at TV6CNA. Anyone having made a QSO with the station and wanting to obtain a QSL

CERTIFICATES OF THANKS

Do you know an Amateur who has contributed to our service in some special way? If you do, send Debbie his name and the name of his club. The CARF Certificates of Thanks should be presented formally, with due ceremony, at a club meeting. Debbie's address is Box 356, Kingston, Ont. K7L 4W2.



can get the special card from Claude F6BNQ. We extend our heartfelt thanks to F6BNQ who was the originator of this commemorative get together between French and Canadian Amateurs and also to all the OMs from Department 62.

VIMY: IL Y A 70 ANS

Les visiteurs canadiens qui se rendent en France font souvent une visite sur le littoral de la Manche où ils découvrent les plages de débarquement de 1944 et de nombreux cimetières canadiens, tristes souvenirs des débarquements de Dieppe et de 1944, lors de l'offensive finale.

On est toutefois porté à oublier la "Grande guerre" comme on l'appelle et au cours de laquelle, entre 1914 et 1918, des milliers de canadiens sont tombés sur le sol de France, au pays Artois, mêlant leur sang à celui des alliés venus libérer la France de ses oppresseurs.

En 1936, le Gouvernement français a terminé l'érection d'un immense monument de granit à la gloire et au souvenir des canadiens qui ont fait le sacrifice de leur vie pour la France: le Mémorial de Vimy qui surplombe

cette crête tout près de la ville d'Arras, à environ 200 kilomètres de Paris.

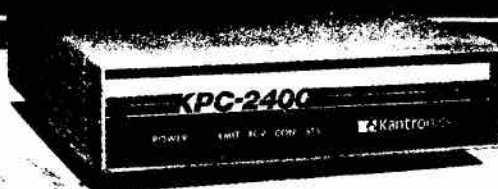
Pour souligner le 70e anniversaire de cette bataille en 1917, les radio-amateurs du département du Pas-de-Calais, où se trouve l'Artois, ont les 14 et 15 février derniers opéré une station pour commémorer cet anniversaire. L'indicatif spécial utilisé était TV6CNA; le but était de réaliser le plus de QSO avec les canadiens et a connu un grand succès avec plus de 300 QSO avec les VE. La station installée à quelques pas du Mémorial de Vimy a pu avoir ce préfixe spécial en TV6 en raison de sa situation géographique qui était en "territoire canadien"... le terrain où est érigé le monument ayant été offert au Canada par la France.

Plus de 15 opérateurs se sont relayés au micro de TV6CNA durant ces deux jours. Pour recevoir la QSL spéciale, on doit écrire à F6BNQ qui fera suivre la réponse dans les plus brefs délais. C'est d'ailleurs Claude F6BNQ, qui a été l'instigateur de cette commémoration radio-amateur. Nous lui en sommes reconnaissants, comme à tous les OM du département 62.

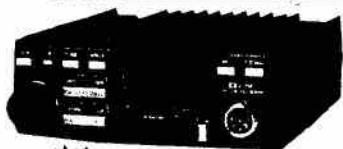
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BY VE1WDX

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Prince Edward Island is located on Canada's east coast, in the Gulf of Saint Lawrence. It is separated from the 'Mainland' by the Northumberland Strait. The narrowest point is about nine miles and is traversed daily by several of the largest passenger and automobile carrying vessels in North America. The 45-minute crossing is enjoyed by thousands of vacationing families during the 'peak' summer months, from June through September. Located at: 45 15N Latitude and 63 10W Longitude.

The capital city of Prince Edward Island is Charlottetown, and therefore it alone is called 'the birthplace of Canada'. This is where the founding fathers assembled to join the individual provinces and territories in this country under one flag, and thereby uniting this grand country of 'Canada'. In 1949, the province of Newfoundland (VO1) & (VO2) under the leadership of Premier Joseph Smallwood signed the required

documents to become Canada's 10th province... thereby uniting the country from Atlantic to Pacific.

RULES

VE1 and VO1/VO2 stations must confirm six contacts with Amateur stations located in Charlottetown, 'The capital city'.

All other VE's and U.S. Amateurs must confirm a contact with three stations in Charlottetown.

All DX Amateurs (stations outside of North America, including Hawaii and Alaska for this award) must confirm a contact with any two

stations located in the city of Charlottetown.

The QSL cards confirming the required contacts must be in your possession when you apply for the Award. Do not send your cards. Send a copy of your log sheet (verified by two licensed Amateurs) along with \$3 or 6 IRC's, to the address above. Our association is proud of this award and hope that you will be too.

All contacts made after Jan 1, 1967 will count for this award. Contacts must have been made on any of the (H.F.) Bands used for Amateur Radio.

BOCA AWARD APPLICATION FORM

CALL _____ DATE _____ 19____

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ENCLOSED: IRC'S () USA\$ () CDN\$ () OTHER ()
THE LOG INFORMATION REQUIRED FOR THIS AWARD HAS BEEN CHECKED AND VERIFIED BY THE FOLLOWING AMATEURS:

SIGNATURE _____ CALL _____

SIGNATURE _____ CALL _____

ABOVE REQUIRES SIGNATURE AND CALL OF AMATEURS CONFIRMING YOUR LOG INFO.

I DECLARE THAT ALL CREDITS PERTAINING TO THIS AWARD HAVE BEEN OBTAINED IN ACCORDANCE WITH THE RULES FOR THE AWARD, AS WELL AS THE RULES AND REGULATIONS FOR AMATEUR RADIO IN MY COUNTRY.

IF I QUALIFY FOR THIS AWARD, WOULD YOU PLEASE SEND IT TO THE ADDRESS ABOVE.

APPLICANT'S SIGNATURE _____

STATION WORKED DATE TIME BAND MODE RST REMARKS

STATION WORKED	DATE	TIME	BAND	MODE	RST	REMARKS

PLEASE PRINT YOUR NAME AS YOU WISH IT ENTERED ON YOUR CERTIFICATE.





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Scouts and Guides meet the 20th Century head on

BY GERRY CURRY VE3MAX

Ask any member of the public to describe a Boy Scout or Girl Guide activity and you are sure to hear descriptions of camp fires, tenting or helping old ladies across the street. Well, all these things are still important to scouting and guiding, but there is much more that makes up today's Scout and Guide. Scouting and Guiding today provide programmes for youth from 6 to 26 years of age, based on an all-round development of their social, spiritual, mental and physical potential.

The Boy Scouts of Canada, Provincial Council for Ontario, and the Ontario Council, Girl Guides of Canada recognize the desire of our youth to explore their 'high tech' future. To this end they have developed the Future Challenge '87 concept and are about to turn a new page in their programme books this Summer.

Now, just what is Future Challenge '87, and what can you do to help.

Future Challenge '87 is a one week programme of 'high tech' experiences designed to allow our youth to explore one very important aspect of the future of their world. It will be held at the Doon Campus of Conestoga College in Kitchener, from Aug. 16 to 23 this year.

Although the closest similarity would be a 'computer camp', Future Challenge '87 will be much, much more.

The Scouts and Guides and their leaders will participate in a packed daytime programme consisting of learning digital electronics; building an 8-bit microcomputer or a 40 metre receiver; computer programming and group discussions on the effects computers and other high technology will have on society. All this will be surrounded by traditional Scouting and Guiding programme based on living in tents and having lots of physical activities, campfires, and all the other things that make camp fun.

Amateur radio will play a key role in the programme by providing practical applications for what is learned in the theory sessions. In the ham shack, they will see both the use of microprocessors in the control and operation of radio equipment, and the

ever increasing use of digital technology in the world of communications through packet radio, etc. Of even more importance, they will be exposed to a great way of using high technology as a career or recreational pursuit.

As well as theory and lab sessions on computer programming, the participants will also get inside the equipment to see just how it works. They will also visit companies who use computers and automation to their fullest.

The Amateur radio station will consist of Yaesu FT-980 and FT-757GX HF Rigs and a Yaesu FT-270 2 Metre FM rig.

Antennas include a 2 Metre omni, a TH-3 Jr. beam and various dipoles. We will use a Kantronics Interface for CW and RTTY and a KPC-2 TNC for Packet, via an Apple Macintosh computer.

The station will use the call VE3SHQ with the permission of the National Boy Scout Headquarters in

Ottawa, and the Packet system will be reached at VE3EUK BBS in Kitchener.

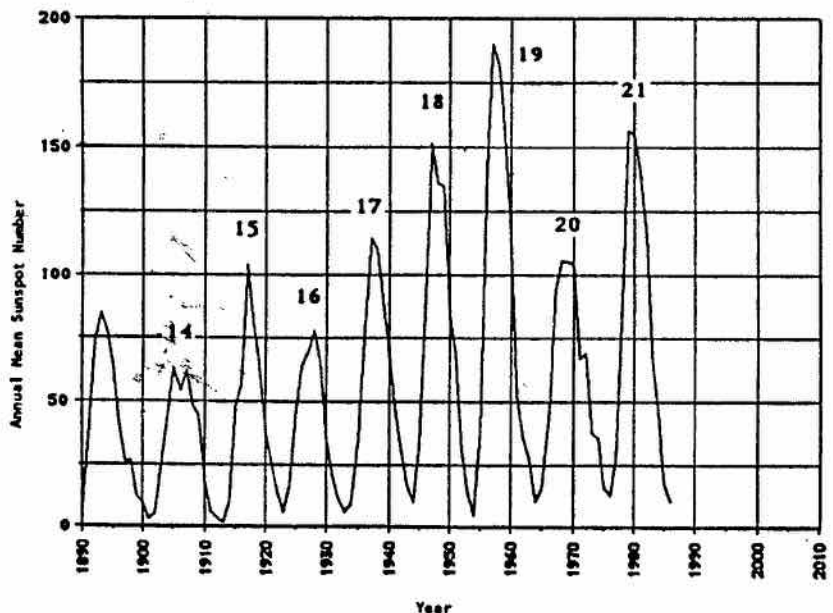
Now, just how can you help?

If you live in the area, you could offer your services for an evening or the entire session. If that is not possible, just remember what propagation is like in August. We would like all the contacts possible. So listen for us and give us a call. Remember, these young people are just the type we need to sustain our hobby. They need all the encouragement we can give them to become Amateurs. During the course, we will attempt to work, at one time or another, all bands in all modes. If you would like to set up a 'sked', drop me a line and we will do our best to meet you 'on the air'.

For further information or to set up a 'sked' please write to: Future Challenge '87, c/o Gerry Curry VE3MAX, RR #1 Millgrove, Ont. L0R 1V0, (416) 669-7376 after 7 p.m. EDST.

20th Century Sunspot Cycles

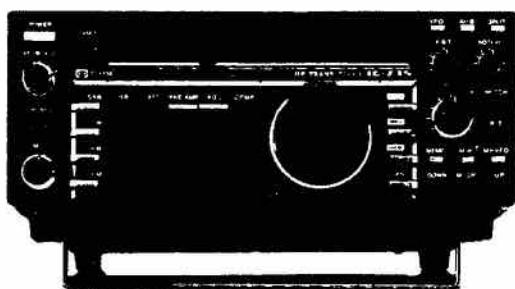
For those interested in solar cycle activity, the chart below (courtesy of the U.S. Space Environment Services Centre and *WIARC Bulletin*) shows the various cycles from the year 1890.



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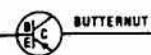
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Reviews

TECHNICAL HISTORY OF THE BEGINNINGS OF RADAR —

By S.S. Swords, published by Peter Peregrinus on behalf of the Institution of Electrical Engineers, 1986.

I first knew of radar about 1938. I had then acquired enough knowledge to wind coils for my o-v-1 to get it down to single digit metre wavelengths, and listened fascinated to television sound from Alexandra Palace, and to an unpleasant loud buzz that appeared nearby. Some miles to the south, there appeared a tower on the horizon for a few weeks. Later, we heard of enormous towers on the Dover road and at Dover itself, and of loud-hailers that called to traffic jams of frustrated motorists: "Your engines will start now." We knew something mysterious was up.

Five years later I watched H2S and Gee displays aboard a Lancaster; indeed, I have an oscilloscope using a tube from a surplus H2S today. So acquisition of this book has been a delight to me; here is the full story, told by someone skilled in the art, the art of radiolocation.

After a chapter discussing the radar fundamentals, the author discusses the precursors of radar, starting with Christian Hulsmeyer's astonishing feat of producing a workable spark gap and coherer radar in 1904, capable of detecting a vessel at 3,000 metres. Indeed, had he not concentrated his sales effort to shipowners— he designed the radar as a collision avoidance device— or insurance companies, but had pressed the idea on navies, he might have succeeded in making a fortune from it. (Shipowners are covered against loss by insurance; insurance companies by premiums.)

He then describes the debut of radar in nine countries. The problem of air attack caused many minds to ponder the problem of detection of aircraft during the 1930s. Just about every one of them came to the conclusion that the reflection of radiowaves was the ultimate solution. So the equipment produced by the combatants differs only in construction detail. One wonders at the mentality that swore us to keep 'the secrets of radar' in this milieu, especially since the technique had obvious uses in peacetime.

The British story comes next, a detailed history of the Chain, home equipment, including circuit diagrams in case anybody cares to build one for themselves, and shorter items on CHL, GCI, and IFF. RDF2, using 955s as mixer and local oscillator feeding an EMI TRF television as an IF amplifier, gets ten pages.

The book ends with a note of the invention of the magnetron. There are nine appendices and name and subject indexes.

As I said, I found this book a delight. This despite rather too many typographical errors, and one or two peculiar items, like Figure 3.11, a map of Woolwich, where Butement and Pollard invented radar in 1931. It has little relevance to the text. On the other hand, no maps provided for the illustration of the Daventry experiment. "The equipment was set up... in a field near Weedon." A map of the area, showing the location of the GSA transmitter aerial, and distinguishing the precise Weedon referred to (the map shows three Weedons: Weedon Beck Weedon Lois, and Upper Weedon, and there is ten miles between them) would prove of interest.

Determination of height at a CH station from range and elevation was calculated from an approximation. I would like to know— and there must have been good reason— why an approximation is needed when two sides and the included angle of a triangle are known, or indeed, why a graphical method, using a diagram of heights concentric with the earth and a range cursor would not have been sufficiently accurate. Such a diagram appears as Figure 5.23.

The Amateur will find this book of interest: the historian will find it invaluable. The extensive bibliographies are a permanent contribution to our literature.

VE3DQB

AMATEUR RADIO AND DX CATALOGUE

Produced by Palomar Engineers.

RFI being uppermost in our minds and on top of the docket elsewhere, the following will be of interest to most readers. More particularly as none of it involves breaking the warranty seal or modifying the offending

equipment with capacitors, chokes, etc.

Using Ferrite Beads to Keep RF out of TV sets, telephones, VCRs, burglar alarms and other electronic equipment is covered quite well in an *RFI Tip Sheet* written by Palomar Engineers and reproduced with permission.

Palomar Engineers sent me their Spring 1987 *Amateur Radio and DX Catalog* with the *RFI Tip Sheet*, and it lists their full line of Ferrite Toroid cores, Iron Powder Toroid cores and Ferrite Beads. They also list RFI and Experimenter kits of Toroids & Beads including application information.

A recent addition to their line of regular equipment such as R-X Noise Bridge, 3-30 MHz Active Antenna, SWR and Power Meter, Universal Audio Filter, Balun Transformers, Loop Antenna, Transceiver and Receiver Preamps, VLF Converters and a Computer Interface is the *Tuner-Tuner*. It is shown as NEW FROM PALOMAR and recommended for anyone that uses those so-called-antenna tuners. The PT-340 connects between your rig and present tuner and when turned on gives a loud S9+ noise in your receiver which you have tuned to the desired frequency. Adjusting your antenna tuner until the noise drops out completely indicates your SWR is 1:1 and after turning the PT-340 off, you are now ready to transmit. Output power up to 3,000 watts is possible over a frequency range of 1.7-30 MHz through an SO-239 connector into a 50 ohm load. External power for the PT-340 is 9 vDC at 35mA although a connector and holder is supplied for your 9v battery if you prefer.

VE6BLY

See next page for RFI Tips, discussed in this review, reproduced courtesy Palomar Engineers.

RFI

Tip Sheet

Using Ferrite Beads to Keep RF Out Of TV Sets, Telephones, VCR's, Burglar Alarms and Other Electronic Equipment

RFI and TVI have been with us for a long time. Now we have microwave ovens, VCR's and many other devices that do wrong things when they pick up RF.

There are several ways to tackle the problem but most of them involve opening the affected equipment and adding suppressor capacitors, filters, and other circuit modifications. Unfortunately there is a serious disadvantage associated with this approach. Any modifications made to domestic entertainment equipment can — and often are — blamed for later problems that arise in it. Modifying your own equipment is not so bad, but taking a soldering iron to your neighbor's stereo is risky.

An alternative approach is to use ferrite beads to reduce the amount of RF entering the equipment. If the equipment is in a metal box, or even if it's in a plastic box, if RF is prevented from entering the box on the antenna lead, the power cable, the speaker leads, the phono pickup leads, and on any other wires entering the box, it is possible to solve the problem without any modification to the equipment. Ferrite beads just slip over the wires and stop RF from going in.

Ferrite beads are made of the same materials as the toroid cores used in broadband transformers but are used at much higher frequencies. For example, ferrite Mix 43 is used for tuned circuits in the frequency range .01 to 1 MHz. It is efficient and losses are low. But, if it is used in the 40-200 MHz range it is lossy. So when you slip a bead of Mix 43 over a wire and there is RF in the 40-200 MHz range going down the wire, it is just as though you put a resistor in the wire. But you did not have to cut the wire to insert a resistor; you just slip a bead over the wire. If the resistance of one bead is not enough you can add more beads or add longer beads to get more resistance. The beads, unlike a resistor, do not affect the wire at low frequencies so the audio, DC, and other low frequency components go through the wire just as though the bead were not there.

There are three bead materials in general use: Mix 73, Mix 43, and Mix 64. The impedance in ohms of size FB-18 beads vs frequency is shown in the following table.

Bead Material	Frequency				
	1-MHz	10-MHz	40-MHz	100-MHz	1000-MHz
73	45	110	110	110	120
43	15	70	110	150	160
64	6	40	110	160	400

From the table we see that beads of the three materials work about the same at 40 MHz where the impedance is 110 ohms. Below 40 MHz material 73 is best. Above 40 MHz material 64 is best. For overall performance from 1-1000 MHz material 43 is the best choice.

It is important to remember that the frequencies mentioned are those of the interfering signals to be eliminated; not the operating frequencies of the equipment being protected. For example: To protect a telephone operating at voice frequencies of .002 MHz we use type 43 or 73 beads to keep 14 MHz RF out.

So when you buy beads you must specify both the physical size (FB-3, FB-8, etc.) and the material (Mix 73, Mix 43, etc.) depending on the frequency of the RF interference. FB-1, FB-3, and FB-7 have .05" holes that will slip over bare #18 gauge wire. FB-8 has a .09" hole and will slip over the insulation of #22 wire. FB-24 and FB-63 have .2" holes to go over larger wire or cable.

Cables. So far we have talked about slipping beads over individual wires. But, in many cases, we are going to find two wire speaker cables, two wire or three wire power cables, twinlead antenna cable, and multi-wire control cables. Cable wires are close together and act just like a single wire as far as RF pickup is concerned. So the whole cable can go through the bead and this will suppress RF transmission through all the cable wires. This is a lot easier than putting beads on each wire.

Twinlead is a special case. If you put a bead on each wire you'll kill the TV signal. But if the whole twinlead goes through a single bead, the TV signal goes on through but the RF interference is suppressed by the bead. This is because the twinlead is a transmission line to the TV signal but looks like a single wire to the RF interference.

This brings us to coaxial cable. The signal going through the coax is confined to the inside of the coax shield. But the outside of the shield acts just like any wire; it can pick up RF and that RF can be carried to the TV or monitor. Shield beads placed over the cable will suppress this interference.

Toroids. When we start talking about slipping beads over coaxial cable and multi-wire cable we see that we may need beads with pretty big holes. Also, if the cable has a molded plug on the end (like some power cords, for example) the plug has to go through the hole and we may need a very big hole indeed. Fortunately a variety of ferrite toroid cores are available with holes as big as 1.4" diameter. They are not available in all the same materials as beads but in similar ones. As a guide when specifying toroids for RF suppression:

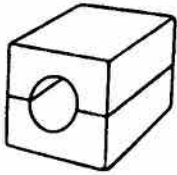
Mix 77 is the best below 40 MHz

Mix 43 can be used from 1-1000 MHz and is the best from 30-150 MHz

Mix 61 is the best above 200 MHz

After you put that big plug through the toroid hole you'll find that the toroid fits the cable very loosely. Don't worry. It will still work fine. If there is room to do it, loop the cable around and run it through the toroid again. Do this as many times as you can. Each turn is just like adding another toroid. And, using the big Mix 61 cores, you add an inductive choke where two turns is four times as good as one turn, three turns is nine times as good, etc.

Reproduced courtesy Palomar Engineers



Split Beads. This is a new development to solve the problem of putting beads or toroids over cables that have big plugs on the end. They are beads that have been cut in half. You put the two halves over the cable and wrap them with tape to hold them together. The mating edges are polished smooth so the two halves mate very closely.

They are available with center holes of $\frac{1}{4}$ " and $\frac{1}{2}$ " diameter. Also for flat computer cable $2\frac{1}{2}$ or 3" wide.

It is important that the two halves of the split beads fit exactly together. So the $\frac{1}{4}$ " hole beads cannot be used for cables larger than $\frac{1}{4}$ ". It does not matter if the cable is smaller than the hole.

All split beads now available are of 43 material which is the best overall material for 1-1000 MHz interference suppression.

Telephone Interference. The standard telephone is highly susceptible to RFI. The telephone wiring in the house and outside on poles make a large receiving antenna. And in the telephone instrument are voltage-variable resistors that act like detector diodes so nearby radio stations are clearly heard. The solution is to keep RF out of the telephone by putting ferrite beads on the telephone cable as it enters the instrument.

The plug of modular telephones will go through F82 toroids. Or $\frac{1}{4}$ " split beads can be put over the cable.

Burglar Alarms. These are much like telephones in that they have extensive wiring throughout the building that acts like an antenna to pick up RF. The solution is the same: Use beads or toroids on the wires entering the electronics box to keep RF out. It also may be necessary to put beads on the 115-v AC power cord.

VCR's. The VCR is a real RFI problem. Ferrite beads on all wires entering the VCR can eliminate RFI from most amateur bands. But on 80 meters even this doesn't always work. W6BIP has worked on this problem; see *Ham Radio Magazine* October 1984 p. 113.

We have been talking about keeping RF out of equipment. You can also use beads and toroids to keep RF in. That fish tank heater that makes all that racket on 80 meters is using its power cord and the house power wiring to radiate interference. A bead or toroid on the power cord right at the heater can keep the noise from entering the wiring. Computer power cords and connecting cables can be treated in the same manner. Sometimes RF comes out of a transceiver's power cable. A toroid can stop it. Or RF flows on the outside of the antenna cable, going right around your lowpass filter. Again, toroids to the rescue.

Each interference problem is different. You have to try this and then try that until you find a solution. Using the principles outlined here, ferrite beads and toroids can be extremely helpful.

AMATEUR RADIO FOR THE VISUALLY IMPAIRED

Recent literature from the Canadian National Institute for the Blind outlines a programme for involvement with Amateur radio. A complete course is offered free by CNIB divisions, in collaboration with individual instructors and Amateur radio clubs across Canada.

The course runs up to 26 weeks (one night a week), and CNIB advises: "You must have a real desire to obtain your Amateur 'ticket'. Remember, blindness is not a barrier to becoming an operator."

Details can be obtained from local CNIB offices, or from the Manager, CNIB Amateur Radio Program, 1931 Bayview Ave., Toronto, Ont. M4G 3C8.

Sighted, licensed Amateurs who would like to sponsor a blind or visually impaired Amateur can also contact the Manager at the above address.

JRSD FUND

If you haven't done so yet, please write your MP about Ravenscroft and make a donation— 1% of the value of your rig seems fair—to the JRSD Fund, Box 8873, Ottawa K1G3J2.

Does your local library carry the radio Amateur call books? If not, ask them!

SWAP SHOP

FOR SALE: HOME in Nakusp, B.C., 733 Columbia Crescent. Nine yrs. young, 1450 sq. ft. plus 325 sq. ft. court-yard-sundeck. Beautifully fenced and landscaped. Double garage, Sauna with pool. Underground wiring, sewer, street lights, side walks. **EXCELLENT DX-Location.** Curling, fishing, golf, Hot Springs, Ski Hill. Contact VE7EHD, 604-265-3175.

GREAT DX: HDR 300, TH7, stacked Sinclair 2M, Hustler collinear, Remote CoaAx switch fed by 7/8 Heliac on 70' guyed tower at 1200'. Room on mast for full 40 metre 3 el beam. Quiet Haliburton Lake 200' frontage; year round insulated cottage with all amenities. ATV or water access, 2 hrs. max. from Toronto. \$50,000. Nick VE3LLJ (416) 372-4576.

FOR SALE: FOX transceiver kits are available from Frank Hughes VE3DQB, Box 855, Hawkesbury, Ont. K6A 3C9. Diode tuner kit \$40, variable capacitor tuning \$50. Either kit \$5 postage and packing.

WANTED: Wireless set no. 19 equipment and accessories. Especially looking for power amplifier and pocketwatch. I am willing to buy and/or trade equipment. Please write to Chris

Bisaillion VE3CBK, 91 Varley Drive, Kanata, Ont. K2K 1H5.

FOR SALE: Kantronics packet TNC-2 mint with manual, cable, software Vic20/C64— \$150 firm. MFJ 1224 interface RTTY/CW with software for Vic20/C64, cable, manual— \$85. Wefax interface see 73 Oct. 1986 with C64 disk, manual— \$55. UPS extra. Monty Hart VE3TA, 55 Highland Ave., Barrie, Ont. L4M 1N2. 705-737-2252.

WANTED: Matching speaker for SB300 receiver. Reg Mallory VE1BNN, P.O. Box 29, Armdale, N.S. B3L 4J7.

WANTED: Active audio filter for CW reception. Please contact Sigi Bernhoff VE3JDA, 15 Sandwell Cres., Kanata, Ont. K2K 1V2. Tel 613-592-0172.

Please send your 'Swap Shop' notices to the TCA Swap Shop, Box 356, Kingston, Ont. K7L 4W2. Single insertion is \$1.00 minimum (10 words) and \$1.00 for each additional 10 words. To renew, send copy and payment again. Please print or type, and put your membership number and call (not counted) at the end of your ad. Include your full address with postal code; if using a phone number, include the area code. TCA accepts no responsibility for content or matters arising from ads.

YL Daughters and their Amateur Radio Dads

They say there is nothing more special than the relationship between father and daughter; unless they are both Amateur Radio Operators—now that's extra special.

Joan VEGBAO (x-VE7ATO) says she grew up listening to the static squawks of short wave receiving as her Dad, David VE6BA, has been a ham for many years.

It was a great thrill for both of them when she received her call in Nov 1969 and her advanced in 1971.

Diane VE6AYL says she became interested in radio through her Dad, Keith VE6AQU, who received his call in 1967. Diane received her first call of VE6AIK in 1969. She changed to VE6AYL in 1975.

Carol ZL1AJL and her Dad Dave ZL1AMN have even been on DXpeditions together.

I know there are many more. Please pass along all family info. And why not try for the CLARA Family Certificate?

A belated Happy Father's Day to all the fathers.

CLARA NET

CLARA change is now in effect!

New Net time and frequency: 20 metre net Tuesday 14.120 1700Z; 40 metre net Tuesday 7.088 1300Z.

87 CELEBRATION

Want to have a great time? Want to learn? Want to have fun?

Then come to the 87 Convention to celebrate the 20th Birthday of CLARA, Sept. 11-12-13 Sheraton Parkway Hotel, Richmond Hill, Ont. (Just north of Toronto.)

A full weekend has been planned. You don't have to be a member of CLARA to attend. The OM is invited to come too.

We have all kinds of fun and entertainment planned, e.g. Bus trip on red double decker bus to Cullen Country Barns, vaudeville show, shopping. Later on a Monte Carlo fun and game night with additional games and entertainment such as clowns and balloon sculpturing. Scottish country dancing exhibition, and possibly instruction, highland dancing. Saturday General Meeting, luncheon and presentations. Forums during the afternoon. Evening

Dinner-Dance. Richmond Hill Bag pipe band and other entertainment. Sunday a.m. a Bon Voyage breakfast. All meals have individual take-home table favours, theme oriented. A few surprises along the way. The usual goody bags and lots of prizes.

Good fun, good food, good drinks, good entertainment and, most of all, good YL friendship. See you at 87 Celebration! For any info regarding 87 Celebration contact me.

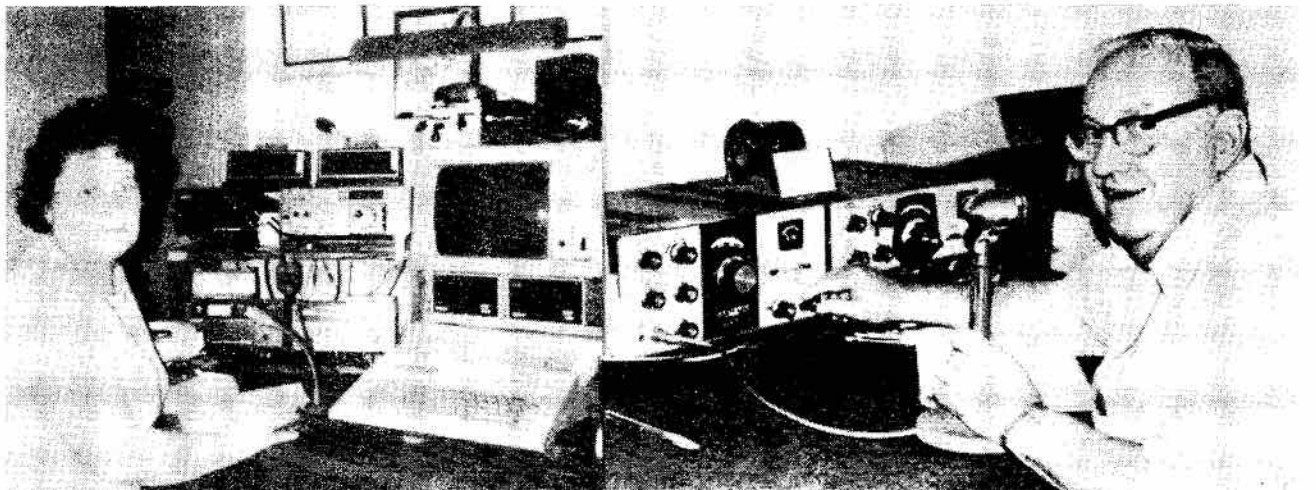
That's it for now. Have a great summer. ■



Wendy VE3ERT is a newcomer as far as getting her call. She became licensed in December 1986. The hobby itself is nothing new for Wendy as she grew up with Amateur Radio. Her Dad is Lloyd VE3ERQ who has been licensed since around 1965. Wendy and Lloyd can be seen at a lot of ham fleamarkets together. In fact, this photo was taken at a recent fleamarket.

Pauline VE3LQA received her call in 1979. Her Dad is Jim VE3AA1. The guy in the middle is Pauline's OM Bill. No call but a good supporter.





Marg VE3EQE received her first licence Dec 17, 1973 and her advanced Dec 20, 1974. Her Dad, Charlie VE3CGW, now a silent key, received his first licence Jan. 3, 1972 at the age of 80, and his advanced April 10, 1974. He became a silent key Sept. 25, 1984.

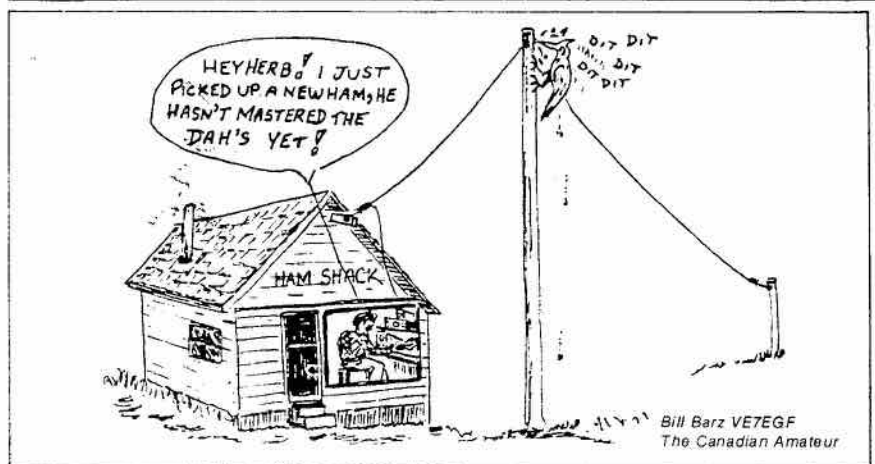


Our daughters Cathi VE3FBL and Dot VE3HUO with their proud Dad, George VE3DGX.

Jeanne VE2JZ, originally VE1YX, has regular skeds with her Dad Murray VE1WX. The photo was taken Christmas 86.

VE3VCA,

CARF would like to invite Amateurs who are in the Kingston area to come operate the club station, VE3VCA. President Ron Walsh, reports that "our signal using a Viewstar PT-2000A and TH-7 is amazing." The station creates a pile-up every time it gets on the air. Ron reports that in one hour of operating on April 27, he worked TU2IO, EI4ZH, UQ1EWC, EA8BLP, GW4HSH, SH3BH and VE6JW/DL. If you'd like to visit the station, contact us and make an appointment.



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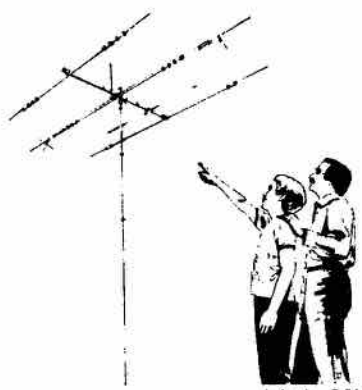
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You too can improve the number and quality of your contacts with a contest winning World Ranger A4 beam.

Forward Gain	8.9 dBd
Front to Back Ratio, Avg	25 dB
SWR	1.2:1 Typical
Bandwidth, Avg KHz	500
Power Rating, Watts	2000 PEP
Feed Point Impedance	50 Ohms
Connector	Twin terminal stainless steel takes all coax.
No Balun Required	Zinc Plated Steel
Hardware	18 x 2 (548.6 x 5.1)
Boom, ft (cm)	
Longest Element & diameter, ft (cm)	32 x 1.13 - 50 (975.4 x 2.9 to 13)
Wind Surface Area, ft ² (m ²)	5.5 (0.51)
Turning Radius, ft (cm)	18.4 (561)
Mast Diameter, in (cm)	1.25 min. 2 max. (3.18 to 5.08)
Material	6063-T832 Seamless Aluminum
Telescope Method	Taper tubing with full circle clamps
Weight, lb (kg)	37 (16.8)



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42-18XL 2M New Boomer	List \$269	SALE \$199
215WB 2M New Jr Bmr	List \$219	SALE \$159
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ARX-2B 2M Ringo Rgr	List \$95	SALE \$75

A743 7MHz 10MHz kit for A3
A744 7MHz 10MHz kit for A4

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You'll be pleased at the ease of assembly because we have designed out unnecessary hardware and given you a fully illustrated instruction manual. Proven in DX-peditions and contests, A3 has become the world standard for 3 element beams.

Forward Gain	8 dBd
Front to Back Ratio, Avg	25 dB
SWR	1.2:1 Typical
Bandwidth, Avg KHz	500
Power Rating, Watts	2000 PEP
Feed Point Impedance	50 Ohms
Connector	Twin terminal stainless steel takes all coax.
No Balun Required	Zinc Plated Steel
Hardware	14 x 1.63 - 1.50 (426.7 x 4.13 - 3.81)
Boom, ft (cm)	
Longest Element & diameter, ft (cm)	27.75 x 1.13 - 50 (845.8 x 2.86 - 1.27)
Wind Surface Area, ft ² (m ²)	4.36 (0.47)
Turning Radius, ft (m)	15.50 (4.72)
Mast Diameter, in (cm)	1.25 min. 2 max. (3.18 to 5.08)
Material	6063-T832 Seamless Aluminum
Telescope Method	Taper tubing with full circle clamps
Weight, lb (kg)	27 (12.9)

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 All-mode Transceiver

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- VS35M \$359
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- RS50M \$449
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DAYTON DX

This year's trip to Dayton was my first with DX in view. The previous two visits had no particular targets, just a general wish to see as much as possible of the great 'Hamvention'. On those trips I had dropped in briefly on the DX forum but passed up the hospitality suites in the downtown hotels, preferring to spend the evening relaxing in an armchair and reading the reams of sales literature I'd picked up during the day and coming to a few conclusions on things I was planning to buy... perhaps!

This year clearly the DX Forum had to be covered, at least in part, so I timed my visit carefully and managed to hear the whole presentation on the Peter 1st Island DXpedition by Kaare Pederson 3Y2VG (LA2VG). It turned out that the organizers had flown Kaare in specially from Norway, as I imagine the two California clubs did last month when Einar Enderud 3Y1EE (AL1EE) spoke at Visalia. His talk and slide show was certainly one of the best I've attended, his material was well organized and many of his slides were of *National Geographic* standard. Most of you will have read the statistics in other magazines but several details in his talk have stuck in my mind. Apparently the site they choose was covered by a layer of ice 20 feet thick topped off by several feet of snow.

They were helicoptered in and out since they were sitting on a plateau about a hundred feet above sea level. All that ice and snow under their feet resulted in an odd problem. When the second station was first fired up, loading into a Butternut vertical with ground radials laid out appropriately, the generator immediately packed up. It turned out that RF was getting into the generator voltage control unit which allowed the AC volts to soar before the whole thing shut itself down. It was fortunate indeed that no damage was done to the ham gear. Kaare had to jury-rig a filter to block the RF out of the control unit before he could get down to working the pile-ups.

Contacts were made on all bands 160 through 10 although the majority were on 40 through 15. Perhaps not surprisingly slightly more than half of all the contacts were with US stations, 57% I think it was. Kaare mentioned his pleasure at the good behaviours of those of us out there in the pile-ups. He spoke of one occasion when he heard, amongst all those U.S. stations, a faint signal from a UA. He asked for everyone to stand by for a minute

while he called the UA only. He then tuned up the band looking for the UA through a range of frequencies that had suddenly, miraculously, become completely quiet!

One of his more amusing slides showed him crouching in the snow talking into a hand-held. What was he doing? Talking to Einar on 2 metres and so ensuring that each of them could claim to have worked Peter 1st Island!

Until I heard this I hadn't realized the obvious fact that the guys on the DXpedition itself are the only DXers who definitely *can't* claim a contact with the rare DX country they are activating!

Other slides showed spectacular icebergs near the island. "We called this one the Castle," he told us as he flashed a picture of a massive block of ice floating by. "This one we had no name for," he told us, and there was a pause before the audience broke up in hoots of laughter. What was it like? Well you'll have to ask someone else who was there, I couldn't possibly go into details in a respectable magazine like *The Canadian Amateur*!

The presentation ended with shots of the mountains of cards that have already arrived in Norway. It sounds as though the dedicated band of LAs who have taken on the task of handling the QSLs have things well in hand. Most of those that have arrived have already been processed and the U.S. cards are being sent in bulk to this side of the Atlantic before being mailed for local delivery, a neat idea.

I mentioned earlier the high quality of the slides taken on Peter 1st Island. Einar LA1EE has generously contributed one of the best of these, the picture being used on the QSL cards, to the Northern California DX Foundation. They have arranged, through the good offices of WZ6Z, to print a limited edition of 20 colour enlargements, 13" by 19", handsomely mounted and signed by Einar himself.

These will be available to the first 200 people who contribute \$150 each to the NCDXF to help replenish their funds, now somewhat depleted by their generous support— more than \$30,000— for this Norwegian DXpedition.

Another highlight of the trip to Dayton was a chance meeting, in the Canadex hospitality suite, with Ellen White W1YL/4, who has for many years now written "How's DX?" in *QST*. I had an interesting chat with her about how she puts her column together. Most of her material comes

in the form of letters from all over the place and she usually has more material than she can use. She, too, has the same problem as everyone else who writes a monthly column: a long time lag between press deadline and publication. It's frustrating to have to reject items because they will be ancient history by the time the magazine is published. I asked her how she had got on in the pile-ups for Peter 1st Island. Apparently she worked them on the second day and got a lot of fun out of kidding the rest of her family of DXers who were still trying to get through days later!

Another chance encounter in the same suite was with Bob Winn W5KNE, who almost single handedly puts out the weekly DX newsheet *QRZ DX*. It was nice to be able to thank him personally for the many tips I have picked up from his publication and passed on to readers of *The Canadian Amateur*. Bob has just returned from his first, I believe, DXpedition to Cocos (Keeling) Islands where he used the Call VK9YW.

It had obviously been a great success but Bob had also experienced one of the problems that travelers to distant lands often suffer after eating local food. He tells me his log book has many pages where the cryptic letter 'D' shows an interruption to the flow of QSOs.

COUNTRIES LIST FOR SOVIET CONTESTS

Readers may not be aware that the standard DXCC list of countries, sponsored by the ARRL, does not apply exactly for Soviet contests and awards. Everything outside the USSR remains the same as the DXCC list, it's the 'countries' within the Soviet union that are expanded in the case of these contests and awards. In these cases only each of the 15 republics (Russian Soviet Federative Socialist Republics, RSFSR, and Soviet Socialist Republics, SSR) which make up the USSR are counted as countries, with the Russian Republic split in two countries (European and Asiatic RSFSRs). In these cases Kaliningrad oblast, UA2F/UZ2F, is not considered a separate country, since administratively it is part of the European RSFSR.

Also considered as 'countries' are a number of Autonomous Soviet Socialist Republics (ASSRs) within the 15 'main' republics and also several island groups. In all cases the normal prefix U may be replaced by R as in RA1, RA4, RD, etc.

Here's the list of 40 USSR 'countries'

you should be using when you are involved in one of their awards or contests:

SOVIET REPUBLICS

UA1-6, UZ1-6 European RSFSR
UA9-0, UZ9-0 Asiatic RSFSR
UB Ukraine SSR
UC Byelorussian SSR
UD Azerbaijan SSR
UF Georgian SSR
UG Armenian SSR
UH Turkmen SSR
UI Uzbek SSR
UJ Tadjik SSR
UL Kazakh SSR
UM Kirghiz SSR
UO Moldavian SSR
UP Lithuanian SSR
UQ Latvian SSR
UR Estonian SSR

AUTONOMOUS SOVIET

SOCIALIST REPUBLICS

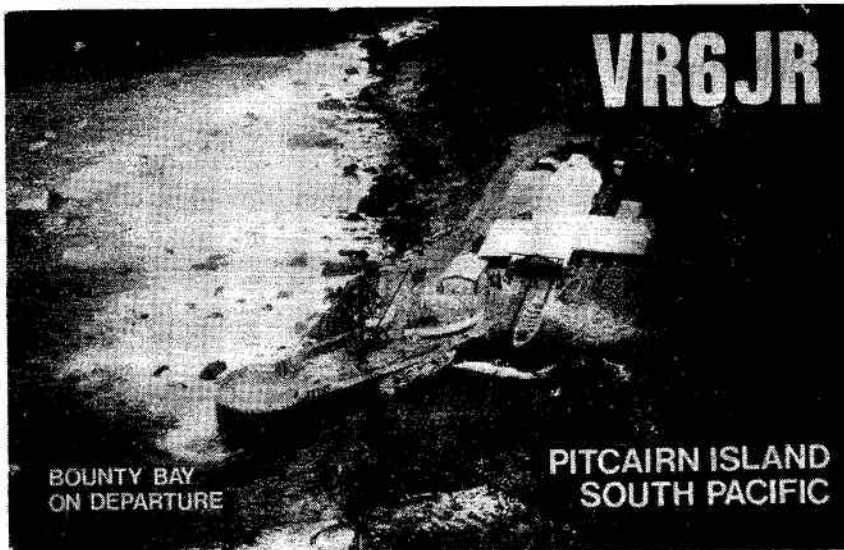
UA1-N Karelian ASSR
UA4-P Tatar ASSR
UA4-S Mari ASSR
UA4-U Mordavian ASSR
UA4-W Udmurst ASSR
UA4-Y Chuvash ASSR
UA6-I Kalmyk ASSR
UA6-J Severo-Ossetian ASSR
UA6-P Chechin-Inguish ASSR
UA6-W Daghestan ASSR
UA6-X Karbvardin-Balkar
UA9-W Bashkir ASSR
UA9-X Komi ASSR
UA0-O Buryat ASSR
UA0-Q Yakut ASSR
UA0-Y Tuva ASSR
UD-N Nakhichevan ASSR
UF-Q Adzhar ASSR
UF-V Adkhaz ASSR
UI-Z Karakalpek ASSR

ISLAND GROUPS

UA1-0 Franz Josef Land
UA1-P Novaya Zemlya
UA0-Q New Siberian Island
UA0-Z Kuril Islands

REPORT FROM THAILAND

My special correspondent in Thailand, daughter number 3, has excelled herself this month with a large cutting from the *Bangkok Post* of March 29. Written by a Tony Waltham, this whole-page article entitled "Thailand's radio hams in the spotlight" covers the current situation in HS in considerable detail while adding all the necessary background to make the piece readily understandable to a layman. It seems that the country is rapidly moving closer towards opening up Amateur radio to general use by licensed citizens. At the moment Thai club stations are only on the air during Amateur radio contests and for special events. Luckily for everyone concerned, this now means that the club stations are on the air every weekend. The Radio Amateur Society of Thailand (RAST) has over 600 members, most of whom



A recent arrival from the Bureau. Jim Russel G30KQ spent several months on Pitcairn in 1985 building the sturdy-looking jetty you can see on his card and working several thousand Amateurs worldwide from Tom (VR6TC) Christian's shack.

are Thais. Let's hope it won't be too long before most RAST members are on the air whenever they like from stations in their own homes.

10 METRE OPENINGS

A letter from Reg VE1BNN nicely reinforces the remarks I made last month about keeping an eye, or rather ear, open on ten metres, sometimes it can surprise you.

Early in May Reg noticed the VP9BA beacon on 28.300 around 1500 UTC each day. Its signal was monitored for about an hour before it faded out. On one occasion a South African beacon, ZS3PQ, came through weakly at 1630 UTC. Later in the day, around 1900 UTC, openings into the Caribbean and South America developed.

On May 7 the Bermudian beacon showed up as usual and on turning the band Reg was delighted to come across 5X5GK calling CQ on an otherwise dead band! Reg and Gerry exchanged 5x5 reports and had a solid 20 minute QSO before they lost propagation. The band stayed dead until 2000 UTC when T72AJ and some South American stations showed up. As Reg says, "You never know what will come through on 28 MHz, or when, so it pays to watch the beacons and check propagation. An easy new country may be found far from the QRM of the 20 metre band!"

During Reg's chat with Gerry 5X5GK, he learnt of some of items which would be really useful to Gerry in his work as a Canadian medical missionary in Uganda. I've passed the information on to our editor in the

hope that he can find room for it in the current 'Letters to the Editor' column. Take a look at his 'want list.' and see if you can help him out.

BITS AND PIECES

BY China— Activity from here seems to increase every month with new stations coming on the air and the operators luckily becoming old pros at handling the inevitable pile-ups. Particularly worthy of note is BY0AA which is located in that elusive Zone 23. Look for him on 14.025 MHz between 0030 and 0200 UTC every night. One of the DX Newsheets tells us that he puts "a big signal into Eastern North America" so this might be the easiest BY to work at the moment, for those of us in Eastern and Central Canada anyway.

Often on the air at about the same time is BY9GA just a few kHz up the band.

Other stations to look out for include BY1SK on 14.025 MHz at 0255 UTC and 14.188 at 0130 UTC; BY4AA on 14.025 MHz at 1230 UTC; BY4AOM on 14.215 MHz at 0340 UTC and BY4RB on 14.022 MHz at 1215 UTC "on most mornings with few takers." BY9GA has a YL operator and can be found on 14.226 MHz most evenings. With all this activity none of us should have any excuses for not having BY safely in the Log! **9M2, West Malaysia**— Regular readers will already know that I think Southeast Asia is the most difficult part of the world to work, from Eastern Canada anyway. However there

Continued on next page

seems to be plenty of activity from this side of the Malaysian peninsula according to a recent issue of *Inside DX*. Look for 9M2CW on 14.185 MHz at 1615 UTC; 9M2GH on 14.182 MHz at 1355 UTC; 9M2PL on 14.221 MHz at 1410 UTC and 9M2DF, whose name is Chin, on 14.220 MHz at 1415 UTC. Looks as though those of us whose favorite mode is CW are out of luck here!

VR6, Pitcairn Island— Further to my remarks in the May column I was glad

to read in *QRZ DX* that Tom VR6TC has now returned to the island. I hope this means he has completely recovered from his medical problems and is back on the air again.

EP, Iran— Signs of renewed activity from this country with David EP2DL reported on 14.158 and 14.180 MHz at 1630 and 1700 UTC. Most of his contacts seem to have been with European stations; only a few QSOs were with stations in North America. We have less information about the

second station, EP2DF, except that he was reported to be working stations on the East coast of North America. Either of these stations would be an excellent catch as activity has been sparse in the extreme from Iran since the revolution.

Thanks are due to the following sources for some of the material appearing in this column: *Inside DX*, *The DX Bulletin*, *QRZ DX*, the *DXer*, VE1BNN and Julia Cooper (*Bangkok Post*). ■

MICROWAVES

Michaél Ross VE2DUB
988 Hudson, St. Bruno
Quebec J3V 3Y2

Writing this column in mid-May, I have just returned from the Thirteenth Annual Eastern VHF/UHF Conference in Nashua, New Hampshire. This event draws many of the big gun VHF/UHF operators from the East Coast and always serves as a real shot in the arm to renew my enthusiasm, just listening to what other people are doing on the bands. Canadians in attendance at the conference included VE3FN, VE3CZM, VE2DUM, VE3BFM/W1, a VE1 whose call I didn't get, and VE3CRU who brought a number of VHF/UHF transverters and preamps along.

This year's program included talks on GasFet preamps by W1JR, reflector antennas and feeds by W2IMU and 432 and 1296 cavity amplifiers by WBODRL, who came all the way from Kansas. That was just the morning lineup. After lunch K1FO talked about receiver system noise temperature followed by W9IP/2 on the astronomy of moon tracking for EME. W1GXT reviewed the new

novice operating privileges as they relate to 220 and 1296 and W1XP finished up with a look at UHF solid state circuits. Informal band discussions from 50 MHz to light were held as an alternative to the formal talks.

Receiver preamp noise figure and gain measurements were made on Sunday morning along with antenna gain measurements. We didn't stick around long enough to see the antenna results, so I'll have to wait to get them by mail.

In addition to the formal program, I got a first hand look at a pair of homebrew 10 GHz SSB transceivers operated by W1XP and KA2CDZ. They were both using IC202's and 21 dB horn antennas at opposite ends of the antenna test range (parking lot). With an output power of about a milliwatt, their best DX was around 25 miles. This is far below their maximum range but just as far as they have tried so far.

Another great conversation piece was a complete SSB Electronics 10 GHz transverter all neatly packaged in a small aluminum box, complete with waveguide antenna switch. The owner was complaining that he had five other stations within 20 miles of his station but nobody was on. I wish I had that kind of problem!

W2DRZ displayed a new transverter that covers 50, 220, 432, 902 and 1296 MHz on a single board, using a 144 MHz IF. The output power is only 22 dBm but suitable amplifiers could resolve that quickly. This looks like the way to go to get on the VHF/UHF bands all in one shot. Price was \$640 U.S. including the basic transverter (\$300), 4 stage TX/RX sequencer for 5 bands (\$40), transverter housing 12.5x13.5 inches (\$50) and +22dbm 5 band power amplifier with harmonic filtering (\$250). Power supply requirements are 13.5 V at about 2 A. Sounds like this system would be great for mobile or portable operation.

Other interesting stories of working 2304 SSB EME using a 28-foot dish, travelling wave tube amplifiers for the microwave bands, working 70 miles on 902 with a microwatt and listening to the equipment lineup at W2SZ/1 filled in the rest of the weekend. There was much interest in the 903 MHz band, with many of the attendees either active or planning to get on.

I made audio recordings of the talks. If you would like a copy send me three blank 90-minute cassettes and \$5 to cover duping and mailing costs. Last year's talks are also available.

I expect to have reports of summer microwave mountaintop activity for the next issue and some photos of the equipment mentioned this month. Please send me reports of your activity on 1296 and up for inclusion in this column. ■



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Fleuri mon



VE2 FMA CONFIRME QSO

AVEC SPECIMEN

SUR _____ MÈTRES

LE _____ AOÛT 1987

A _____ UTC/GMT

CERT # _____

OPÉRATEURS

VE2AHC _____

VE2FOT _____

VE2FQX _____

FLEURIMONT

LAT: 45° 23' 49" LONG: 71° 50' 32"

QUÉBEC — CANADA

Le 7 août 1937, une population de 800 citoyens se regroupent pour voir naître la municipalité d'Ascot Nord.

Le 11 août 1971, suite à un concours populaire, Ascot Nord devient Fleurimont.

Aujourd'hui plus de 14.000 citoyens, établis sur 8.396,8 acres, sont fiers de célébrer le cinquantième (50^e) anniversaire de Fleurimont, ville fleurie.

On the seventh of August, 1937, A population of 800 citizens see the municipality of Ascot Nord borned.

On August 11, 1971, As a result of a contest, Ascot Nord becomes Fleurimont.

Today, over 14,000 citizens, established on 8,396.8 acres, are proud to celebrate the fiftieth anniversary of Fleurimont, also known as "ville fleurie".

Maire _____ Mayor
JULIEN DUCHARME

VE2FMA

In 1984, three Amateurs got together to try a new experience, the Canada Contest. René VE2AHC, Normand VE2FQX and Sylvain VE2FOT got together under the same roof to participate... just to participate.

Since then, the group VE2FOT is still active and again will be involved in some new project only to participate. However, this time the reason is different and the calling letters also.

The group for contest and special events VE2FMA will be active for the first time for the celebration of Fleurimont's 50th anniversary—August 9, 1987. Time: 14:00 to 02:00 UTC. Frequency: 14,155 USB and 3765 LSB (nightly). Calling letters: VE2FMA (Fleuri Mon Amour)

A certificate will be given to all Amateur radio ops or SWLs who will send a confirmation of the contact to: VE2FMA 1866 Ch. Galvin, Fleurimont, Quebec, Canada J1G 3G1. P.S. No mailing fee required.

Note: All confirmations should be sent by the Sept. 9, 1987.

Rene Biron VE2AHC,
Normand Boisvert VE2FOX,
Sylvain Latulippe VE2FOT

STATION VE2 FMA EVENEMENT SPECIAL

En 1984, un groupe de 3 amateurs se sont réunis pour essayer une

nouvelle expérience, soit le Canada contest. En effet, René VE2AHC, Normand VE2FQX et Sylvain VE2FOT se réunissaient sous le même toit pour participer... uniquement participer.

Depuis ce temps, le groupe VE2FOT est toujours actif et s'implique encore une fois dans quelques chose de nouveau uniquement pour participer.

Cependant, cette fois la cause est différente et les lettres d'appels aussi.

Le regroupement pour concours et événement spéciaux VE2FMA sera actif pour la première fois pour la célébration du cinquantième (50) anniversaire de Fleurimont, Québec. Date: 9 août 1987; Heure: 14:00 à 02:00 UTC; Fréquence: 14,155 USB et 3765 LSB (en soirée); Lettre d'appel: VE2FMA (Fleuri Mon Amour)

Un certificat sera alloué à toute station radio amateur ou SWL qui ferait parvenir une confirmation du contact à: VE2FMA 1866 CH. Galvin FLEURIMONT, Québec J1G 3G1 N.B. Aucun frais postaux exigé.

Acheminement: toute confirmation devrait être expédiée avant le 9 septembre 1987.

René Biron VE2AHC
Normand Boisvert VE2 FQX
Sylvain Latulippe VE2FOT

When all the joints have cooled, and the thing checks out, tell TCA about it!

CALENDAR

July 11: 13th Annual Ontario Hamfest, Burlington, Ont. Details May issue.

July 12 & 13: International Hamfest. Details May issue.

July 16-19: ANARCON '87, Mississauga, Ont. Details June issue.

July 25: Charlottetown ARC Flea Market. Details this issue.

July 31, Aug. 1 & 2: Saskatoon 1987 Hamfest and 9th CARF/DOC/CRRL National Symposium. Sponsored by Saskatoon ARC, Box 751, Saskatoon, Sask. S7K 3L7.

Aug. 9: VE2FMA Fleurimont 50th anniversary. Details this issue.

Aug. 15: Brantford ARC Flea Market, Woodman Park Community Centre, Contact P.O. Box 1661, Brantford, Ont. 519-753-2087 for details.

Sept. 4-7: RCCS Reunion '87. Details March issue.

Sept. 11-13: CLARA 87 Celebration. Details October YL column.

Sept. 12-13: Ham Happenings, Nanaimo ARA, Parksville, B.C.

Sept. 19: Kingston ARC Third Annual Amateur Radio and Electronics Flea Market, Kingston, Ont. Details: Bernie Burdsall VE3NB, 613-544-4438.

Applications for DOC licence examinations Sept. 23. DOC licence examinations June 17, Oct. 21.

Publicize your get-together here. Write the Editor, P.O. Box 356, Kingston, Ontario K7L 4W2. Please let us know about your events three months in advance to list them in the Calendar.

The deadlines for *The Canadian Amateur*, 1987, are for October, Aug. 21; November, Sept. 18; December, Oct. 23 and January 1988, Nov. 13.

Charlottetown Flea Market

The Charlottetown Amateur Radio Club will be sponsoring an Amateur Radio Flea Market on Saturday, July 25, 1987. Location will be 250 Brackley Point Road (the OLD Charlottetown airport TERMINAL building).

Open to Amateurs and the public from 8 a.m. to 3:30 p.m. Visitor talk-in will be on the VE1HI repeater (146.340 MHz. input, 146.940 MHz out).

Refreshments available. Come and join in the fun and frolic with us and visit Prince Edward Island at the same time!

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CONTEST SCENE

John Connor VE1BHA
18 Deerfield Dr., Apt. 1112,
Nepean, Ont. K2G 4L2

Let me begin this month by apologizing to all for my recent two-month sabbatical. I can only blame a lack of time caused by a very busy work schedule and some travel.

Anyway, this month we have the results of the 1986 CQ CW WPX Contest, plus a good collection of odds and ends. As well, it is time for—wait for it—the Third Annual Fiendishly Difficult Contesters Quiz! (Flourishes and huzzahs.)

But first, to the WPX CW. Once again, the Canadian contest contingent turned in a very good performance. Leading the way was Lee XL7CC, who piled up 1900 QSOs and 3.4 million points, good for the number two slot in the world-wide single op, all band battle. This was also a new Canadian record, and just short of being a new North American record as well.

In the single band competition, Canadians nailed down number five spots at either end of the spectrum. Yuri VE3BMV totalled 43,428 points on 160M, while VE2AEJ/3 came up with 4,756 points on ten metres.

Not everybody stayed home for this one, though. VE7SV operated from the Cayman islands as ZF9SV and set a new North American record on 80M with 346k. That was also good for the third world high score on the band. I suspect that 80M from the Caribbean in May is probably not a picnic.

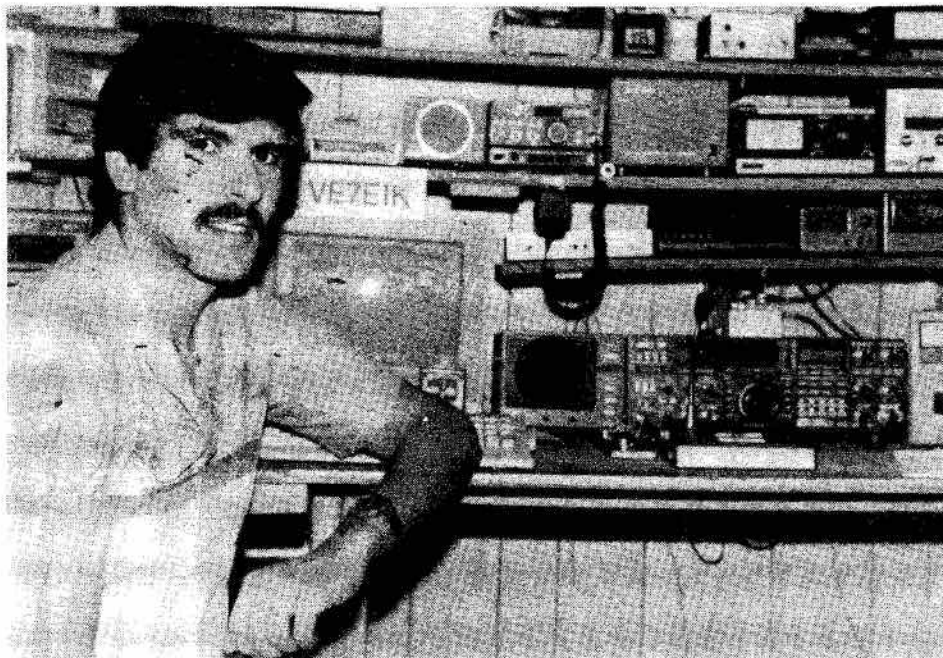
In other action that weekend, VE3NBE took top honours in Canada on 15M with 61k, while VE6CBran up 1.4M on 20M. The crew at the University of Toronto squeezed into their little shack and emerged with 618k, multi-single. (The shack at VE3UOT is so small that you have to step outside just to change bands. Ha, ha... hmmm. Sorry.)

There were no entries for either 80M or 40M in this contest. Both of Yuri's records remain intact.

All in all, a pretty good showing I would say. Let's hope that the VEs turn in as good a job this year. I'm sure that they will, given some propagation.

Speaking of WPX, I have two items from this year's phone contest. The first is a score from our ever reliable west coast correspondent George VE7EIK. He used a 205BA at 56 feet to come up with 990 QSOs on 20M monoband for 893k. George also reports some planned antenna improvements at his QTH this summer. It certainly sounds like Penticton will be showing up pretty consistently in the contests.

The second item from the phone contest is VA3T. For all of you who



George VE7EIK used a 205BA at 56 feet to come up with 990 QSOs on 20M monoband for 893k.

heard this and said "What??", here is the story.

VA3T was a special call issued to the VE3UOT club station to commemorate the 60th anniversary of radio science at the University of Toronto. Why the single letter suffix? Good question. After issuing it, the DOC seemed to think that they had made a clerical error and were going to change it. But the person who was dealing with the DOC said they were quite happy with the call as it was, and so it stood. I'm pretty certain that the whole thing was legitimate, having seen the letter from the DOC authorizing the call. (I made the mistake of dropping by because I wanted to talk to a couple of the operators. Next thing I knew I was on 80M.) Despite fairly mediocre conditions and lots of people stopping to ask about the call, they managed about 2000 QSOs. When last heard from, they still didn't know what the multiplier was.

THIRD ANNUAL FDCQ

All right sports fans, it's time once again for the annual brain breaking Fiendishly Difficult Contesters Quiz. After this, you will feel like you just spent the night on 160M. Ready? GO!

1. For some inexplicable reason, you have decided to operate from the geographical North Pole in the CQ

WW Phone Contest. Tuning around 20M, you suddenly hear a UI8. You need him for a multiplier. Which way do you turn the beam?

2. After working the UI8, you hear a VK9. Now which way do you turn the beam?

3. During this operation, what call sign do you use?

4. Which of the 40 CQ Zones has the smallest population?

5. With the addition of the West Texas section, a clean sweep in Sweepstakes is again 75 sections. When was it last 75 sections and what section was deleted to make 74 sections?

6. What is the highest score ever made by a Canadian station in a contest sponsored by *CQ Magazine*?

7. VP used to be a very common prefix. How many countries could you work today using the VP prefix?

8. JA3YKC is a well known Japanese contest station which is located at a university. Which university?

9. Speaking of university contest clubs, W8LT is well known as a breeding ground for contesters. What university is it located at?

10. Some years back, one of the better-known U.S. multi-multis was W3AU. What was the callsign of this station before W3AU?

11. You are a CW contester and have decided you want to have the shortest possible call you can in Canada.

Where do you go and what call do you ask for?

12. The IARU HF Championship has replaced the Radiosport Contest. What contest did the Radiosport replace?

13. You work XX9XX in the CQ WW CW contest. After you have sorted out the call, you realize that you have worked what zone?

14. What year was the first WPX CW Contest held?

15. Who was the top VE single operator all band entry in that contest?

TIDBITS

In closing, a couple of comments on the Dayton Hamvention this year. As usual, a good crowd of testers was present. Included in that crowd was Garry Hammond VE3XN, Mr. Prefix. For some reason he seemed a bit bothered by VA3T. Can't imagine why.

The contest forum was interesting, although this year it seemed to concentrate mainly on describing several U.S. superstations. Interesting, sure, but somehow I doubt that I will ever have a station with 24 towers.

One item worth mentioning concerns the *National Contest Journal*, a publication that is put out by Randy KSZD. Apparently ARRL will be taking over publication of the *NCJ*, which will be available as a separate publication from *QST*, in much the same manner as *QEX*.

FDCQ ANSWERS

1. South.
2. Still south. Everything's south.
3. Beats me. As far as I can make out from the map, you are on the high seas. Your call/MM? Anyone have any suggestions?

THE ROYAL NAVAL AMATEUR RADIO SOCIETY

You Naval types, Royal and merchant, are invited to join the RNARS. They're as friendly a lot as you will find; try Sundays on 14.052 at 0800Z, or 14.135 at 1900Z, or 14.190 at 2000Z. They have an excellent quarterly 64-page newsletter. Dues are 5 Pounds p.a.

TECHNICAL ARTICLES

TCA welcomes technical articles. Please send them to the Technical Editor, Bill Richardson VY1CW, RR1, Site 20, Box 63, Whitehorse, YT Y1A 4Z6.

Looking for cheap connectors for use around the shack? Try using the tops of discarded 9-Volt batteries. They are cheap and plentiful.

4. Easy question. Zone 2, with a population probably under 70,000.

5. 1978. The Canal Zone was deleted in 1979.

6. CK7WJ made 16,545,370 points in the 1979 WPX, multi-multi.

7. 10. VP2E, VP2M, VP2V, VP5, five VP8s and VP9.

8. Osaka

9. Ohio State

10. W3MSK

11. Go to Saskatchewan and try to get VE5EE. Try VE5EEE if that's taken.

12. The Bicentennial Celebration

13. Zone 24

14. 1979

15. VE1AIH with 544,859 points.

That's it for this month. See you again in September.

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No. 2 Kenwood Mic. MC50 no S/N ID L.A.R.C.

No. 3 View Star tuner VS300A no S/N ID L.A.R.C.

No. 4 Kenwood pwr supply PS30DC S/N 309163 ID LARC

No. 5 Yaesu FT225RD S/N-81030418 ID L.A.R.C.

No. 6 Delhi Tower DMX54 no S/N no ID

No. 7 Yaesu FT208R S/N-4E382683 no ID

No. 8 Yaesu FRG-7 S/N-131087 ID-B. 1947.29

No. 9 Kenwood TR7950 S/N-3080499 no ID

No. 10 Icom IC3200A S/N-1910 no ID

No. 11 Icom IC37A S/N-2677 no ID

No. 12 Drake TR7 S/N-3013 no ID

No. 13 Drake pwr supply S/N-3282 no ID

No. 14 Kenwood TS700A no S/N no ID

No. 15 Heathkit SB220 no S/N no ID

No. 16 Yaesu FT208R S/N-4E382333 no ID

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No. 20 Diawa 2030 no S/N ID sin.# 426-451-118

No. 21 Kantronics interface no S/N ID sin.# 426-451-118

No. 22 RCA VCR VHF no S/N ID sin.# 426-451-118

No. 23 KDK 2015A no S/N ID sin.# 426-451-118

No. 24 Yaesu FT227R S/N 020487

No. 25 FOUND

No. 26 Decca KW109 supermatch S/N BT578/52 ID SIN 228-030-631

No. 27 ICOM 45A S/N 18301628 no ID

No. 28 KDK FM240 S/N 246 no ID

No. 29 SWAN SWR Bridge no S/N

No. 30 Kenwood TR7400 S/N 630018 no ID

No. 31 Yaesu HF set 707 S/N 4202056 no ID

No. 32 Yaesu 707 power supply no S/N no ID

No. 33 Yaesu 707 scanner no S/N no ID

No. 34 Kantronics Interface S/N 4134160016336 no ID

No. 35 Viking PH Patch M/N 250-0046-001/3 no ID

No. 36 Ham rotor control no S/N no ID

No. 37 SWR Bridge 10W to 1000W no S/N no ID

No. 38 Yaesu FT757GX S/N 4E07113 no ID

No. 39 Yaesu FT 208R S/N 4C370126, no ID, stolen out of car, gear of VE3OEU in Chatham.

No. 40 Azden PS4000 Lost in the post Nov. 4/86, Gear of VE3GAI. NOTE: Found Jan./87.

No. 41 IC 202AT Ser No. 050592; 42: Icom microphone; 43: 30 watt 2M amplifier; 44: North American Repeater Book; 45: Carrying bag, etc. Gear stolen from car; second break-in in 60 days. Above gear of VE7HFP, Port Moody, B.C.

No. 46: Azden PCS 3000 Ser. No. 75502. Had home brew touch tone pad, gear of VE3NBB, Downsview, Ont.

No. 47 Tail Twister New S/N SEW85141. Stolen from Flea Market. Property of MacFarlane Electronics, Battersea, Ont. \$100 Reward for return.

No. 48 Larsen Mag Mount NMO type with NMO 220 antenna. Stolen from flea market, property of Scarborough Amateur Supply (London) Rep. by VE3OLN.

Notes: No. 30-37 were stolen out of the CSC College in Quebec. Reported by VE2OO. No. 38 is the gear of Bud VE1RV. It was lost by the Post going 100 miles.

If you lost any gear send a list to me: HOT-WATCH, c/o Bob Fletcher VE3OEC, 201 Admiral Dr., London, Ont. NSV 1H9 or call collect 1-519-455-3988. Phone Collect after 6 p.m.

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From the Clubs...

I was asked by the friendly gang down in the Kingston office if, since I receive so many club bulletins (thank you, but I would like even more), I would look after the Social Events column in addition to this one. That certainly makes sense to me, so I agreed. Now I see a bit of a problem. (And don't you just know that I am going to ask you for help!)

I am sitting in front of my C-64 today, April 30, typing out material that may see the light of day in *The Canadian Amateur* in August. I am extracting information from bulletins issued anytime between January and April (if I am lucky). So, by the time you are reading this, most of the activities and social events listed in the bulletins are history.

If your club will be putting on some event for which you would like publicity through the pages of *The Canadian Amateur* please get the information to me or to the editor as early as possible. The normal deadline for material is about six weeks prior to the first day of the month of issue. However, our deadlines are not totally rigid for special news items, and, depending upon the urgency or importance, we could try to work something out.

A few more questionnaires have trickled in during the past month and I thank those who took the time to respond. If you have not yet returned your questionnaire, I hope that you will, so we can ensure that our mailing list is correct.

According to *VO News*, published by SONRA (Society of Newfoundland Radio Amateurs), "... on Dec. 12, 1986, to commemorate the 85th anniversary of the first transatlantic radio transmission, Newfoundland Amateurs VO1KS, VO1NA, VO1MN, VO1BL and others activated special station VO1A/1 from Cabot Tower, Signal Hill. The equipment and operators have changed but this is the same historic hill at which Marconi, back in 1901, using a simple receiver with no amplification and an antenna held aloft by a kite, first copied the letter 'S' sent in Morse code from his transmitter in Poldhu, England."

I had the opportunity to visit the site a couple of years ago and to chat with one of the operators (his name was Shaun, but I am not sure of his call—I have it down as VO1AY, but that is probably wrong). Standing by the plaque and looking out to sea and thinking about those early days gave me a strange feeling, and made me a little more appreciative of the work carried out by those pioneers and

made me realize just how fortunate we Amateurs are.

Thanks, Ev, for the article and photo; it brought back some pleasant memories.

The Calgary ARA continues to be very active in community events, according to *Key Klix*. On Feb. 7, a number of members assisted in the Kananaskis 45 Cross Country Marathon. Unlike last year, when it was bitterly cold, this year the weather was clear and perfect for the event. There were about 350 skiers, with 32 taking on the 45 kilometers.

Congratulations to Tony VE6MX and his team for a good job.

Then, just a month later, 16 members of CARA assisted in the Calgary Sports Car Winter Rally. This rally was, this year, split into two sections: Ghost Lake Road (13 kms) and Harold Creek Road (15 kms). Eleven cars took part under conditions that offered minimal challenge for the drivers, and communications went well.

And on the subject of autosport, the Thunder Bay ARC received a letter from S. Parlee, President of the Thunder Bay Autosport Club, stating that "... On behalf of the Thunder Bay Autosport Club, I would like to thank your club members for their assistance during the Molson Lakeview 100 International Ice Race. The weather conditions were impossible on Sunday, and the event simply could not have been run without radio assistance. Despite the weather, the event was considered a huge success by the more than 50 international participants. As a token of our appreciation, we have enclosed a cheque in the amount of \$150 as a donation to your club."

Thanks go to Dan VE3KRO, Les VE3JAAJ, Rich VE3OPI, Dwayne VE3NHP, John VE3TC and Pete WDOBCX/VE3.

According to Les Abbott VE6OG, the NARC has put its new UHF repeater on the air. Les writes, in the *ARL of Alberta's VE6*, that "... one of the first steps in the project was to secure the callsign VE6KM to commemorate the contributions to our hobby by Keith Millar, who passed away in 1984. VE6OG was able to get agreement from Mrs. Millar to release the callsign for the project."

Les wishes to thank the team that assisted in putting the repeater together: Al VE6BKE, Don VE6XP, John VE6BOS, Leo VE6LG, Dick VE6BLQ and VE6BOE.

Congratulations to the Beaver Valley ARC on their 20th

anniversary. The club is attempting to put together, as an anniversary project, a booklet containing pictures and history of the club. Good luck.

And from the WestCum ARC Newsletter this bit of humour: "Served him right: The day after King Louis XVI approved the Metric System in France, he was imprisoned by revolutionaries." I thought the system had been handed down 'in the beginning'.

SILENT KEY

The ham community was saddened by the sudden passing of Dan Person VE3KRO on March 13. Dan was an active member of the Lakehead Amateur Radio Club and was serving a term as one of the Directors and had over the past years served in many other Executive capacities.

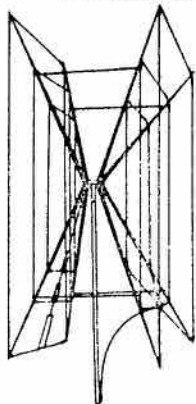
Dan took part in the many public service events that the club provides communications for, such as the Sibley Ski Tour (Check Point 5 won't be the same) and the Thunder Bay Auto Sport Club Ice Racing. He had helped with the recent Jeep International Snowmobile Race from Thunder Bay to St. Paul and could always be counted on to fill a Check Point for the various road races in the city.

Dan was one of the few hams on ATV (Amateur Television) and you could always see the lights that decorated his tower during the Christmas Season when driving in the Current River area. He could always be relied upon to help with Senior Citizens Christmas Message program. Dan was also active with the Lakehead Search and Rescue of Thunder Bay and had been a member of that organization for the past several years. He was serving his term as Director and Head of the Radio Committee with that organization.

Active also with the Boy Scouts of Canada, Dan was recently awarded the Medal of Merit for outstanding service to Scouting. Many was the time that I stopped and chatted with him while he worked at the Trout Lake Scout Camp. Dan was a past Scout Master for seven years, Scout Coordinator for two years and District Commissioner, Port Arthur District for five years. He was instrumental in organizing the Scout's Rendez-Vous of the Voyageurs and worked organizing the Jamboree on the Air, donating both time and radio gear to this event every year.

Dan was employed as a mechanic for the past 30 years at Intercity Ford and was 52 years of age. ■

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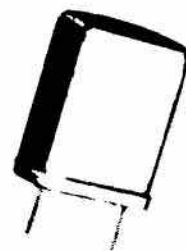
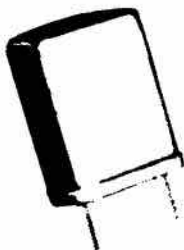
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THE COLUMN

The Policy of your national Federation can be simply stated as 'Service to Amateurs of Canada'. This statement was made many years ago and CARF has an enviable record of fulfilling this Policy.

One criterion for a successful national Amateur Radio society is its ability to communicate with the Amateurs it serves. Communication is a two-way street and, as many have found, contact with members of the Board of Directors, of the National Executive, the Head Office staff, staff of *The Canadian Amateur* and/or committees is readily made with queries answered and comments thoroughly considered.

To communicate with the Amateurs, CARF uses a variety of methods. Up to 1973, when CARF had only provincial members, a monthly newsletter was produced and circulated but, since then, the main method has been through the pages of *The Canadian Amateur*. A typical issue is full of Canadian Amateur news and information—latest news from DOC, club news, YL news, contest and award information, DX information, Packet Radio news, satellite information, EMI information, SwapShop, etc., etc. There is no other publication that provides this service—that of keeping its readers well-informed and aware of Canadian Amateur affairs and activities—which is a prime responsibility of the national society. Other means of communication are the bi-weekly on-the-air bulletins, information sent monthly to affiliate clubs and organizations and direct correspondence with individuals and organizations.

The national society must also demonstrate mature, responsible leadership in confronting problems

QSL cards are expensive. Several hobby shops in town will sell you a silk screening kit made especially for posters, Xmas cards, etc. You design the artwork, sensitize a piece of silk stretched between a wooden frame with a liquid supplied, place your artwork over this silk and expose to light. Then dip the silk and frame in solvent and you get a negative of your artwork. With a squeegee you force ink through the silk onto your cardboard blank and there you have it—your own distinctive QSL card. Involve the family and impress your friends.

and providing services. The direction of this leadership is determined by the Board and implemented by the National Executive after a full appraisal of conditions, data and information available, optimum procedures for gaining results desired, possible side effects and, in the provision of services, appraisal of finances and resources available.

The recent DOC proposal to restructure the Canadian Amateur Radio Service is a case in point. The CARF Board and National Executive noted the changes made by DOC in late 1978 to Amateur operating certificate examinations and procedures. By 1980 they were aware that the good growth of Canadian Amateur numbers, evident since 1972, had virtually ceased and the Board directed the National Executive to convey our concerns to DOC. In late 1980 a presentation was made to officials of DOC in Ottawa by the President, Vice President, General Manager and Chairman of the DOC Liaison committee. This presentation included recommendations for immediate changes to procedures used (changes were made), on requirements for the various classes of certificates, and that a full review be made of questions used in the technical sections of the examinations.

In brief, it was recommended that the Morse code speed be dropped to 8 wpm for the Amateur certificate and provision be made for a small number of errors in all code tests; that requirements for the Amateur certificate be such that a majority of candidates should be able to qualify after a one-semester night school course (40 hours of classroom instruction); that the requirements for the Advanced Amateur certificate be reviewed with requirements similar to those of the Amateur certificate (but no code requirement) with emphasis on modes and conditions met when operating above 30 MHz. In particular, it was strongly recommended that the emphasis on Amplitude Modulation transmission and reception be discontinued; that the Amateur level requirements for receivers and transmitters be based on block diagrams, with representative diagrams given in the DOC TRC-24 and that a list of formulae, used in answering questions, be included in each examination.

Further meetings were held with DOC officials, with officials of CRRL also attending, with the result that several of CARF's recommendations have been incorporated and with

DOC making their Proposal for Restructuring in late 1985. Both CARF and CRRL requested Canadian Amateurs and their organizations to comment on the content of the DOC Proposal, meetings between CARF and CRRL were held and a joint submission on the Proposal was forwarded to DOC. (See September 1987 issue, *The Canadian Amateur* for full details.)

The creation and development of services for Amateurs is also a major responsibility of the national society and your national Federation has an unequalled record in providing these for the Amateurs of Canada. Since the first annual meeting of CARF in 1968, CARF has had a DOC Liaison committee to deal with queries raised by Amateurs and to keep the Federation fully aware of DOC activities. Other services have followed—the introduction of a Central QSL Bureau, run by Jean Evans VE3DGG, to handle incoming QSLs and to provide an Out-going QSL service to CARF members; production and updating of the *Canadian Amateur Radio Regulations Handbook*, of the *Certificate and Advanced Amateur Study Guides*, of the *Instructor's Manual* and the *Canadian Amateur Reference File*; sponsorship of the prestigious CANADAWARD and the Canada Day contests; talks by CARF officials at club meetings; participation in conventions and hamfests across Canada; active representation on RABC and CSA committees; sponsorship, at DOC request, of the annual National Amateur Radio Symposiums; and instrumental in having an Amateur (the late Bud Punchard VE3UD) appointed as a member of Canada's delegation to WARC '79.

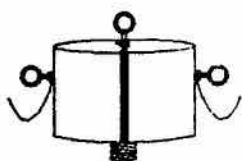
The provision of leadership is no problem with the election of competent Regional Directors and members of the National Executive. But development of existing services, including *The Canadian Amateur*, and provision of additional services of value to the Amateurs of Canada will depend on growth of the membership of CARF. You can assist in this by pointing out to non-members you may contact what your national Federation has accomplished during its 20 years of operation and the benefits that accrue from membership. Just think—if every CARF member could sign up one new member, membership would grow by 100% and produce adequate finances to thoroughly carry out the Policy—'Service to the Amateurs of Canada'. ■

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The QRP editor of *Radiosporting*, Paula Franke WB9TBU, has sent me two recent copies of that magazine. They just celebrated their 25th issue anniversary in May according to the 'Radiotorial' written by Yuri VE3BMV/W2, who also writes other columns and is the editor/publisher too! Now you know where Yuri hangs his DX aerial and a little about his extracurricular activities. Paula writes the QRP section besides experimenting with various QRP antennas and still found time to send me her version of a beam heading program for C64 including a screen dump to printer. She has now gotten me started on building a better gain antenna which may lead to working more QRP DX soon.

GLEANINGS

Just managed a little under 2000 points in the QRP QSO Party on the weekend of April 18-19 but do not expect with those few points to place anywhere in the overall standings. For anyone to 'win' there must be at least two entries from a call district. However, it was good experience and again provided practice among which was WBILC with his KW chasing new prefixes. As you can see, QRP contributes to these 'hunters' as well as creating a clear QRG for the QRO QSO enthusiasts. Our local nuisance appeared again for a half hour QSO with a KH6 after acknowledging the QRP activity with a report to AC8W who he told he was running 50W but was likely closer to five hundred and 50.

Since the increase in postal rates, no one has made a report by letter, not even one from our VE-QRP net manager Des VE3ABT. It may arrive soon but will be too late for my deadline this month. Last Sunday found only Rick WL7BDK and myself on the net from this neck of the woods. More QNS may have been around but we did not hear them— noon on Sunday in the summer is asking quite a lot.

MORSE, S.F.B.

Keying 60 mA with a hand key on CN/CP Telecom's land line should qualify as QRP in any book. A bunch of the gang were whooping it up on April 25 this year between Edmonton, Winnipeg, Toronto and Ottawa/Montreal in commemorating the birth date of Samuel Finley Breese Morse on April 27, 1791. We gathered at the Junior League of Edmonton headquarters which is in the C&E (1891) Railway Station where there is also a permanent display of telegraph and

railroad artifacts. A more complete report will be found in a future issue of the Morse Telegraph Club journal, *Dots and Dashes*, so make certain your membership is valid.

SINPO

Does anyone remember the SINPO-SINPFEMO topic about this time last year? Bernie VE3NB sent in his listing which was an improvement over the published one and Bob VE7BS sent in the 'official' word and descriptive charts. Bob stated he thought Spud Roscoe VE1BC might send in a detailed history but just in case he didn't... here is something now. Anyway Spud has made his appearance on another subject, albeit radio, it was nice to hear from him. Bob also mentioned after confirming

DXCC on 160 we just might convert him to QRP and I wonder if he meant going after DXCC on 160 QRP? Quite an accomplishment!

MOBILE QRP

Just a reminder for those thinking of going out in the wild blue yonder using a rear bumper mounted whip. Radiation appears best in the direction of the vehicle groundplane, i.e. in the direction that you have the nose or bow pointed. This is the reverse or true opposite of a nose-to-tail dipole or trailing ae used when flying and proven more than once while sitting on the N-S runway in Yellowknife talking to Churchill or Whitehorse using 40 watts AM, back when!

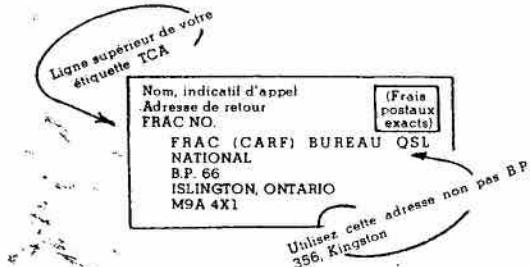
Le service QSL de FRAC

Le but de cette note est d'expliquer la procédure pour l'utilisation du service QSL international de FRAC. Veuillez consulter le Manuel de l'opérateur pour l'utilisation du service QSL en général. Voir le chapitre sur la façon de faire parvenir vos cartes QSL.

Le service d'envoi des cartes QSL de FRAC se charge de l'envoi de vos cartes QSL dans le monde entier. Ce service est gratuit à tous les membres de FRAC. Si vous envoyez beaucoup de cartes, les frais de votre souscription seront tôt récupérés du au coût élevé du service postal quand les cartes sont expédiées directement.

Veuillez observer les règles suivantes quand vous utilisez le service FRAC d'envoi des cartes QSL:

- 1 Classer les cartes (DX) alphabétiquement par préfixe.
- 2 Classer les cartes canadiennes par ordre numérique de préfixe.
- 3 Veuillez placer les petites quantités de cartes dans des enveloppes en papier épais et bien scellées. Envelopper les grosses quantités de cartes avec précaution de préférence dans du carton. N'utilisez pas de brocheuse!
- 4 Veuillez adresser vos envois comme suit:



5. **NE PAS RECOMMANDER** les envois de cartes. Cette pratique est plus dispendieuse et occasionne souvent des retards et par conséquent, n'est pas réellement nécessaire.

6. Si vous désirez recevoir une preuve que FRAC a reçu votre envoi de carte QSL, veuillez inclure une enveloppe

pré-adressée au une carte postale avec timbre avec le mot "RECEIPT" imprimé.

7. Si un colis était endommagé sur réception (très rare), FRAC vous fera parvenir une liste des cartes reçues de sorte que vous pourrez vérifier s'il y en a eu de perdues dans le courrier.

Handheld Improvements

BY ART BLICK VE3AHU

In late 1983, a Yaesu FT208R with AC charger, speaker mic and rubber duck, was purchased for use as a portable 2 metre transceiver. Unfortunately, just before, I was bed-ridden for six months in early 1984, the base station IC22S developed problems and the mobile transceiver was destroyed in the vehicle accident that caused my hospitalization. During this period, the FT208 was the only means available for 2 metre communications and it became evident that improvements should be made to the HT. These were made when circumstances permitted.

The first improvement was to the antenna. The rubber duck is a good portable antenna but performance leaves a lot to be desired. Upon testing the rubber duck, it was found to have an SWR of 2.5:1. This improved when a ground plane was used with the antenna. It was found that to access the local repeater, it was necessary to balance the HT upright on my stomach, which is not a convenient way to operate. Luckily, the XYL found my clip-on antenna in the home workshop and this antenna, clipped to the metal bed frame, gave improved performance, and allowed the radio to sit on the bedside table.

As all my 2 metre antennas are terminated in UHF connectors, it was necessary to obtain a UHF to BNC adapter. This is an item that every handheld owner should purchase.

The clip-on antenna is a very useful adjunct to the handheld as it is small, lightweight, can be easily disassembled, and significantly improves the signal of an HT. One point to remember is that to perform properly, it requires a ground plane. This can be made by clamping three or four lengths of stiff wire or insulated wire, 19" long, to the base of the antenna.

A clip-on antenna can be constructed by attaching an SO239 connector to a large battery type alligator clamp. The radiator is a 19"

piece of stiff copper 14-gauge wire soldered into a PL259 connector. Be sure to insulate the portion of the radiator that is inside the connector. Again, the radials can be stiff wire fastened to the clamp. When making the coax feedline, terminate one end in a BNC connector. This will cut down losses incurred if a UHF to BNC adapter is used.

When the hospital finally released me, it was thought that a mag mount with 5/8 whip and loading coil would be the most convenient way to go. I was going to be chair-bound for several months. A ground plane was needed for this antenna. It was mounted on a metal smoking stand, although any metal base would have worked.

It quickly becomes apparent to handheld users that the nicad batteries supplied with these units are not intended for continuous use, especially in the high power mode. Upon checking the owner's manual, it was found that the rig required 10.8 volts. Thus, a power supply of this voltage and capable of 700 mA would power the radio and keep the battery charged. These requirements can be met by building a suitable regulator for a 13.8 volt supply or battery. The supply I used was rated at 13.5 volts at 2.5 amps. A regulator as shown in the accompanying schematic was constructed. This supply has been in use for over 2 years. The resulting increase in power output provides much improved performance.

Frequent charging of a nicad battery, especially when the battery is not fully discharged, can cause the battery to develop a memory and not recharge fully. This can be overcome by discharging the battery until voltage output drops to 1 volt per cell and then recharging. A suitable resistive load for discharging would be 100 ohms for a 200 mA discharge rate or 200 ohms for a 50 mA rate. When using the power supply, the battery is on constant float charge. For this reason, the radio should be

disconnected from the supply periodically and used with the battery.

There is always a problem of where to put the handheld when it is used as a base station. This can be solved by mounting a piece of 2" by 4" lumber on a piece of 1/4" plywood that can be mounted on top of the power supply. A screw-on hook is mounted on one side to hold the speaker mic and a metal plate is spaced from the front so the HT can be hooked on. This is detailed in the diagram. This makes a presentable arrangement when painted to match the radio or power supply.

When the handheld was used from the vehicle with a 5/8 whip, it was found that the low power output did not provide good performance. To increase range, a trunk-mounted 40 watt amplifier was purchased. This unit takes 6 amps on transmit and 5 mA on receive. To power the radio, a second regulator was constructed, and together with two switches, was mounted in a small metal box that sits beside the passenger's seat. The HT was mounted on a small metal plate similar to the one used on the base supply. This was attached to the rear side of the console but could be fastened to lower areas of the dashboard.

The switches allow the radio to be used alone or with the amplifier. The cable to the regulator module should be run to a spare fuse connection on the vehicle fuseblock. Preferably this should be a position that is off when the ignition is off.

Another obvious short coming of handhelds when used in vehicles is lack of audio. There are many linear integrated circuits available at low cost that will provide increased audio output. In this case, a LM380 based amplifier was constructed to the schematic shown. This provides 1.5 watts output to either a 4 or 8 watt speaker. Audio level is controlled by the HT volume control.

Continued on next page

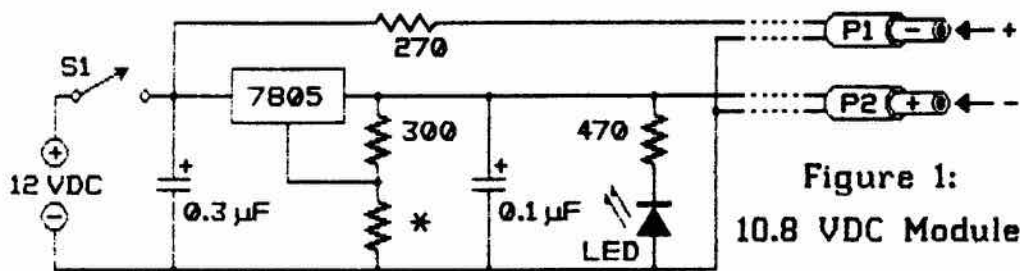


Figure 1:
10.8 VDC Module

* - Initially connect a 500 ohm potentiometer and adjust for 10.8 VDC output to a load of 100 ohms. Measure resistance of pot and replace with equivalent fixed resistance.

S1 - SPST toggle switch

P1 - Mini phone plug (RS 274-290), +12 VDC to the end section.

P2 - Coax power plug (RS 274-1569), +10.8 VDC to outer section.

7805 - Three-terminal 5 volt regulator (positive polarity).

Figure 2: HT Mount

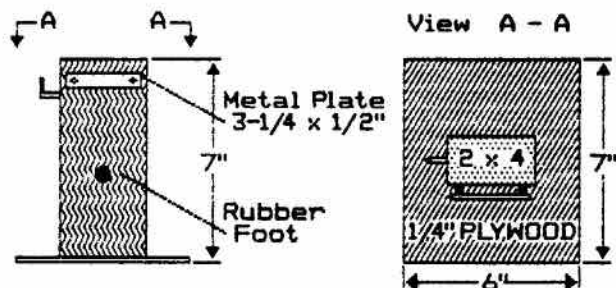
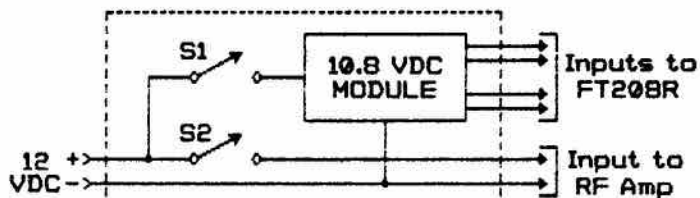


Figure 3: Mobile Switch Box



S1 - SPST Mini Toggle Switch.

S2 - SPST Toggle Switch capable of handling RF Amp input current.

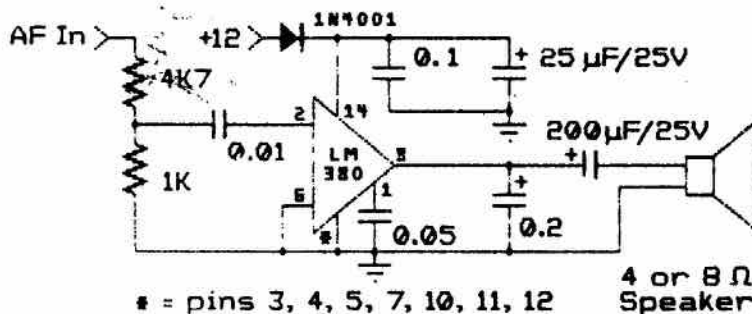
Module, etc, housed in a metal box, 4" x 2" x 2"

HANDHELD (cont'd)

All the modules were built on 2" by 3" pieces of Vector board with .1" hole spacing and copper lands connecting rows of holes. Similar boards can be obtained from many suppliers.

With the exception of the mobile amplifier, cost for these improvements was minimal. For an outlay of about \$25, you too can have your handheld perform as a base or mobile rig as well as its intended use for portable operations.

Figure 4: 1.5 Watt Audio Module



* = pins 3, 4, 5, 7, 10, 11, 12

4 or 8 Ω Speaker

The Bobtail Curtain Antenna

BY VY1CW

The Bobtail Curtain has been largely overlooked by Amateurs except for a few of the low band diehards. It has many features which make it very attractive for DX use, as evidenced by the results on 75 metres experienced by some users. The antenna provides a vertically polarized, low angle, broadside, bidirectional pattern with 7 to 10 dB of gain.

For those that cannot erect a yagi or quad, this antenna can provide very good results on 10, 15 and 20 metres. It can be constructed of wire strung between trees or can utilize tubing vertical elements with wire as the horizontal elements. Accepted theory calls for the vertical elements to be 225 divided by the frequency in MHz and the horizontal phasing elements to be 473 divided by frequency in MHz. For all practical purposes, the standard formula for quarter and half wavelengths, 234 and 468, work well.

The matching network can be as shown in the diagram or can be a parallel circuit with 75 to 150 pF of capacitance with enough inductance to resonate at the desired frequency. The feedpoint tap on the coil is then moved to obtain the lowest possible SWR. Alternatively, the antenna can be fed directly with 50 ohm coax if the connection between a vertical element (preferably the centre element) and the horizontal element is broken and the shield attached to the horizontal element and the centre conductor attached to the top of the vertical element.

The main point to consider is, do not be afraid to experiment. As is true with all antennas, what works in one location might not work exactly the same in another location. This is a very simple antenna that can provide outstanding performance and best of all, it can be constructed very cheaply.

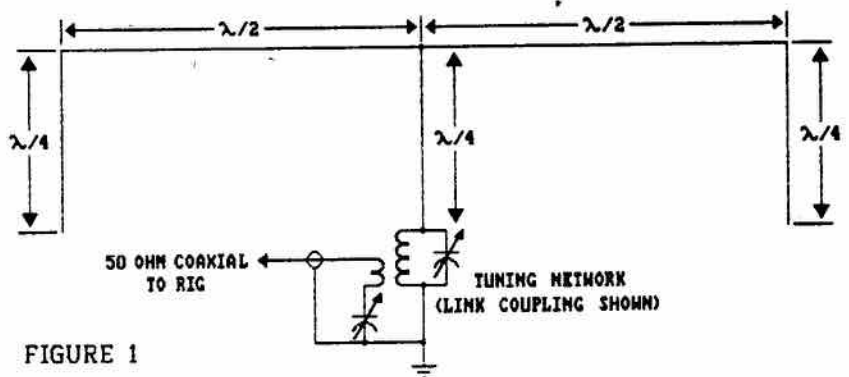


FIGURE 1

The Bobtail Curtain in its essence. Though readily adaptable to any Amateur band, this array has historically been applied primarily to 40 and 80 meters. The tuning network is resonated on the operating frequency chosen. The earth ground need not be an elaborate affair, because of the high impedance at this feedpoint.

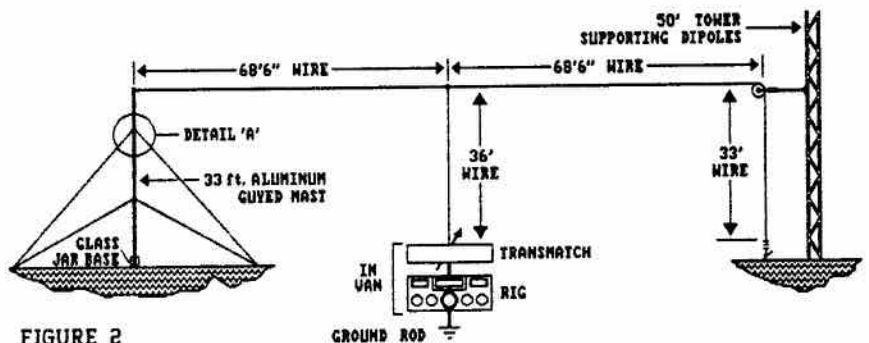
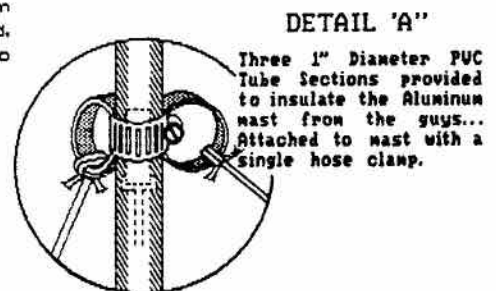


FIGURE 2

The actual 40 meter version of the Bobtail antenna, as erected to suit specified conditions at the VE3NSR/3 Field Day site. The array's design intent remains basically unchanged, despite the "customizing" required to prune Figure 1 into a reality.



DETAIL 'A'

Three 1" Diameter PVC Tube Sections provided to insulate the Aluminum mast from the guys... Attached to mast with a single hose clamp.



BOMBER JACKET

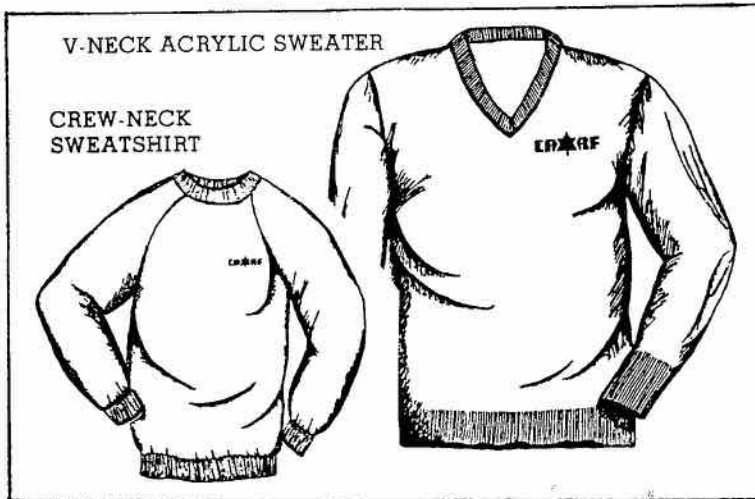


WARM-UP JACKET



LACOSTE KNIT GOLF SHIRT

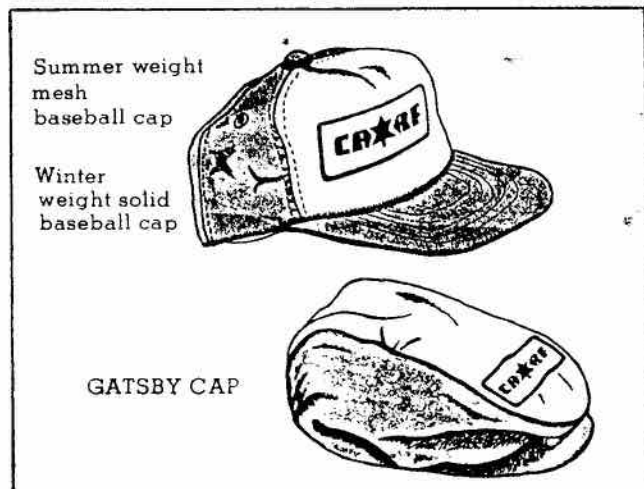
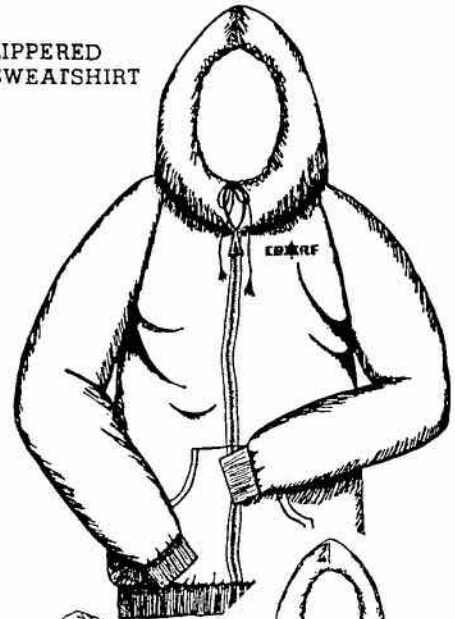
INTERLOCK KNIT GOLF SHIRT



V-NECK ACRYLIC SWEATER

CREW-NECK SWEATSHIRT

ZIPPERED SWEATSHIRT



Summer weight mesh baseball cap

Winter weight solid baseball cap

GATSBY CAP

WINDCHEATER JACKET



PULL-OVER SWEATSHIRT



Men's Medium = Ladies' Lg.
Men's Small = Ladies' Med.

■ = Not Available

	MEN'S				LADIES'			UNIT COST	CALL YES/NO	TOTAL
	S	M	L	XL	OS	S	M			
BOMBER JACKET Blue								\$34.95		
White										
WARM-UP JACKET Blue								\$29.95		
White										
WINDCHEATER JACKET Blue								\$34.95		
White										
ZIPPERED SWEATSHIRT (with hood) Blue								\$22.95		
White										
PULL-OVER SWEATSHIRT (with hood) Blue								\$21.95		
White										
CREW-NECK SWEATSHIRT Blue								\$18.95		
White										
V-NECK ACRYLIC SWEATER Blue								\$24.95		
White										
LACOSTE KNIT GOLF SHIRT (with pocket) Blue								\$18.95		
White										
INTERLOCK KNIT GOLF SHIRT (no pocket) Blue								\$18.95		
White										

SUB TOTAL:
ORDER SUB TOTAL:
ITEMS PERSONALIZED at \$3.00 PER ITEM:
SHIPPING CHARGES on orders under \$75.00
7% PST to Ont. residents only
TOTAL

\$3.50

Call Sign for Personalized Orders _____

HATS: ONE-SIZE (Cannot be personalized)	
Summer-weight mesh baseball cap	\$5.25
Winter-weight solid baseball cap	\$6.25
Gatsby cap	\$6.95
SHIPPING ON HAT ORDER ONLY	\$1.00
TOTAL	

NAME _____

ADDRESS _____

CITY _____ PROVINCE _____

POSTAL CODE _____ DATE _____

Orders received prior to the 15th of the month will be made up that month; orders after the 15th will be made up the next month.



K.A.R.C.

(Kingston Amateur Radio Club)



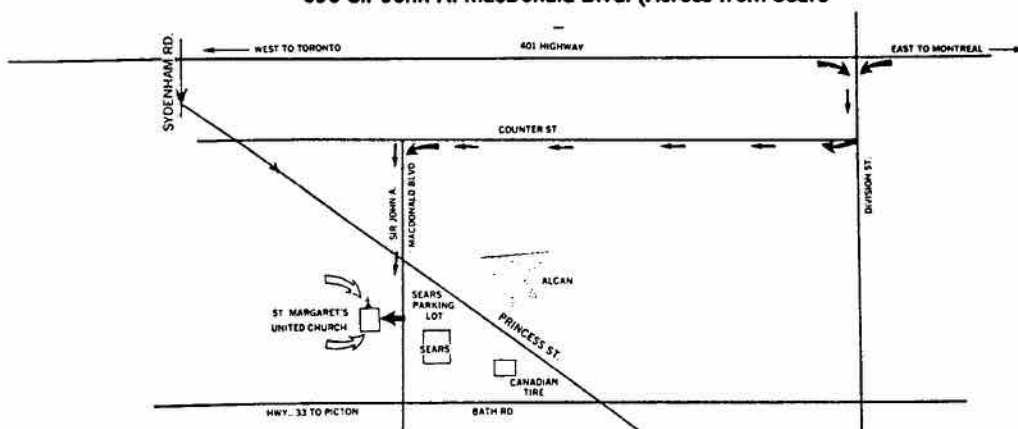
3rd ANNUAL
EASTERN ONTARIO
AMATEUR RADIO and ELECTRONICS

FLEA MARKET

SATURDAY, SEPTEMBER 19th, 1987

ST. MARGARET'S UNITED CHURCH

690 Sir John A. MacDonald Blvd. (Across from Sears)



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LARGE \$10.00

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VENDORS 8 a.m. to 2 p.m.

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TALK-IN 34, 94

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CARF Log Sheets (Package of 25)	\$3.00	_____
CARF Message Forms	\$2.25	_____
CARF Sew-On Crests	\$2.50	_____
CARF Logos (adhesive sticker).....	4/\$1.00	_____
Canada Flag Lapel Pin	\$1.00	_____

TEXTS AND STUDY GUIDES

Certificate Study Guide	\$15.00	_____
Advanced Study Guide	\$15.00	_____
Instructors Guide For Amateur Licence	\$4.50	_____
Information Guide for Advanced Certificate	\$10.00	_____
CW into Foreign Languages	\$6.00	_____
Amateur Radio in Canada— An Overview	\$10.00	_____

Special Club Discount of 15% for orders of 10 or more of The Certificate Study Guide and/or the Advanced Study Guide to the same address. The price is now F.O.B. Kingston by your selection of carrier.

CANADIAN AMATEUR REFERENCE GUIDE

Basic H.F. Antennas <i>By Art Blick VE3AHU, 23 Pages</i>	\$2.25	_____
Contests: Radiosport <i>12 Pages</i>	\$1.75	_____
The Amateur Bands <i>12 Pages</i>	\$2.25	_____
Routine Daily Operating <i>16 pages</i>	\$1.75	_____
DX <i>By John Gilbert VE3CXL, 15 Pages</i>	\$2.25	_____
Establishing An Amateur Station	\$2.25	_____
<i>By the late Bud Purnard VE3UD, 11 Pages</i>		
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Amateur Design of Printed Circuit Boards	\$2.50	_____
<i>By John Iliffe VE3CES, 19 Pages</i>		
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<i>For Reference Sections</i>		

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Add \$1.00 Postage and Handling

1.00	\$1 ⁰⁰	_____
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Total— Please Remit by Cheque, Money Order, Mastercard or Visa

_____	_____	_____
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Name: _____

Call: _____

Address: _____

Postal Code: _____

**Canadian Amateur Radio Federation
Federation des Radioamateurs Canadiens**

P.O. Box 356, Kingston, Ont. K7L 4W2

613-544-6161

HAM HAPPENINGS 87

NANAIMO AMATEUR RADIO ASSOCIATION

SEPTEMBER 12 & 13



SATURDAY
 1900: POT-LUCK DINNER & SOCIAL W/BAR

SUNDAY 1000-1500
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 PARKSVILLE, B.C.
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DRIVE... OR TAKE THE 7am FERRY FROM HORSESHOE BAY AS A FOOT PASSENGER.
 CALL AHEAD ON TALK-IN FREQUENCY AND SOMEONE WILL MEET YOU ON ARRIVAL IN NANAIMO

R-V PARKING
 NEXT-DOOR TO SITE AT PARK SANDS BEACH RESORT • SERVICED OR UNSERVICED

PRIZES!
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Tous les membres de FRAC reçoivent *'The Canadian*

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If you want a 2-meter handheld with exceptional features, quality built to last, and a wide variety of interchangeable accessories, take a look at the ICOM IC-02AT and IC-2AT handhelds.

Frequency Coverage. The IC-02AT covers 140.000 through 151.995MHz and the IC-2AT, 141.500 through 149.995MHz...both include frequencies for MARS operation.

IC-02AT Features. ICOM's versatile IC-02AT handheld has the following outstanding features:

- DTMF/direct keyboard entry
- LCD readout
- 3 watts (IC-BP3 battery pack) standard, or 5 watts (IC-BP7 battery pack)
- 10 memories which store duplex offset and PL tone (odd offset can be stored in last 4 memories)
- Frequency dial lock
- Three scanning systems: priority, memory and programmable band scan (selectable increments of 5, 10, 15, 20, or 25kHz)

IC-2AT Features. The IC-2AT is ICOM's most popular handheld on the market. The IC-2AT features a DTMF pad, 1.5 watts output, and thumbwheel frequency se-

lection. The IC-2A is also available and has the same features as the IC-2AT except DTMF.

Accessories. A variety of slide-on battery packs are available for the IC-02AT and IC-2AT, including the new long-life 800mah IC-BP8 which can be used with both handhelds.



Other accessories include the HS-10 boom headset, HS-10SB PTT switchbox, HS-10SA VOX unit (for IC-02AT), and an assortment of battery pack chargers.

The IC-02AT and IC-2AT come standard with an IC-BP3 NiCd battery pack (IC-02ATHP comes with IC-BP7 battery pack), flexible antenna, AC wall charger, belt clip, wrist strap, and ear plug. See the IC-02AT and IC-2AT 2-meter handhelds at your local ICOM dealer.



IC-2AT
with IC-BP3
battery pack

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(High Power)
version
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