

QST 

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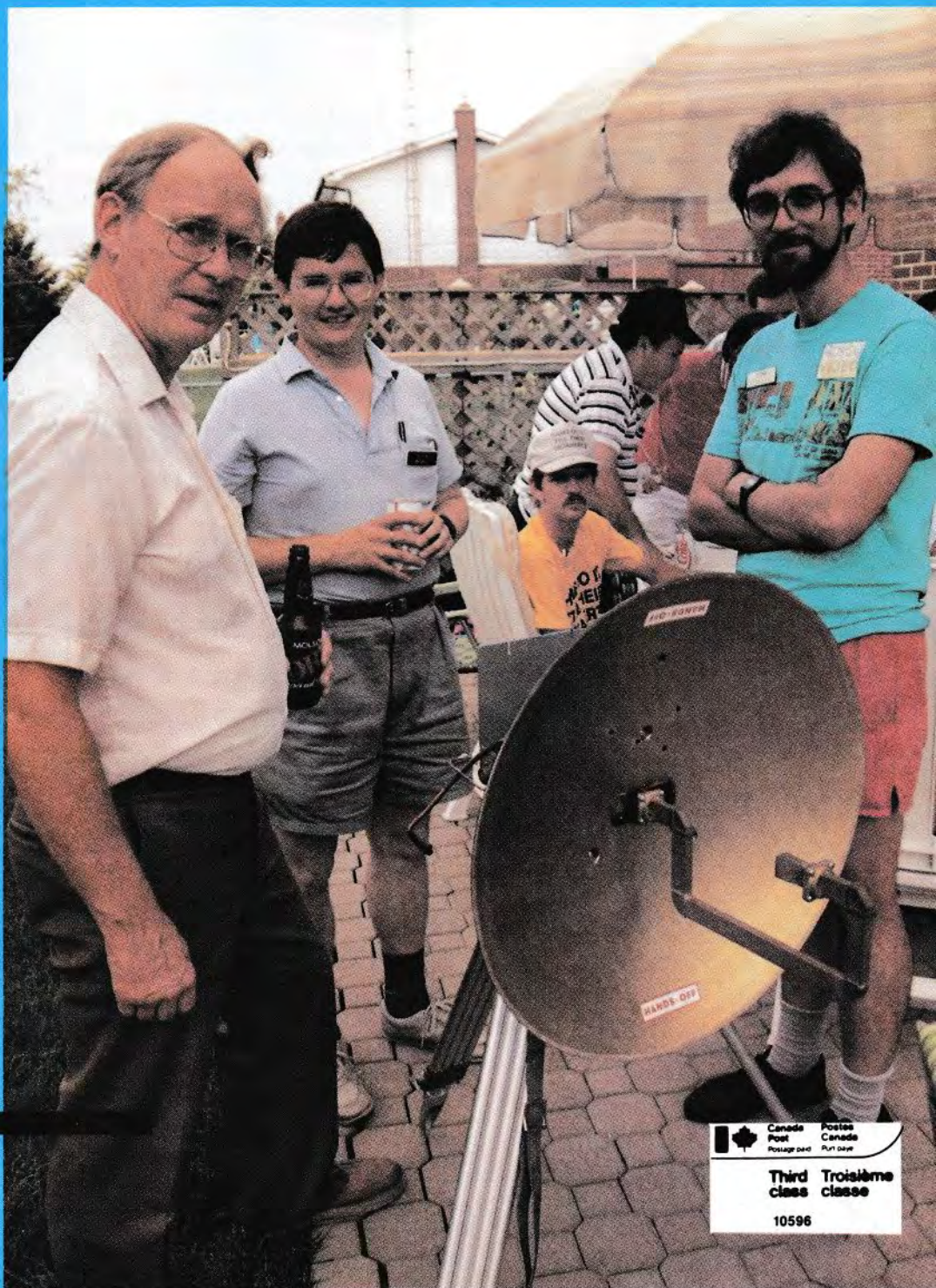
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
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QST CANADA

QST Canada (ISSN 0840-1670) is published monthly by CRRL Publishing, Inc., to provide radio amateurs, others interested in radio communications and electronics, and the general public with information related to the science of Amateur Radio communications.

Staff

David Adams, VE3HBF
R.R.#1, Sutton West, ON L0E 1R0
Tel (416) 478-2131, Fax (416) 478-8163
Editor

Bob Boyd, VE3SV, Dana Shtun, VE3DSS,
Ray Staines, VE3ZJ, Ken Oelke, VE6AFO,
Ernie Poole, VE3NSZ
Contributing Editors

Ray Staines, VE3ZJ
General Manager

Keith Bentley, VE3DHL
148 Donhill Cr, Box 96
Kleinburg, ON L0J 1C0, Tel (416) 893-1984
Advertising Manager

Harry MacLean, VE3GRO
Production Assistance
LaserGraphics
Lithotronic Output
WEBCO Division of Bowes Publishers, Ltd
Printing and Distribution

CRRL Office

2025 Richmond Street
Box 56
Arva, ON N0M 1C0
(519) 660-1200, Fax (519) 660-8244

Subscription rates: CRRL membership with QST Canada: \$15 + \$12 + \$0.84 GST = \$27.84 per year. CRRL membership with QST and QST Canada: \$15 + \$43 + \$3.01 GST = \$61.01 per year. Two- and three-year subscriptions are available at multiples of the yearly rates. Copyright © 1992 by CRRL Publishing, Inc.

ABOUT THE COVER



From left to right, Keith Bentley, VE3DHL, Mike Ross, VE2DUB, and Steve Kavanagh, VE3SMA, contemplate microwave DX on 10-GHz SSB. ■

Nominations Sought for CRRL "Amateur of the Year" Award

This award is designed to recognize a Canadian amateur who has made an outstanding contribution over the past year, or one who has consistently contributed to the welfare of Amateur Radio over several years.

Deadline for nominations is 1992 December 31.

Send your nomination with supporting

documents to the CRRL Secretary, CRRL Headquarters, Box 56, Arva ON N0M 1C0.

The winning candidate will be determined by a vote of the CRRL Executive Committee. The name of the winner will be announced in the CRRL News bulletins and in QST Canada. —W. W. Loucks, VE3AR, CRRL Secretary ■

Nominations also Sought for YRARC "Young Amateur of the Year" Award

The York Region Amateur Radio Club (YRARC) is sponsoring a national award to help publicize and promote Amateur Radio among the youth of Canada.

The winner will receive \$500. First and second runners-up will receive \$200 and \$100.

The award will be made on recommendation of a panel of directors of the YRARC.

Nominations for the award are welcomed from any official of a CRRL-

or CARF-affiliated club anywhere in Canada.

Details of the candidate, and his or her age and accomplishments in the field of Amateur Radio, will be the basis for judging. A candidate must hold a Canadian Amateur Radio licence.

Submissions should be sent to Awards Committee, York Region Amateur Radio Club, Box 352, Newmarket, ON L3Y4X7 by December 31, 1992. —David Adams, VE3HBF ■

ARRL 11TH COMPUTER NETWORKING CONFERENCE

This year's conference will be hosted by the Amateur Radio Telecommunications Society, at Farleigh Dickinson University, Teaneck, NJ, on November 7, 1992.

FALL QST QSO AWARD PARTY

This year's fall QST QSO Award Party will be held at 0000-2400 UTC on November 8. Sponsored by the Canadian Radio Relay League, work any eight of the twelve QST stations operating across Canada to qualify for a handsome award. Look for QST stations just above 21.250, 14.110, 7.050 and 3.750 MHz. To receive your award, send a copy of your log with an SASE or one IRC to CRRL Awards Manager David Noon, VE3IAE, 19 Honeysuckle Crescent, London ON, 5Y 4P3. ■

Silent Keys —

Conducted By Ray Staines, VE3ZJ

It is with deep regret that we record the passing of these amateurs:

VE3XL, Geoff Field, Picton, ON
VE4LN, Gordon Lidster, Brandon, MB
VE7AIN, David Wade, Victoria, BC
VE7FAZ, Frank Guerard, Victoria, BC
VE7IA, Jack Scagel, North Vancouver, BC

Note: Silent Key reports sent to QST Canada must include name, address and call sign of the reporter. To avoid unfortunate errors, reports are confirmed only through acknowledgement from the family of the deceased. Thus, those who report a Silent Key may not receive an acknowledgement from QST Canada. ■

All letters are considered carefully. Letters are edited for clarity and may be condensed in order to have more information and readers' views presented. The publishers of *QST Canada* assume no responsibility for statements made by correspondents.

THOUGHTS ON EDITING

It appears that *QST Canada* is doing a better job of editing for good English usage and technical detail than is the ARRL's *QST* (and *QST* is doing a better job than many other magazines!). Is this because Canadian authors are trained in grammar more thoroughly than their US counterparts? Possibly, but I can't confirm that. This letter was sparked by my reading a number of technical magazine articles in the past few weeks in which editorial carelessness, sloppiness or plain ignorance of good English usage produced articles that at the least were unpleasant to read. To help assure that

QST Canada continues its good work, and that articles continue to be readable and understandable, I submit the following thoughts on editing.

It makes little sense to tell someone *how* to do something until that person knows *what* it is that is to be done. Verbs tell us what is being done, adverbs tell us how. A sentence containing the construction "...was automatically transmitted..."—the *how* followed by the *what*—is more logical if worded as "...was transmitted automatically..."—the *what* followed by the *how*. With the more logical construction the meaning of the sentence is most often clearer to the reader. While the

Fowlers, in their treatise on English usage, indicated that placing the adverb between the subject and the verb was acceptable, they did not say that it was preferable. Unless it is necessary to avoid a very messy sentence structure, in my view, it is preferable to use the logical approach. —E. J. Moore, VE3CZZ, Nepean, ON

LETTERS FOR QST CANADA

We welcome letters for publication on topics related to Amateur Radio. Letters may be sent directly to the Editor, David Adams, VE3HBF, R. R. 1, Sutton West, ON L0E 1R0, Tel (416 478-2131, Fax 24 (416) 478-8163 (24 hours a day).

The Canadian Radio Relay League, Inc La Ligue Canadienne de la Radio Amateur, Inc



The Canadian Radio Relay League (CRRRL) is a noncommercial association of radio amateurs organized for the promotion of Amateur Radio communications and experimentation, for the establishment of networks to provide communications in the event of disasters or other emergencies, for the advancement of the radio art and the public welfare, for the representation of radio amateurs in legislative and other matters, and for the maintenance of fraternalism and a high standard of conduct.

CRRRL is incorporated under the Canada Corporations Act. Its affairs are governed by a seven-member Board of Directors elected every two years by the CRRRL general membership. CRRRL is noncommercial, and no one who could gain financially by the shaping of its affairs is eligible for membership on its Board.

CRRRL is the Canadian member-society of the International Amateur Radio Union (IARU). "Of, by and for the Canadian Radio Amateur", CRRRL numbers within its ranks the vast majority of active amateurs in the nation and has a proud history of achievement in amateur affairs.

A bona fide interest in Amateur Radio is the only essential requirement for membership. An Amateur Radio licence is not required, although full voting membership is granted only to licensed amateurs in Canada.

Membership inquiries and general correspondence should be directed to CRRRL Headquarters, Box 56, Arva, ON N0M 1C0 Tel (519) 660-1200.

Officers

President: Dana Shtun, VE3DSS
500 Willard Ave, Toronto, ON M6S 3R6
(416) 763-1761

Honorary Vice Presidents:
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Directors

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25 Lawnsdale Dr, Dartmouth, NS B3A 2N1
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(204) 728-2463

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(604) 584-6517

Section Managers

Alberta: Don Wilcox, VE6CG
940 Marpole Rd NE, Calgary, AB T2A 4E3
(403) 248-5614

British Columbia: Ernest Savage, VE7FB
4553 West 12th Ave, Vancouver, BC V6R 2R4
(604) 224-5226

Manitoba: William G Crooks, VE4JR
431 Hillary Cr, Winnipeg, MB R2Y 0Z1
(204) 837-9509

Maritimes-Newfoundland: Carl Anderson, VE1UU
25 Lawnsdale Dr, Dartmouth, NS B3A 2N1
(902) 469-9756

Ontario: Larry Thivierge, VE3GT
34 Bruce St W, Renfrew, ON K7V 3W1
(613) 432-5967

Quebec: Joe Unsworth, VE2ALE
163 Mgr Bourget, Vaudreuil, PQ J7V 2W4
(514) 455-2448

Saskatchewan: Joan Lloyd, VE5JML
1655 Garnet Street, Regina, SK S4T 2Z1
(306) 525-2605

Staff

General Manager: Raymond Staines, VE3ZJ
Field Services Manager: Ken Oelke, VE6AFO
7136 Temple Dr NE, Calgary, AB T1Y 4E7
(403) 280-5340

Awards Manager: David Noon, VE3IAE
19 Honeysuckle Cr, London, ON N5Y 4P3
(519) 453-2292

Central Incoming QSL Bureau Manager:
Don Welling, VE1WF
Box 51, Saint John, NB E2L 3X1

Outgoing QSL Bureau Manager:
John Henderson, VE3HFT
Box 56, Arva, ON N0M 1C0

General Counsel: Timothy S Ellam, VE6SH
Suite 3300, 421 7 Avenue SW, Calgary, AB T2P 3S8
(403) 260-3533

Honorary Counsel: B Robert Benson, QC, VE2VW

*Voting member, CRRRL Board of Directors

Merger Memo

Merger Memo No. 1: Key Executive Members of CRRL and CARF met in Cobourg, Ontario on Saturday, October 3, 1992 as an Ad Hoc RAC planning group. One of the major issues discussed by this group was the status of the legal and accounting work that is being done in order to complete the merger process. Merging the operations of two non-profit corporations is a complex procedure.

These transactions require the approval of Revenue Canada. The RAC incorporation papers have been filed with the Federal Government in Ottawa.

The planning group did the following:

- affirmed maintaining the National Field Organization
- established a committee to study the National Capital Region headquarters office
- reviewed a proposed operational budget
- affirmed that all CARF and CRRL members will continue in RAC with all services intact.

We will continue to keep you informed as matters progress. However, please remember that until everything is complete, your national organizations need your continued support. Buy memberships.

—Dana Shtun, VE3DSS,
President, CRRL

—J. Farrell Hopwood, VE7RD,
President, CARF

The Baud

Reflections on the use and misuse of the term, "baud".

By Ernest J. Moore, P. Eng., VE3CZZ
37 Ashgrove Crescent
Nepean, ON K2G 0S1

The term, "baud" is often misused in literature, in casual technical conversation, and even in formal presentations. While misuse of a technical term may not throw an author's credibility seriously into question, it certainly detracts from the quality and polish of a presentation—and may confuse or mislead the reader! The purpose of this article is to explain the meaning of "baud" and to define its proper use.

The term "baud"

"Baud" is a measure of the rate of signalling on a communications facility (a telephone line for example). Technically,

$$\text{baud} = 1/t$$

where t is the duration in seconds of the shortest signalling element (pulse) transmitted on the facility.

The term came into use at the turn of the century as a measure of the transmission capability of telegraph systems. It was named in honour of J. M. E. Baudot, a French telegrapher who, in 1875, invented the first practical digital multiplex telegraph transmission system.

"Baud" is concerned only with the rate at which pulses are sent along a transmission facility. Baud is not at all affected by the number of amplitude values that the pulse may have, which could be anywhere from two to infinity. It is simply the rate at which pulses are transmitted, and includes the idea of "per second".

Since "baud" is inherently a rate, the use of the combination "baud rate" implies "rate of a rate" which is the second derivative of condition and suggests the rate at which the pulse rate changes. Normally, a constant pulse rate (a "baud rate" of zero) is desired. From this it is apparent that "baud" defines the transmission line pulsing rate, and that "baud rate" defines the pulse rate stability. This comment suggests that use of the term "baud rate" should probably be avoided.

Bauds vs bits per second

Information is measured in terms of binary digits or "bits". The rate of transferring information between elements of a system is measured in terms of bits-per-second. The bit applies solely to information and has nothing to do with the rate of

signalling on a transmission facility between locations, which, as we have seen, is measured in baud.

A bit has the logical value of either zero or one, i.e., one of only two possible conditions. If information is transmitted directly from one place to another by means of streams or trains of binary pulses, each of which can have only one of two possible values, then the rate of transferring information, in bits-per-second, and the pulsing or line rate in baud, will be equal numerically.

Consider now the situation where each transmission or line pulse is quaternary, i.e., can have any one of four possible values. Under these conditions each line pulse can carry the information carried in two information bits. In this case the line rate in baud is equal numerically to *one-half* of the information rate in bits-per-second. This situation is typical of devices such as four-phase modems.

Some systems transmit information using double line pulses to achieve some particular purpose. For example, bi-phase or di-phase systems use a line pulse which is first positive and then negative for, say, a logical "one", and first negative and then positive for a logical "zero". This arrangement results in a cancellation of DC energy in the signal, and provides a large amount of timing information as well. This is very useful in some systems. In terms of baud, however, each half of the pulse is recognized as a signalling element. In this case, the line rate in baud is equal numerically to *twice* the information rate in bits-per-second.

From this discussion it can be seen that bits-per-second of information transfer *may* be related to transmission line "baud" by the specific modulation or encoding method employed. However the terms "bits-per-second" and "baud" refer to separate concepts and should be treated as separate.

Transmission bandwidth

The bandwidth required to transmit a pulsing signal is approximately one hertz of bandwidth for each pulse per second of the signalling rate. On this basis, for a pulse rate of 2400 baud, a bandwidth of 2400 Hz is required—only marginally possible on a high quality telephone line.

A 9600-baud signal would require a bandwidth of 9600 Hz, and this is not possible on any telephone line! However, a 9600-bit-per-second signal in which each line pulse has any one of 256 possible values, that is, 8 bits per pulse, would transmit on line at

$$\text{line rate} = \frac{9600}{8} = 1200$$

According to our rule, this 9600-bit-per-second signal could be sent on a system having a usable bandwidth of only 1200 Hz! This sort of technique is used in all higher capacity modems.

Summary

1. "Baud" is the rate of signalling on a transmission facility, in 1/seconds
2. "Baud rate" normally is not a legitimate term and should be avoided. (A "baud rate" other than zero really implies an unstable system!)
3. Bit-rate and baud are separate and unrelated terms representing different concepts and should not be used interchangeably.
4. Bit-rate and baud *may* be related numerically by a modulation or encoding method. ■

HELP WANTED

Malcolm Hamon, VE3KXH, in conjunction with IARU, coordinates the Canadian Monitoring Service, and he needs your help. He is looking for Canadian amateurs to form part of a monitoring team to help combat the problem of intruders on our amateur bands. Please contact Malcolm at 5 East Bank Road, Newcastle, ON L1B 1B7, Tel/Fax (416) 623-0472. ■

MOVING?

For uninterrupted delivery of *QST* and *QST Canada*, please send your change of address notice to CRRL, Box 56, Arva, ON NOM 1C0 eight weeks before you move. Don't forget to quote your call sign or the seven-digit number on your mailing label. —Ray Staines, VE3ZJ ■

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Canada and European Community Joint Study Launched

Canada's Minister of Communications, Perrin Beatty, has announced a joint study with European Community nations on the evolution of Electronic Data Interchange (EDI).

EDI is the exchange of routine business documents in standardized electronic format between suppliers, banks, manufacturers and other private and public sector institutions.

"By working with its European partners," said Mr. Beatty, "Canada will stay at the forefront of EDI, technologically and strategically."

In Canada, the study, *Telecommunications Requirements for International EDI (TRI-EDI)*, is being sponsored by the Department of Communications, working with public and private sector organizations. In Europe, the sponsor is the Commission of European Communities. The project will be managed by a joint steering committee from both bodies.

This study complements other Canadian cooperative initiatives on EDI at the international level. The Department of Communications has contributed to the establishment in Montreal of the EDI World Institute/Institut Mondial EDI, whose members include national associations from twelve countries. DOC recently contributed \$7.5 million to assist the work of the Institute.

MARC CELEBRATES 60 YEARS

On October 30, Montreal Amateur Radio Club will stage a fun night to celebrate 60 years of service to radio amateurs. It will take the form of a buffet dinner at Bill Wong's Restaurant on Decarie Boulevard—preceded by a "Punch Bowl Junction" and followed by a presentation "A Journey Back in Time" with awards and memorabilia.

VI7AJT MARKS 350TH YEAR SINCE DISCOVERY OF TASMANIA

Special-event station VI7AJT will be active throughout the month of November, to celebrate the 350th year since Tasmania was discovered by the Dutch navigator and explorer Abel Tasman. Tasman, who was employed by the Dutch East India Company, sailed from Batavia (now Djakarta) aboard the *Heemskerk* and discovered the island which he named Van Diemen's Land on November 24, 1642.

VI7AJT will be operated throughout November by a roster of Tasmanian amateurs. A special award and a special QSL card will be available to those making contact with the station. For details, or to receive the award or the card, contact the

Awards Manager, VK7NBF, Box 88, Deloraine, Tasmania 7304, Australia.

GUELPH ARC TO OPERATE VG3W

Once again, members of Guelph (Ontario) Amateur Radio Club will operate special event station VG3W over the Armistice Day period, in memory of those who died in two world wars. The station will be located at the John McCrae House Museum in Guelph. Operation will be on 10, 15, 20 and 40 metres, at 1500-2200 UTC daily on November 7-11.

John McCrae, poet and physician, was born in Guelph. He served in the South African War, and later, in the First World War. In 1914, he enlisted in the Canadian Expeditionary Force as a medical officer. He died in the hospital of which he was in charge in 1918. He is best remembered for his poignant war poem, *In Flanders Fields*.

ON4CLM TO HONOUR LINCOLN AND WELLAND REGIMENT

Once again, ON4CLM (Canadian Liberation March) will recall the liberation of Knokke-Heist on the Belgian coast by Canadian forces on November 1, 1944.



This is the tenth year that ON4CLM has commemorated the liberation. As in other years, ON4CLM will pay special tribute to one of several Canadian regiments involved. In 1991, the Algonquin Regiment was honoured. This year, it will be the Lincoln and Welland Regiment. The Lincoln and Welland regimental crest will appear on the ON4CLM Jubilee Award in full colour.

Look for ON4CLM from October 30 to November 8. To receive the ON4CLM Award, send log information and US \$5 or ten IRCs to ON4CLM, Box 110, B-8300 Knokke-Heist, Belgium.

DOUGLAS DAY SPECIAL-EVENT STATION VF7L

Members of Fraser Valley Amateur

Radio Association will operate special-event station VF7L from Fort Langley, British Columbia, from November 19 to November 23. The station will be on the air from 1700 to 2300 UTC each day on the 20-, 15- and 10-metre bands.

The operation is to commemorate the 134th anniversary of the proclamation on November 19, 1858, that created the colony of British Columbia. The proclamation was read by James Douglas at Fort Langley. This will also mark the annual meeting of the British Columbia provincial cabinet at the old fort.

A special certificate will be available. Certificates will be mailed from Fort Langley and cancelled with a special Douglas Day postmark. To receive the certificate, send log your information and US \$1 to Fraser Valley ARA, Box 50, Fort Langley, BC V0X 1J0.

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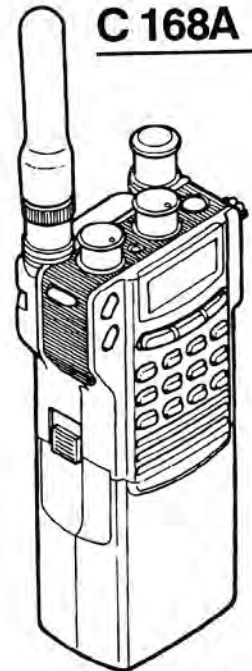
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Report of the 1992 IARU Region 2 General Assembly

CANADA TO HOST NEXT IARU REGION 2 GENERAL ASSEMBLY

The Canadian delegation at the International Amateur Radio Union (IARU) Region 2 General Assembly, held recently in Curaçao, submitted a proposal that the 1995 General Assembly of Delegates of IARU Region 2 be held in Niagara Falls, Canada. The selection of a meeting site is made by popular vote of the delegates. Competing proposals came from Nicaragua and Cuba, but the Canadian bid was successful.

This will be the first time that Canada has hosted an IARU General Assembly, and we have plenty of time to do a good job. The responsibility for planning and implementation will fall to the new Canadian Amateur Radio organization, Radio Amateurs of/du Canada (RAC). The Niagara Peninsula Amateur Radio Club has enthusiastically accepted the challenge to provide local help.

These meetings are serious working sessions with a long and rigidly controlled agenda. Unlike a hamfest or convention, only delegates from each country and some volunteer helpers may attend, along with some paid professional help such as simultaneous translators.

Region 2 has two official languages, English and Spanish. In Curaçao, 28 countries were represented in person or by proxy. Only nine of these were English-speaking. Most of the countries represented were Spanish-speaking, with Portuguese being spoken in Brazil and Dutch in the Netherlands Antilles.

REPORT OF 1992 IARU REGION 2 GENERAL ASSEMBLY

IARU Region 2 delegates, with observers from IARU Regions 1 and 3, met in Curaçao (PJ2) from August 30 to September 5 at the Holiday Beach Hotel.

The Canadian delegation consisted of George Spencer, VE3AGS; Dana Shtun, VE3DSS; Bruce Balla, VE2QO; and Mal Hamon, VE3KXH. Tom Atkins, VE3CDM, was present and very busy as Secretary of IARU Region 2. Tom was elected Vice President of IARU Region 2 during the course of the meeting.

IARU does not have individual membership, but consists of member-societies, one from each country. At present, the Canadian Radio Relay League is member-society for Canada. The formation of Radio Amateurs of/du Canada (RAC) will require that an application be made to IARU for RAC to become the new member-society for Canada.



CRRL Vice President for International Affairs George Spencer, VE3AGS, and CRRL President Dana Shtun, VE3DSS, at the conference table at the recent IARU Region 2 General Assembly in Curaçao. Between them in the background is Mal Hamon, VE3KXH, Region 2 Monitoring Service Coordinator for Canada.

An IARU Region 2 General Assembly is held once every three years. The IARU Region 2 Executive Committee meets at least once a year between general assemblies to carry on the business of the organization. Delegates to a General Assembly arrive on Saturday and Sunday. Most leave on the following Saturday.

In Curaçao, the opening plenary session was held on the Monday, August 30. Delegates were welcomed at opening ceremonies, and there were speakers on subjects relating to the business of the meeting. Jacket and tie was the order of the day for the plenary sessions.

Working committees were assigned as follows:

A—Administrative matters such as constitutional changes, common licensing between countries, review of WARC achievements and preparation for the next WARCs,

B—HF band operations, subband allocations for various modes, bandwidths, operational procedures, complaints re operations, intruders and interference,

C—VHF/UHF and microwave operations, covering concerns similar to those for HF, but for frequencies above 30 MHz, and

D—Finance committee, credentials of delegates, eligibility to vote, dues assessment, financial report.

Proposals and other papers were prepared before the meeting and submitted to the IARU Region 2 Secretary for translation into Spanish or English, and distribution to delegates.

Each delegate attended the committee of most interest, and was allowed to serve part time on more than one committee.

Working sessions ran from Tuesday morning until Wednesday evening. Each committee was expected to have completed its agenda by then, and to have written its recommendations for the final plenary session.

Thursday was a day off for committee members. It was the busiest day for the IARU Region 2 Secretary. He was responsible for the translation, printing and distribution of documents for the final plenary session on Friday, September 4. At the Friday session committee documents were considered, modified if necessary, and voted on by the delegates.

SOME RESULTS OF THE 1992 GENERAL ASSEMBLY

20-metre subbands: Committee B considered the allocation of subband frequencies in the 20-metre band to accommodate the rapidly expanding number of digi-mode stations. Previous IARU Region 2 recommendations were 14.070–14.0995 MHz for CW and RTTY, and

14.0995–14.1005 MHz as a beacon guard band. The new proposal is to permit digi-mode from 14.070–14.112 MHz with 14.095–14.112 MHz to be designated as "packet priority". A +/-500-Hz guard band is to be continued as long as beacons continue to operate on 14.100 MHz.

Canadians have long regarded 14.100–14.150 MHz as a "Canadian phone band" on 20 metres. Certainly packet operation above 14.100 MHz has been creeping up during the past year, and has been occupying 14.100–14.110 MHz for quite some time.

Monitoring service: The IARU Monitoring Service (formerly "IARU Intruder Watch") in Region 2 now has a new coordinator. He is Mark Allen, WJ7X. Mark made several presentations to the General Assembly and its committees. Mark said that considerable progress had been made in identifying and silencing intruders. Mark was given authority by Region 2 to make direct contact with administrations,

broadcasters and station managements on a one-year trial basis. G4GKO in IARU Region 1 has shown that this can be an effective way of dealing with intruders on our amateur bands.

A monitoring handbook, signal tapes, monitoring instructions and log forms are available. Canadian amateurs interested in pursuing monitoring activities should contact Canada's monitoring service coordinator, Mal Hamon, VE3KXH, 5 Eastbrook Road, Newcastle, ON L1B 1B7.

Canadian matters: The Canadian delegation presented five papers for consideration at the 1992 General Assembly. They were:

- 1) A society report for Canada,
- 2) A proposed band plan for frequencies above 50 MHz,
- 3) A complaint re unlicensed intruders on 15 metres,
- 4) Suggested improvements in the English wording of the IARU Region 2 Constitution, and

5) A proposal that the next IARU Region 2 General Assembly be held in Canada.

CRRL President Dana Shtun, VE3DSS, prepared a report describing the Canadian band plans above 50 MHz. He became Chairperson of Committee C which considered various recommendations for these bands.

The most important matter for Canadian radio amateurs was the band plans that were accepted during the final plenary session. It is suggested that all Canadian amateurs make copies of these band plans and keep them handy to their operating positions. Remember, Canadians no longer have subband assignments made by the government. There would be absolute chaos without international agreement as to which frequencies should be used for each of the various modes.

A future article will deal with other decisions reached during the 1992 IARU Region 2 General Assembly. ■

Amateur Radio Helps Search and Rescue Services

Stories from the edge—and some practical advice.

By S. G. "Spud" Roscoe, VE1BC
Box 1, Site 5, R. R. 5
Armdale, NS B3L 4J5

A few years ago Amateur Radio was involved in the search for a yacht. There were several units in the area. One was a large container ship whose radio officer was a radio amateur. The cost of a tank of fuel for this vessel alone would resemble the national debt. We were getting very close to a rescue when the amateur who activated the search told us the yacht was no longer in trouble. The search was terminated. Two weeks later a Russian fishing vessel spotted the yacht. It had turned turtle at about the time we were told it was no longer in trouble. The lone occupant was still clinging to its bottom. He was one very lucky person!

Rescue Coordination Centre

The Rescue Coordination Centre (RCC) in Halifax has long enjoyed valuable assistance from Amateur Radio operators. The extensive monitoring and communication relays set up by Amateur Radio enthusiasts worldwide have aided Search and Rescue (SAR) in many ways, especially when yachts on transatlantic

voyages use them for contact with home. Sometimes a radio amateur will be the only link with a vessel.

Recently an Italian yacht in mid-Atlantic accidentally activated its Emergency Position Indicating Radio Beacon (EPIRB). The Amateur Radio operator who had a regular schedule with the yacht was the only way Air Sea Rescue authorities could establish the yacht's status. This allowed RCC to release aircraft and ships searching for the "distressed vessel", saving time and money.

Another example of cooperation involved a Canadian yacht en route to the Azores. A storm delayed it, and two other yachts reached the Azores well ahead of it. Concern for the yacht's safety was transmitted to an Amateur Radio station in Canada. Unfortunately, this yacht did not have Amateur Radio, only Marine VHF and an EPIRB. The operator informed Halifax and acted as a relay to allow RCC to get more information from yachts in the Azores area. By contacting the yacht captain's relatives in Canada, RCC learned that he had left word not to

initiate a search until the end of July, and not to be concerned if he had not arrived before then.

RCC decided to do an extensive communication relay to all ships in the area, and to alert Canadian Forces patrol aircraft in the area, to try to spot or communicate with the yacht. Meanwhile the Amateur Radio operator contacted other relatives of crew members on the yacht. These relatives became very upset and worried. As it turned out, the yacht sailed safely into port. SAR authorities appreciated the cooperation of the Amateur Radio operator—even though his telephone calls to relatives and to the media caused complications and suffering.

As a guideline, contact the RCC if you have any reason to be concerned about the safety of any vessel or aircraft, but allow trained experts to contact family members to avoid causing problems. The Rescue Coordination Centre in Halifax can be reached at (800) 565-1582 or collect (902) 427-8200. It is responsible for air and sea rescue, 24 hours-a-day, seven days a week. ■

HF Band Plans Adopted by the 1992 IARU Region 2 General Assembly

160-METRE BAND

1.800 – 1.840 MHz CW and DIGIMODE
1.840 – 2.000 MHz CW, PHONE and other wideband modes

80-METRE BAND

3.500 – 3.580 MHz CW only
3.580 – 3.635 MHz DIGIMODE
3.620 – 3.635 MHz PACKET PRIORITY
3.635 – 4.000 MHz CW, PHONE and other wideband modes

Note: Canadians have generally accepted the previous DOC requirement of 3.725 – 4.000 MHz for PHONE and other wideband modes, leaving 3.635 – 3.725 MHz for existing CW occupancy.

40-METRE BAND

Committee B recommended the following band plan:

7.000 – 7.035 MHz CW only
7.035 – 7.050 MHz DIGIMODE
7.040 – 7.050 MHz PACKET PRIORITY
7.050 – 7.300 MHz CW and PHONE

ARRL stated that it would not be able to implement the packet segment recommended by Committee B, and wished to record that the 40-metre band plan is not yet completely resolved because of different allocations and operating patterns in different parts of the world. Ecuador proposed the following modification to the recommendation of Committee B:

- a) Designate 7.040 – 7.050 MHz for international packet
- b) Designate 7.100 – 7.120 MHz for packet within Region 2

With the modifications proposed by Ecuador, the 40-metre band plan was approved.

30-METRE BAND

10.100 – 10.130 MHz CW only
10.130 – 10.150 MHz DIGIMODE
10.140 – 10.150 MHz PACKET PRIORITY

20-METRE BAND

14.000 – 14.070 MHz CW only
14.070 – 14.112 MHz DIGIMODE
14.095 – 14.100 MHz PACKET PRIORITY
14.100 – 14.112 MHz CW, PHONE and PACKET shared
14.112 – 14.350 MHz CW and PHONE

Note: The beacon system is operating at 14.100 MHz, therefore a protection of +/- 500 Hz is necessary.

17-METRE BAND

Acceptance of ARRL proposal, clarifying the following:

18.068 – 18.100 MHz CW only
18.100 – 18.110 MHz DIGIMODE
18.105 – 18.110 MHz PACKET PRIORITY
18.110 – 18.168 MHz PHONE and other wideband modes

15-METRE BAND

Basically harmonized with the Region 3 band plan:

21.000 – 21.070 MHz CW only
21.070 – 21.125 MHz DIGIMODE
21.090 – 21.125 MHz PACKET PRIORITY
21.125 – 21.450 MHz PHONE and other wideband modes

12-METRE BAND

Acceptance of ARRL proposal, clarifying the following:

24.890 – 24.920 MHz CW only
24.920 – 24.930 MHz DIGIMODE
24.925 – 24.930 MHz PACKET PRIORITY
24.930 – 24.990 MHz PHONE and other wideband modes

10-METRE BAND

28.000 – 28.070 MHz CW only
28.070 – 28.189 MHz DIGIMODE
28.120 – 28.189 MHz PACKET PRIORITY
28.189 – 28.970 MHz PHONE and other wideband modes

Note: The term "DIGIMODE", a contraction of "digital modes", means Baudot RTTY, ASCII and AMTOR.

CLEAROUT SPECIALS - LIMITED QUANTITY

Alpha Delta - DXA Twin Sloper antenna, 40/80/160M	99	75	J.R.C. - NRD-525 Shortwave Receiver 0-34MHz
A.E.A. DX-10 10M Handheld Transceiver	249	159	J.R.C. - NRD-535 New Shortwave Receiver 0-34MHz
A.E.A. LA-30 HF Amplifier (1)3-500Z 5 band 10-80 1200W PEP	1499	1099	K.D.K. - Speach240 Voice Synthesizer for FM-240
SHINWA SR-001 200channel 25Mhz-1GHz Receiver & Pwr Sup	849	499	Kenpro - PB-H high power nicad for KT-220ET handy
Book - ATV Secrets, introduction to Amateur Television	13	7	Kenpro - KCS-200 compact charger for above
Book - Hambook, ArtSci Amateur Hambook by Bill Smith N6MQS	19	12	Kenwood - BC-7 quick desk charger for TH-205 215 225
Book - Grove International Callsign Directory	30	15	Kenwood - BH-4 belt hook for TH-205 215 225
Book - Lost Users Manual, Instructions for many older/newer xcvs	30	19	Kenwood - LCD-721 Converts TM-721 display to look like TM-731
Book - Radio Receivers Chance or Choice Vol 1 & 2	both	30 10	Kenwood - MB-4 Mobile Bracket for TH-205 215 225
Book - Hamstuff 1991, find out where to obtain anything, 1" + thick	25	9	Kenwood - PB-1 Nicad for TH-215 225, 12V 800maH
Book - Shortwave Receivers Past & Present, review	15	9	Kenwood - PB10 standard nicad for TH-26A, 7.2V 600maH
QSL Card Holders (2) each one hold 20 cards	8	4	Kenwood - PB-11 switch nicd 12/6V 600/1200maH TH26 75 77
Butternut - SC-3000 Scanner antenna, High Gain Vertical	149	99	Kenwood - PB-14 Nicad for TH-27/28/78 5W 12V 300maH
Barker-Williamson - ASW-5 Window Mount SWL Antenna	99	49	Kenwood - PB-3 Nicad for TH-205/215/225 7.2V 800maH
Cushcraft - CS-147M 2M 5/8 wave Mag Mount	79	49	Kenwood - PB-4 Nicad for TH-205/215/225 7.2V 1600maH
Cushcraft - DX-120 2M array	179	69	Kenwood - PB-5 Small Nicad for TH-25/26/75/77 7.2V 200maH
Cushcraft - PS-4 Polarity switcher for AOP-1 Oscar antenna	169	79	Kenwood - PB-8 Nicad for TH-25/26/75/77 5W 12V 600maH
Daiwa - CN-520 Cross Needle Meter, 1.8-60MHz, 200/2000W	130	79	Kenwood - PS-31 Power Supply to match TS-790/850 16amp
Daiwa - CN-650N Cross Needle Meter, 1.2-2.5GHz, 2/20W	359	179	Kenwood - PS-430 Power Supply to match TS-140/430/440 16a
Daiwa - CNW-419 Antenna Tuner with Cross Needle Meter	329	229	Kenwood - SP-31 Speaker with audio filters to match TS-790/850
Daiwa - DK-210 Deluxe Keyer with LED Speed Meter	175	129	Kenwood - SP-430 Speaker to match TS430/440/140/680/R5000
Daiwa - MR-750E Rotator, strength about equal to HAM IV	549	349	Kenwood - SW-2100 SWR Power Meter, Dual Meters
Daiwa - MR-750PE as above with Rotary Preset	599	389	Kenwood - VC-10 VHF converter (118-174) for R-2000
Sanyo - AA Nicad Batteries, 600maH	4	2	Kenwood - YG-455CN-1 250Hz CW Filter for TS-950/940/850/450
Grundig - Cosmopolit 9 band Shortwave with Cassette & Clock	299	149	M.F.J. - 1221
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Grundig - Yacht Boy 220 12 Band Shortwave	189	99	M.F.J. - 1710 3/8 wave telescoping 2M antenna
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Grove - Skywire, basic shortwave antenna, needs coax	30	15	M.F.J. - 312B VHF Converter for mobiles 140-150 gives 150-166
Hy-Gain - 18WTS Hy-Tower 10-80M with 160M kit, one only	1199	699	M.F.J. - 721 Audio Filter CW & SSB
Hy-Gain - 18VS single frequency vertical anywhere 10-80M	129	49	M.F.J. - 725 New Audio Filter CW & SSB
Hy-Gain - 2BDQS 40/80M dipole, very Hi-Q traps	269	129	M.F.J. - 815B HF Power SWR Meter 1.8-60MHz
Hy-Gain - 5BDQS 10-80M doublet, very Hi-Q traps	389	199	M.F.J. - 841 VHF SWR Power Meter
Hustler - BBL-144A 2M mobile antenna	89	39	Mirage - B-23 2M Amplifier for handies, 25-30W out
Hustler - SPS-144 2M Mobile antenna	89	39	Misc - Heavy plastic bracket to hold handy in car or on desk
Hustler - RX-2 Basic 2M 5/8wave mag mount mobile antenna	40	29	Nye-Viking - 047-006 phone patch for Icom xcvs
ICOM - IC-2SA 2M Handy, 40 Memories, 108-174Rx, NO TTPad	569	249	Nye-Viking - 047-006SP phone patch with speaker for Icom xcvs
ICOM - IC-475A 430-450MHz 25W All Mode with Power Supply	1999	1299	Sony - ICF-PRO-80 Shortwave radio with scanner frequencies
ICOM - IC-4SAT 440MHz Handy loaded with features	469	349	Sony - MDR-V1 Digital Quality Stereo Headphones
ICOM - IC-901 Factory Repack, 2M/440, Opt. 10m 6m 220 1.2	1269	899	TRAC - TE-133 C-MOS Keyer
ICOM - A-20 Airband Transceiver with VOR	799	599	TRAC - TE-144 C-MOS Keyer
ICOM - AD-10 charges BP-21/22/3/4 in BC-35 charger	19	5	TenTec - 3001 Mobile Matcher
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ICOM - BC-50 quick desk charger for BC-21/22/23/24 Nicads	129	49	TenTec - 3115 Mobile 15M antenna
ICOM - BP-20 empty case for 6 AA cells for u2AT	29	10	TenTec - 3120 Mobile 20M antenna
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ICOM - BU-1 Nicad backup for IC-25A/H to hold memories	49	19	Uniden - BC-004 Preamp for BC-760XLT with motorola ant conn
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Cloth Diamond 3"	(OT) 2.00	1.00	1510	<input type="checkbox"/>
ARES Circular Patch 4"	(OT) 4.00	1.00	1530	<input type="checkbox"/>
Set of 3 CRRL Logo Decals	(OT) 1.00	1.00	1590	<input type="checkbox"/>

OPERATING AIDS

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Microwave Handbook Vol. 3 (RSGB)	40.00	1.50	6522	<input type="checkbox"/>
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	PRICE	POSTAGE	STOCK #	✓
ARRL Antenna Book 16th Edition	24.00	2.50	4001	<input type="checkbox"/>
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Spread Spectrum Sourcebook	24.00	1.75	5060	<input type="checkbox"/>

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From Spark to Space	22.50	1.50	7020	<input type="checkbox"/>
Radio Buyers Sourcebook	18.00	1.75	7040	<input type="checkbox"/>
Wireless Communication in US	36.00	1.75	7030	<input type="checkbox"/>

CRRL Publishing, Inc., Box 56, Arva, ON N0M 1C0

How to order: Please return this form or a copy with the items you are ordering checked (✓). In the area to the right, add costs and postage for the items. Then add 7% GST to your total. **Ontario residents only: Add 8% provincial sales tax on total of costs and postage (but not on GST) for all items marked (OT). Thank you.**

Name: _____ Call: _____

Address: _____

Postal Code: _____

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Cost of items \$ _____

Postage \$ _____

7% GST \$ _____

8% PST—(OT) items
Ontario residents only \$ _____

Amount of cheque \$ _____

Rescue by Helicopter

Amateur Radio and Rescue Coordination Centre collaborate...

By J. Bruce Prior, VE7HR
16080 93A Avenue
Surrey, BC V4N 2P4

"It has to be here somewhere," I said to my 13-year old son, Matthew, as we searched above the 500-kilovolt pylon for the trailhead. We were looking for the Dilly Dally trail east of a long fjord called Indian Arm, 22 kilometres from downtown Vancouver. I had hiked the trail a few years before, but on 19 June 1992, it was nowhere to be found. Our backpacks were loaded for a five day trip along the western divide of the Fraser River drainage basin. We hoped to follow the divide from Dilly Dally Saddle to Mount Bonnycastle, and then retreat to the lowlands on logging roads. I suggested that we just plunge into the thick bushes above the power line cut until we reached the tall trees. Then surely we could find the trail.

More than two hours later, we were resting among the trees above the powerline. Our elevation was slightly above the pylon and we were close enough to throw a rock at it. Our "plunge" into the bushes turned out to be a scratching, crawling struggle with our heavy backpacks. Once into the tall trees we couldn't bear the thought of going back through that mess. Traversing back and forth, we couldn't find the trail. I had chosen the wrong pylon from the start.

Our only practical option was to head up the forested slope at a 40-degree angle until we reached a connecting trail on the ridge top about 1200 metres above. Several times, we encountered crumbling rock cliffs where we had to thread our way through notches. Once, I climbed up a pitch and let down a five-millimetre perlon rope to retrieve Matthew's pack and then I belayed him up to a safe place. Another time, I scrambled past a dead tree which dislodged a loose rock on a cliff. It hit my arm and cut it, barely missing my head. And yet another time, Matthew was leading up a pitch where he found a large precarious rock. He warned me to hug the cliff below an overhang before letting it go. I never saw the rock, but its crashing sound was awesome.

As the hot day wore on, we gradually used up our water supply. I usually "water load" before starting a hike. I



Matthew Prior on the talus slope with the 80-metre rig ready to call for help. Note the precious Expos cap.

drink to satiation, and then force myself to drink more until I can bear it no longer. Perhaps because the trail we were looking for crossed several creeks, I neglected to "water load" that morning. Nowhere on the slope we ascended could we find any source of water.

From previous experience I knew what that meant. Dehydration is not only very unpleasant; it can seriously impair mental functions. I would need my full faculties if I were to try to go all the way back down, or to explore farther to find a route around the high cliff barrier.

Not far below the cliff was a tiny patch of almost level ground where we could have pitched our tent. Without water we would be worse off than during this evening. Reluctantly, I made the decision. It was hard to put it into words. "Matthew," I said, "we're in trouble. We have to go down to a clear spot and call for a helicopter."

On our way down to the talus slope,

we ran across some ripe huckleberries which we devoured. The berries contained only a tiny bit of water, but somehow they almost quenched our thirst, which I was feeling more than Matthew.

We found a clear spot among the boulders, and drank the last drops of our water supply. Matthew rolled out the half-wave 80-metre dipole and we attached the centre connector and coaxial feedline. Since our projected route would have taken us well beyond VHF range, I had brought only my 80-metre transceiver, designed and built by Derry Spittle, VE7QK. Matthew connected the microphone and power supply which consisted of three 4.5-volt headlamp batteries soldered in series, held together in a cube shape by yellow duct tape. I took a set of cross bearings and wrote out this message:

**NR 1 EMERGENCY VE7HR
WEST SLOPE OF EAGLE
RIDGE BC JUNE 19**

**RESCUE COORDINATION
CENTRE**

PARTY OF TWO AGED THIRTEEN AND FORTY EIGHT MAROONED ON MOUNTAINSIDE NOW WITHOUT WATER X CANNOT PROCEED UP OR DOWN TO SAFETY X REQUEST HELICOPTER EVACUATION X LOCATION ON TALUS SLOPE ON EAST SIDE OF INDIAN ARM BEARING SEVENTY EIGHT DEGREES FROM ORLOMAH BEACH AND ONE HUNDRED FIVE DEGREES FROM MOUNT SEYMOUR

BRUCE PRIOR

I tuned in the BC Public Service Net on 3729 kHz and said, "Break, break, break!" Net control said, "Go ahead." I said, "This is Victor Echo Seven Hotel Romeo with emergency traffic, over." He said "Okay, VE7HR with no traffic, thank you...."

Meanwhile, 84-year-old Don Hings on Capitol Hill in Burnaby was monitoring the frequency to check out his 80-metre

antenna. He jumped in and said "No. VE7HR says he has emergency traffic. This is VE7BH." Net control said, "Sorry. Can you copy him?" Don said, "Yes, I copy him fine here." Net control said, "VE7BH, you take his traffic." Don called me, and I began reading my message slowly. I realized I had forgotten to count the words and enter a check number, so I said "check unknown" after my call in the preamble. Another amateur telephoned the Rescue Coordination Centre (RCC) to alert that organization that a message was coming. Don finished taking my traffic. When he got through to the RCC, he actually had to argue to convince them he had an emergency message. He was told they couldn't talk to him as they were expecting information about an emergency!

Then came two hours of waiting. RCMP Staff Sergeant Jim Schrumm at the Coquitlam detachment authorized the evacuation immediately so it could be finished before dark. The net control operator resumed the routine roll call for the net. I learned later that this decision was the subject of some controversy. From our point of view on the mountain, it was comforting to hear ordinary chatter after our message had been delivered, and we had no trouble hearing VE7BH. Jim Williamson, VE7JN in Nanaimo, was also in good range. Later Derry Spittle, VE7QK who had built my transceiver, checked in and asked about us.

Matthew and I dug out a signal mirror. The sun went behind heavy clouds so we stowed it away again. We said a prayer for the safety of the helicopter crew. Don Hings relayed a message from Rescue

Coordination Centre, asking if a helicopter could land where we were. I answered, "Not on the talus slope." Asked what length of cable would be required, I estimated 50 to 100 feet. This meant they needed to assemble a full crew of six to carry out a cable rescue. The 442 Search and Rescue Squadron at CFB Comox was assigned the mission.

We were asked if we had anything to signal our location. I noticed Matthew's bright yellow sleeping pad. I said we'd set that up. We unrolled it, weighed it down with rocks, and let it hang over a boulder so it could be seen from the side as well as from above. A number of amateurs kept their eyes open for the big yellow helicopter as it made its way from Comox across the Georgia Strait and along the North Shore communities of West and North Vancouver.

Finally the big twin-rotor Labrador helicopter appeared. It made one sweep, disappeared over the ridge and appeared again. In case the crew was tuned to 3729 kHz, I described its location relative to us. Then it turned and headed directly toward us. It turned aside and we could see two crew members waving. I told the people on the net about this, signed off and quickly stowed the rig into my backpack. The helicopter disappeared. When it reappeared it was flying very slowly above the treetops, carefully moving over us. The two rotors seemed to create a hurricane. Little rocks and bits of rotten log debris flew about. We closed our eyes and turned our backs. Matthew held on to his precious custom-made Expos baseball hat. After a while the debris was no longer a problem. Anything loose had

already been swept free.

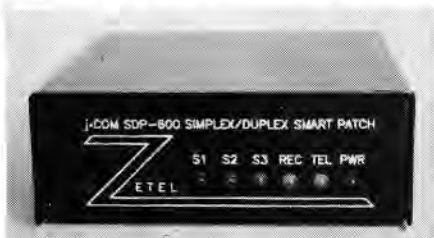
While the pilots, Captains J. M. Weisenborn and G. F. Dowler, kept the helicopter rock steady, down the cable came Sergeant John M. Kelly. He put a harness around Matthew and shouted for him to put his hands down to his sides. Away flew the baseball cap! Grabbing Matthew in a bear hug, Sergeant Kelly accompanied him as the cable was winched up to the helicopter to join the rest of the crew, Sergeant J. P. Caughy, Master Corporal J. S. Poirier and Corporal A. J. Banky. Watching my own son ride up to several tons of whirling machinery was an experience I'll always remember. Then Sergeant Kelly came down and picked me up. Rides at the Pacific National Exhibition pale in comparison. Then he went down again and retrieved our backpacks, sending each in turn up the cable. He even took time to scoop up the 80-metre antenna, which we had been prepared to abandon. The yellow foam pad was long gone. Last, he picked up my two ski poles which I use routinely as walking sticks, and he came up the cable again.

A few minutes later we landed at the heliport next to the sea-bus terminal in Vancouver. Sergeant Kelly presented Matthew with a squadron cap to replace his lost Expos cap, and the helicopter was airborne again. After a luxuriously long drink of fresh water, I was soon talking to my wife Margaret, asking her to come and pick us up. John Kranitz had stayed long beyond his normal working hours to keep the heliport open for us, and he stayed until Margaret arrived. It had been quite a day! ■

New Products and Services

Conducted By David Adams, VE3HBF

j-COM SDP-600 AUTOPATCH



This is a microprocessor-controlled interface intended to link a VHF/UHF transceiver and a telephone line, allowing the user to make and receive calls from any handheld transceiver or mobile rig within range of the base station.

Installation consists of connecting the autopatch to the rig's microphone and plugging in an RJ-11 telephone jack.

The SDP-600 can be used in full duplex mode with a dual-band transceiver. Using full duplex, both parties can

hear each other at the same time, as with a cellular telephone. Simplex mode may be used with VOX control based on sampling both the telephone and receiver audio signals or carrier detection.

The unit measures 4.6" x 1.6" x 5.05". It can be ordered from j-Com, Box 194, Ben Lomond, CA 95005.

PRO-AM "KISS" MOBILE ANTENNAS

The 19-inch MM144 two-metre antenna and 6.5-inch MM450 70-centimetre antenna use quarter-wave radiators. The MM240 dual-band antenna uses a quarter-wave radiator for two metres and a five-eighths wave radiator for gain on 70 centimetres. All are fully assembled, pretuned and come with 8 feet of RG-174 coax and a BNC connector.

For more information, contact the Pro-Am, Division of Valor Enterprises, 185 West Hamilton Street, West Milton, OH 45383.

NEW CANADIAN MICROWAVE DEALER

Bob Morton, VE3BFM, is setting up shop as "Maple Leaf Communications". Morton now represents Down East Microwave and offers their extensive line of transverters, amplifiers, antennas and accessories.

"The future of Amateur Radio is in the UHF/microwave region," says Morton, "with fascinating new challenges in terrestrial, EME and satellite communications. The 1296-MHz band now has nightly SSB activity in Southern Ontario. I found that I could bring in equipment and offer it to Canadian amateurs at very attractive prices. We are locating sources of hard-to-find components and accessories too."

You can send for a free catalogue. Write to Bob Morton, VE3BFM, Maple Leaf Communications, R. R. 1, Everett, ON L0M 1J0. ■

Elderhostel 1992

An introduction to Amateur Radio...

By Charles F. Leggatt, VE3CFL
3 Baker Avenue
Toronto, ON M4V 2A9

Elderhostel is an international program of educational opportunities for people over the age of 60. From small beginnings in New England in 1975, it now offers courses in over 40 countries, including all Canadian provinces and territories. In 1991 there were almost a quarter million Elderhostelers. Most courses run for a week. Cost is around \$320 per week including board.

The idea struck me at least a year ago. Like most people when the light bulb goes on, I couldn't keep my mouth shut. These light bulbs we get at one time or another don't always light up the way we expect them to. Indeed, in my experience, most seem to short circuit before they even get to the flicker stage. But this one not only flickered; it lit up more brilliantly than expected.

The light bulb in this case was switched on through a discussion on the need for communications for seniors—people not disabled in the normal understanding of the term, but those deprived, for whatever reason, of the normal everyday human contact, people whose contacts were slowly eroding through the deaths, illnesses and disabilities of their friends. As social animals, we know that human contact plays a large part in our personal happiness and health. And though, for example, there are specific programs for the blind, I could find nothing that attempted to target the lonely.

We have many facilities for the interested, but many older people look upon Amateur Radio as being too difficult for them, not being aware of its wonderful benefits. The average reaction to the suggestion that they take a radio course is, "I'm too old for that sort of thing." Regrettably, the matter is dropped.

This was supposition on my part, but my wife Dianne, who is a five-month radio amateur, thought the idea was terrific. The question was twofold. Was I correct in my supposition, and if so, how could I target this potential group of seniors? The mail that morning came to my aid with the "Elderhostel program".

Anyone who doesn't know about Elderhostel and its fantastic programs for people over 60 (partners can be over 50) had better drop me a line to get on the mailing list. [Or write to Elderhostel, 75 Federal St, Boston, MA 02110-1941. —Editor] Leafing through the program, I noticed that beautiful Killarney Mountain Lodge had several Elderhostel programs organized for that summer, but none were



Instructor Charles Leggatt, VE3CFL, explains the importance of antennas to Elderhostelers at Killarney Mountain Lodge.

related to radio. But it happened that Maury and Annabelle East who own the lodge were old friends of mine, so I dropped them a line. What did they think of an Elderhostel course on "Introduction to Amateur Radio"?

Introduction, mind you, because the five-day period over which the program would span only allocated two hours a day. The rest of the time could be spent in canoeing, fishing, sailing and using all the wonderful facilities that Killarney Mountain Lodge has to offer.

Maury thought the idea was a good one; but would Elderhostel think so? And if they did, would their subscribers think so too? Elderhostel did put Amateur Radio into its 1992 fall program, and I got an immediate response with full booking for the week of August 23.

Then the fun started. It had all seemed quite simple when I first talked about it. After all, it was an introduction, not a full blown course of instruction. But how to keep it simple yet informative? How to

keep it interesting and not get lost in the jargon? How to cover the subject in a way that the students would want learn more, in only eight hours spread over a five-day period, when there were so many other fun things they could do?

Fortunately, Dianne, being a very keen new amateur, was prepared to study up on the subjects we had agreed she should present. This was good, because every now and then she would say I was wrong about something I was preparing—and all too often she was right! Over the next few months we slowly put together what we thought would be a good, fun-filled, informative program, including "hands on" projects.

Many people at this stage were not only helpful but generous with books and pamphlets. Thanks must go to Ray Staines, VE3ZJ, and Dick Reiber, VE3IBV, at CRRL Headquarters in Arva, Ontario, to our friends at ARRL in the US, to the Seven Seas Cruising Association, and of course to our own DOC.

Through them we were able to put together a broad and interesting Amateur Radio library which our students used a great deal. It was fun and rewarding to see an 80-year old trundling the *ARRL Handbook* back to the cabin to study further on some subject we had covered that morning.

As for our students, 36 signed up for the program—15 Americans and 21 Canadians. There were six single ladies from Ontario, and some 30 single gentlemen from the US and Canada. Maury had warned us not to expect more than a thirty- or forty-per cent turnout—that people often came only for the holiday facility. And who could blame them with the loveliness of the location, the food, and everything else that the lodge provided. But all turned out for the first morning's "Welcome to Ham Radio". Two said they were only there for three days and wanted to go painting. One had a severe hearing impediment. Two were (mature) young lovers. The rest enjoyed the excellent video, *New World of Amateur Radio*, loaned by CRRL. The morning went by quickly—but how many would be there on Tuesday? With the sailing, fishing, and hiking, etc., we certainly had some competition.

Tuesday came and 30 attended. Several said that on Monday they had wondered what they were doing there when they could have been fishing, but we had intrigued them. Had we hooked them?

That morning, we ran the Morse code tapes from the *ARRL Talk to the World* package. They were thrilled, and wanted more. By week's end, the main complaint was that they wanted more Morse code, and more hands-on-the-key time. In four 15-minute sessions, most of them were copying half the alphabet including numbers!

We made antennas, and we hoisted them up. We got on the Waterways Net each morning and became an official relay for any US traffic into the area. We tied in with local amateurs on two metres. The Mississauga Maritime Net and then the Afterburner Net made contact with us each morning. Although the sessions didn't start officially until 8:15 a.m., most of our students turned up at 7:30 for the hands-on program, operating the TS-440 and the TS-930. It was great fun, and for all of them and for us—an exciting new experience.

Needless to say, the perfect program we had worked out in Toronto changed a bit while we were on the job. But we ended up with something that will stand a little firmer the next time around. Elder-hostel and Maury have now asked us to do a winter, spring and fall program, so we know it was successful.

How many of our students will go on to take their licencing exam? Four or five have said they want to. Whether they do

or not, I have the distinct impression that there are now 30 quite well informed persons who will have a higher appreciation and respect for our hobby. Who knows how many of their grandchildren will now be introduced to Amateur Radio? ■



Contest Corral

1992 November

13–15 November: JARL International DX SSB Contest

14–15 November: Worked All Europe RTTY Contest sponsored by DARC

15 November: OK DX Contest (mixed modes)

21–22 November: RSGB 1.8-MHz CW Contest

21–22 November: All-Austria CW Contest

28–29 November: CQ WW DX CW Contest

6 December: Finland 75 Years of Independence Contest. Sponsored by SRAL, the Finnish Amateur Radio League (80-, 40-, 20-, 15- and 10-metre SSB and CW)

Notes from the CRRL Outgoing QSL Bureau

Canada Post will not accept parcels for the former Yugoslavia. Our last shipment of cards was returned to us. All cards in the future will be held until Canada Post resumes deliveries.

The Central QSL Bureau for Russia at Box 88, Moscow, is having financial and organizational problems. The outcome is expected to be the formation of individual bureaus in each CIS republic. If you have individual addresses for contacts in either of these countries we suggest that you send your cards directly. The CRRL Outgoing Bureau will continue to serve CIS republics as well as it can. However, anticipate substantial delays before you receive replies. ("As The World Turns" on page 18 in the October 1992 *QST Canada* includes a list of CIS QSL bureaus, supplied by N6VR. —Editor) ■

CROSS-CANADA CYCLIST BOB JORDAN, VE6CS

A report in the Peterborough (Ontario) *ARC News* tells of a June 1992 meeting with Bob Jordan, VE6CS, of Priddis, Alberta.

Harold, VE3KXB, was on the PL Net on Wednesday, June 17, when Bob checked in. Harold was on his way north to Haliburton, so he arranged to meet Bob in Lakefield.



Bob Jordan, VE6CS and trusty bicycle. (VE3KXB photo)

Bob has cycled across Canada from Victoria, BC, to Ottawa in three stages. He is a semi-retired miner, and has been in the oil business for many years.

Two years ago Bob cycled from Victoria to Edmonton. Last year he resumed his journey, travelling from Edmonton to Kenora, Ontario. On May 28, 1992, he left Kenora and pedalled to Ottawa, a distance of 2200 kilometres in 20 days.

He plans to complete his coast-to-coast ride next year by cycling from Ottawa to St. John's, Newfoundland. ■

Ham-Ads



Advertisements must pertain to Amateur Radio. For individuals or firms offering products or services for sale, the rate is \$0.50 a word + GST. This is reduced to \$0.25 per word + GST for those seeking to dispose of or acquire personal station equipment. Telephone numbers count as one word. No charge for postal codes. Unless specified, a *QST Canada* Ham-Ad will appear in the next available issue. Send Ham-Ads to CRRL, Box 56, Arva, ON N0M 1C0.

WANTED: Old Marconi wireless telegraph keys. Murray Willer, VE3FRX, 557 Spadina Road, Toronto, ON M5P 2W9.

KENWOOD



FM DUAL BANDER TH-78A

IN COMMAND

Kenwood's New FM Dual Bander Sets the Pace

One glance at ergonomic design of Kenwood's TH-78A is enough to tell you that this is far from an ordinary handheld transceiver. You're looking at the smallest dual bander in the world, packed with the finest communications technology: built-in DTSS and paging functions, alphanumeric memory and message paging, dual-frequency receive (including VHF+VHF & UHF+UHF) and double-band scan. Plus much more. Compact and confident, the TH-78A is truly going places.

- Built-in DTSS & paging functions
- Alphanumeric memory functions (max. 6 characters)
- Alphanumeric message paging (max. 6 characters)
- Dual-frequency receive
- Dual encoder
- Full-duplex cross-band operation
- ABC (automatic band change)
- Double-band scan
- 51 non-volatile memory channels, optionally expandable to 250 channels with optional ME-1
- 4-position output power control (High/Mid/Low/Economy low)
- CTCSS operation with TSU-7 tone decoder (opt.)
- Sliding keypad cover
- Auto power-off
- Auto battery saver
- 10-minute time-out timer (TOT)

NEW

Smallest Dual-Band Transceiver in the World

KENWOOD ELECTRONICS CANADA INC.

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Telephone: 416 670 7211, Facsimile: 416 670 7248

The CRRL Field Organization Forum

REPORTS FOR AUGUST 1992

Alberta: SM: Don Wilcox, VE6CG. No report available this month.

British Columbia: SM: Ernie Savage, VE7FB. BC Public Service Net (BCPS, 3729 kHz, 0130 UTC daily) Manager Jim, VE7JN, reports check-ins: high 179, low 114, total 4595. BC Emergency Net (BCEN, 3652 kHz 1900 UTC daily) Manager Ray, VE7BCL, reports QNI 1222 and QTC 506. Newcomers are doing well and the net is growing every month. Your Section Manager and family spent three weeks on Vancouver Island and attended Ham Happening in Cobble Hill with 500-600 amateurs and their families. Duncan ARC deserves much praise for a very active Saturday and Sunday. 1993 Ham Happening will be in Nanaimo. On Wednesday, September 16, we attended the buffet luncheon aboard the Princess Mary in Victoria with 116 members of Victoria New Horizons ARC. These gatherings are a wonderful way to meet old friends and make new ones. Did you keep your promise to do your antenna work during the sunny days of the past summer? We did manage to visit our BCEN NM Ray, VE7BCL, and his new home among the trees of Sooke. 73.

Manitoba: SM: Bill Crooks, VE4JR; ASM: VE4IX; STM: VE4STU; SEC: VE4PN; NM's: VE4AHG, VE4FP, VE4LB, VE4TE and VE4TY. Got a note from Bruce, VE4BWA, about the activities of the Interlake ARC. The club had two amateur stations set up at the Arbog Summerfest, as well as at the Icelandic Festival at Gimli. Both of these were well attended and brought to the public's attention this most interesting hobby of Amateur Radio. They had their first meeting of the year early in September, and are again putting on training classes under the able leadership of Peter, VE4PWO. The classes are scheduled to start about September 15. Nice going! The annual MS-150 Bicycle Marathon between Winnipeg and Portage la Prairie was run during the weekend of August 29-30. Our thanks go to these hams who helped provide communications along the way: VE4s AEZ, AHG, AJR, BBB, CIS, CP, DAR, DDC, HE, HK, KEN, NM, and NQ with help from his granddaughter and his XYL: RWC, SE, UX, XYL, YF and ZU. About 500 cyclists started out on the race, with 367 finishing for a good cause: to help fight multiple sclerosis. Manitoba Repeater Society advises that the Superlink system has been cancelled because the PC controller boards that were ordered were not delivered. They have decided to use a more reliable supplier who can back up the product and maintain reliable service. More later. The PATN CW net will start up on October 1 with VE4TY as net manager. Nice going, Tony.

Maritimes-Newfoundland: Acting SM: Carl Anderson, VE1UU; STM: Bob Kirkpatrick, VE1VAR; BM: Brent Taylor, VE1JH. No report available. The Maritimes-Newfoundland Section needs a Section Manager. Duties are not onerous and work can be rewarding. Contact Acting SM or CRRL for details.

Ontario: SM: Larry Thivierge, VE3GT @ VE3WQ; A/SM and BM: VE3AV @ VE3JF; Acting SEC: VE3GT @ VE3WQ; STM: VE3CYR @ VE3KRG; TC: VE3EGO, VE3BC, founding father of ONTARS, celebrated two more important milestones in a long and successful career. Bruce turned 80 and has 65 years with the same call, first being licensed in 1927. Congratulations, Bruce. VE3XJ is finding it a little tougher to work some "new ones" as his DXCC total on RTTY now stands at 245 confirmed. Some call sign changes: VE3IMA is now VE3HA and VE3BM is now VE3KS. VE3WHU (444.775 MHz +) has been relocated to a site in Oro township between Barrie and Orillia. The repeater is "cross-linked" into VE3WHO in King City. All of the features of VE3WHO can be found on VE3WHU. The site should give good coverage throughout central Ontario/Simcoe County. VE3OSQ BBS is leaving the village of Blakeney (elevation 310 feet) for the

Reports invited: CRRL Section Managers (SMs) and their Section-level assistants coordinate traffic handling, emergency communications and bulletin service across Canada. Your SM (name and address appears on page 2 of this *QST Canada*) welcomes reports of individual and club activities for publication in this column. Activities do not have to be related to the CRRL Field Organization or to CRRL.

top of Dwyer Hill (elevation 475 feet). Kieran advises that he will finally be putting up his 56-foot tower for the 144.97-MHz LAN. ECs reporting this month and all by packet were: VE3FS, VE3GNW, VE3LPM and VE3LVO. Thanks, guys. Among those attending the EAN traffic handlers' picnic in Verona, NY, were VE3CYR, VE3DVE, VE3FAS and VE3GSQ. Some 60 amateurs from Canada and the US were in attendance at the annual event hosted by K2KIR. Burlington EC VE3LVO advises that the Burlington ARES group with 16 amateurs provided communications over two days for the Golden Horseshoe Touch Football Tournament. EC VE3FS visited Collingwood to speak on ARES and how the Blue Mountain Club should go about setting up an active group in their area. VE3AJN and VE3DUI are doing a terrific job moving traffic into Australia and other parts of the world through IATN. Since restructuring in September, 1990, Canada's amateur population has increased by 19.6 per cent to 33,624.

Quebec: SM: VE2ALE; STM: VE2ED; OBS: VE2GO; BM: VE2ALE; QSL MGR: VE2IJ. There are some out there in radio land working at public events and accepting messages for transmission via Amateur Radio without being sure of the full name, proper address (street number, street name, town or city and postal code, telephone number with area code). When an ARRL standard message number is sent, and they ask for an answer on same, it is not indicated in message preamble by precedence indicator (HX-). If proper handling and passing of messages via Amateur Radio is not followed up, how can the public that may need help in emergencies or disasters depend on us to do the proper job? After all, operators at relaying and delivering stations are not mind readers. Also, as per BBS sysops, packet messages for NTS are not to be sent via packet in book form. From VE2IJ, an open invitation is extended to all amateurs and friends to attend Montreal Amateur Radio Club's (MARC's) 60th anniversary celebration on October 30 at Bill Wong's Restaurant in Montreal. A buffet-dinner is planned and much more. Details to be announced at local club meetings and at auction sales, and through publicity flyers and packet radio. Make this one a "must". MARC invite tous les radioamateurs et leurs amis à une soirée amicale pour fêter le 60e anniversaire de sa fondation, date 30 octobre, au restaurant Bill Wong, Boulevard Décarie, Montréal. Enseignements supplémentaires seront fournis prochainement aux réunions locales et via réseaux paquet. Soyez des nôtres. Heard on the TP Net that as of June 27, Jeffery Field, VE3XL, formerly VE2BO, is a Silent Key. Michel Tanciv, YO3CV, is a visitor to Montreal. He will be returning to his home country in November. Comments heard about the Hamfest 92, Rive Sud de Québec, were that it was well attended, but that sales were disappointing. The CIDX Exposition and forums were well attended during the day with the SWL and scanner buffs along with some local amateurs taking in the displays presented. Now that the vote has been decided and the new organization is to be RAC, I hope that everyone will support the new RAC executive to make RAC one strong and healthy organization. Ziggy, VE2AZU, mentioned to me that William (Bill) Still, former VE2AZT and W2GJR, is now resident at the Bayview Hospital, 27 Lakeshore in Pointe-Claire, PQ, Tel (514) 695-9384. A phone call or visit would be appreciated. Don't forget JOTA and/or the SET weekends. Look for us in the CRRL QSO Party in November.

Saskatchewan: SM: Joan Lloyd VE5JML @ VE5AGA. Congratulations to new amateurs Stuart, VE5SGR; Rawn, VE5RMO, and Curtis, VE5CAT. We welcome to the CRRL team as AECs: Dick VE5LI—Saskatchewan SW; Frank, VE5BBB—Moose Jaw; Jerome, VE5KZ—Regina; Derek, VE5SD—Saskatoon; Ned, VE5NED—Saskatoon Area; Harry, VE5HAE—Prince Albert; Gordon, VE5YB—Battlefords; Bruce, VE5ND—Melfort—Nipawin; and Alex VE5XR—Saskatchewan NW. The following provided communications for the 150-km MS Bike Tour on August 8-9: VE5s AAA, BV, BW, CON, CPU, DCP, EE, FAR, GW, HL, KZ, MH, MU, RJR, RN, SI, TH and UU. And for the Kids Triathlon on August 15 these VE5s helped out: AAA, BV, BW, ELJ, RJR and UU. August 29 found VE5s AAA, BV, BW, DCP, DSC, EE, FAR, IC, IQ, IVK, MNM, MQ, MU, RJR and SHK providing communications for the annual Downtown Dash. My thanks to these dedicated amateurs who help out with these public service events and raise awareness of our hobby. Keep it up guys and gals. Here's hoping for less rain and better band conditions in September than we had in August. 73. ■

Calendar



Attention: Deadline for items is the 20th of the second month preceding month of publication. For example, information should reach *QST Canada* by January 20 to be included in a March issue.

Fort Langley, BC: Special-event station VF7L will be on the air on 1992 November 19-23. See "Happenings" on page 4 this *QST Canada*.

Guelph, ON: Central Ontario Regional Amateur Radio Annual Banquet, Saturday, 1992 November 7 at Desert Inn, 61 Woodlawn Road West. Jointly hosted by Guelph ARC and Kitchener-Waterloo ARC. Cocktails at 1830, dinner at 1930. \$35 per couple, \$20 single. Facilities for 400. Music: Black Forest Band. For tickets and information contact Marg or Gordon Wright, Tel (519) 836-5783 or Gord Gibson, VE3NOK, Tel (519) 893-5148.

Guelph, ON: Special event station VG3W, 1992 November 7-11 from the McCrae House Museum to honour our war dead. See "Happenings".

Knokke, Belgium: Special-event station ON4CLM, 1992 October 31—November 8. See "Happenings".

Newmarket, ON: 16th Annual Newmarket Hamfest Saturday, 1992 November 14 at Huron Heights Secondary School off Davis Drive. Opens at 0900. Admission: \$5. Over 200 vendors including manufacturers and commercial vendors. Plenty of parking. Refreshments and extra space for socializing. Six-foot vendor tables (up to three): \$15 each. Talk-in on VE3YRC, 147.225 MHz (+).

Tasmania, Australia: Throughout November, special-event station V17AJT will mark 350th anniversary of Abel Tasman's discovery of Van Diemen's Land (Tasmania) in 1642. See "Happenings".

QST QSO Award Party: 1992 November 8, 0000-2400 UTC. Sponsored by CRRL. Work up to twelve QST stations across Canada on 15, 20, 40 and 80 metres. ■

A Tribute to VE2AB

Ten years ago, Jacques Pamerleau, VE2AB, was appointed coordinator of Réseau d'Urgence, the RAQI provincial emergency network. Thanks to his efforts, this network has earned an enviable reputation for effective service in times of emergency. Under his capable direction, the network has provided emergency communications in a wide variety of incidents including major snowstorms, earthquakes, floods, tornadoes, and forest and fire fires. His column "Ici VE2RUA" in the RAQI journal, *Radio Amateur du Québec*, has done much to stimulate the organization of local emergency communications groups, and has provided expert advice and guidance on a wide variety of emergency preparedness topics.

Wishing to pursue other endeavours, Jacques decided in August to retire from his position. He leaves a highly effective organization, ready to assist whenever called upon. Merci, Jacques, de la part de tous ceux servi par le Réseau d'Urgence du Québec.

12-VOLT CONNECTORS

The life of a standardizer is never easy! In this column last April, I proposed the adoption by all Canadian ARES groups of a standard power supply connector for their radios. The idea was to permit ready interchangeability during a disaster, when radios might be moved to locations where they would be powered from batteries, generators or other 12-volt supplies. My recommendation was a two-pin cord connector, Radio Shack part number 274-8001. I asked for your views on this or an alternative.

The response was far from overwhelming! Less than a dozen responded, and of these only 60% favoured my proposal. Bill, VE3GPR, who agreed, reminded me that he had made the same suggestion in an article in *TCA* back in June 1979. Pat, VE3KJQ, made a similar suggestion in the March 1992 the *OVMRC Rambler*.

A few amateurs preferred the Canadian Tire two-pin trailer connector, and one amateur felt that a Jones connector was ideal. Not unnaturally, it seemed that each person who had equipped a station with a certain connector wanted to see it adopted as the Canadian standard.

In view of the weak response and the lack of consensus, I am withdrawing my suggestion for establishing a national standard. I have equipped my own station with the Radio Shack connector, and have put in my emergency kit appropriate adapters so my rigs can be used with

other power sources in this area.

GOALS FOR 1993

As the year draws to a close, ARES groups may wish to set some goals for next year, while individuals are pondering their own New Year resolutions. One way

is to seek suggestions at a meeting of members, and hopefully arrive at a consensus. Such a list should be ambitious, but realistic. It should perhaps show the date by which each item is to be achieved. Here is a list of goals that other groups have set in recent years:

Field Organization Reports August 1992

CRRL Section Emergency Coordinator Reports

No reports available this month. Total ARES membership is currently 1053:

CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Dlvd	Total
VE1YS	1	20	23	0	44
VE1BTV	0	24	19	0	43
VE1VAR	2	11	9	0	22
VE2ALE	29	67	256	9	361
VE2ED	0	10	4	6	20
VE2GOP	0	34	40	0	74
VE3CNE	253	15	95	0	363
VE3ORN	4	70	211	6	291
VE3AJN	0	89	66	3	158
VE3HZQ	3	61	85	5	154
VE3GSQ	0	63	46	0	109
VE3CYR	0	77	30	0	107
VE3GNW	0	40	44	0	84
VE3GT	0	32	48	1	81
VE3DVE	1	27	41	5	74
VE3BDM	0	30	41	1	72
VE3WV	0	43	4	0	47
VE3AAU	1	14	25	0	40
VE3SB	0	12	18	0	30
VE3DBG	1	4	18	2	25
VE3MNI	2	6	8	5	21
VE3KXB	0	7	11	0	18
VE3PXR	1	5	8	2	16
VE3FS	0	8	4	1	13
VE3LPM	0	3	7	3	13
VE3KCZ	1	5	4	2	12
VE3GKB	0	5	2	4	11
VE3BAJ	0	2	6	2	10
VE3NVJ	0	1	6	0	7
VE4JR	0	57	21	2	80
VE5KJ	8	47	39	3	97
VE5JML	0	5	0	0	5
VE6CE	19	14	25	1	59
VE6CPP	0	18	18	0	36
VE6AKY	1	2	2	2	7
VE7BNI	19	222	278	38	557
VE7ANG	1	68	69	6	144
VE7BCL	0	95	34	5	134
VE7CCJ	8	40	44	6	98
VE7OM	3	26	28	4	61
VE7FB	5	16	11	4	36
VE7BCF	3	22	8	0	33
VE7XA	0	12	18	3	33
VE7FRZ	2	17	10	0	29
VE7FRE	0	16	10	0	26
VE7BZI	9	7	9	1	26
VE7BOP	4	9	7	2	22
VE7SR	0	11	9	1	21
VE7WI	0	8	11	0	19
VE7FLY	1	6	10	0	17
VE7ALV	1	8	1	4	14
VE7DJ	3	8	3	0	14
VE7DKS	0	11	2	0	13
VE7BUJ	3	4	3	0	10
VE7VO	0	5	3	0	8
VE7CZW	0	6	1	0	7
VE7GKA	0	5	0	0	5

National Traffic System

Net (Mgr)	Sess	QNI	QTC
APN (VE1YS)	29	106	0
KTN (VE3AJN)	13	111	11
NPN (VE3NDI)	31	363	14
OLN (VE3POJ)	31	1018	30
OPN (VE3AJN)	31	634	298
OQN-D (VE3ORN)	29	72	23
OQN-E (VE3CYR)	28	135	88
OQN-L (VE3GSQ)	28	86	27
MEPN (VE4LB)	31	949	19
MMWX (VE4TE)	31	532	17
SEPN (VE5CJ)	30	1161	12
APSN (VE6AKY)	31	823	11
ATN (VE6CPP)	31	137	62
BCEN (VE7BCL)	31	1122	506

Brass Pounders' League

This listing is available to amateurs who report to their SM a traffic total of 500 or a sum of originations and delivery points of 100 or more for any calendar month. All messages must be handled on amateur frequencies, using standard ARRL-CRRL form, within 48 hours of receipt.

BPL: None this month

Public Service Honour Roll

(1991 Revision) This listing is for amateurs whose public service performance during the month indicated qualifies for 70 or more points in the following eight categories (as reported to their SM). Maximum points per category: (1) Checking into a public service net using any mode, 1 point each, maximum 60; (2) Acting as a Net Control Station (NCS) for a public service net using any mode, 3 points each time, maximum 24; (3) Performing assigned liaison between public service nets, 3 points each time, maximum 24; (4) delivering a formal message to a third party, 1 point each, no maximum; (5) Originating a formal message from a third party, 1 point each, no maximum; (6) Serving as a CRRL SM or field appointee, 10 points for each office or appointment, maximum 30; (7) Participating in a communications network for a public service event, 10 points each event, no maximum; and (8) Providing and maintaining an automated digital system that handles messages in standard ARRL-CRRL format, 30 points. Those qualifying for Public Service Honour Roll 12 consecutive months, or 18 months out of 24, will earn a special certificate.

PSHR: VE3ORN (228), VE3AJN (131), VE3BDM (129), VE3CYR (128), VE3GNW (128), VE3GSQ (128), VE3HZQ (116), VE3GT (114), VE3FS (81), VE3AAU (79), VE4LB (77)

Service and Specialized Nets

Independent Net Managers: Please send your reports to CRRL, Box 56, Arva, ON N5Y 4J9.

Net (Mgr)	Sess	QNI	QTC
ONTARS	31	12158	0
GBN (VE3WV)	29	88	29
GBSSN (VE3WV)	29	98	43
Aurora 1 (VE4AHG)	29	969	8
Aurora 2 (VE4FP)	31	1376	2
Prairie WX (VE5EX)	30	691	0
Sask ARES (VE5FY)	5	209	0
Sask 2-Metre (VE5HG)	31	711	4
MJARC 2-Metre (VE5JJP)	31	461	0
ARG 2-Metre (VE5EE)	30	953	1
Alberta ARES (VE6AKY)	8	227	3

- creating or revising the local emergency communications plan
- designing and holding specific emergency exercises
- training members in message handling, net operations, equipment repairs
- developing or improving liaison with bodies that may be served in emergency
- testing communications at potential emergency sites
- obtaining generators, batteries, transceivers, and communications vehicles
- fabricating and installing two-metre antennas at hospitals, fire halls etc.
- arranging Red Cross Level I training for members

Once the list has been compiled, assignment of the tasks to specific members can be made.

ESTABLISHING AN EMERGENCY STATION

Vic Henderson, VE3FOX, has written a series of interesting ARES columns in *The Peel Signal*. I particularly liked the following, from last April's issue:

"During most emergency situations it will be necessary to establish one or more relatively permanent station. For example, when assisting Red Cross it would be required to set up stations at Red Cross offices and at evacuation centres.

"When first setting up a station, you should identify yourself to the person in charge of the shelter or command post,

and choose an area that is suitable for both of you. If inside a building, this should be near an outside wall for best radio reception, or at least accessible to the outside so that an external antenna can be erected. It should be far enough from the action so that noise is not a problem—for you and for non-radio people—but close enough that you are accessible to those you are serving. A separate room with a door would be ideal.

"There should be three persons at the station at all times: 1) a supervisor to oversee operations and interface with the site manager (this person must be a trained, active ARES member), 2) a logger to prepare and check messages and handle filing and distribution, and 3) an operator to handle transmitting and receiving. These duties may be rotated throughout the shift.

"The supervisor must start a log to do the following:

- sign on and off duty
- note shift changes (times and operators)
- record informal traffic handled (formal traffic is handled on CRRL radiogram forms)
- note other events affecting communications.

"Establish the routing for messages within the shelter as early as possible. Determine the person from whom you will receive messages, and to whom you will deliver messages. Also determine

how messages should be processed. Any formal messages between officials should be in standard CRRL radiogram format and signed by that official. Informal traffic can be passed between amateurs or on-site officials without using message forms.

"For continuity of operation, shifts should always overlap. Never leave the station unattended. When a new shift reports for duty, the new supervisor should always contact the site manager and identify himself as the new supervisor for communications.

"All transmission must be done via controlled traffic nets, through a controller who will determine the appropriate method of completing the exchange. Do not call another station without first clearing the call with the net controller. To clarify the location of stations in the event of a major emergency involving many stations, it is advisable to use tactical call signs (e.g. "Crash Site One"). You must still identify periodically with the amateur call sign to keep things legal.

"Keep the radio room free of all non-operating personnel so that operators will not be distracted by the inevitable discussions that will occur. By following these guidelines, it should be possible to quickly establish a station and maintain its effectiveness throughout any situation."

That's it for now. Keep those notes and letters coming. —Bob Boyd, VE3SV ■



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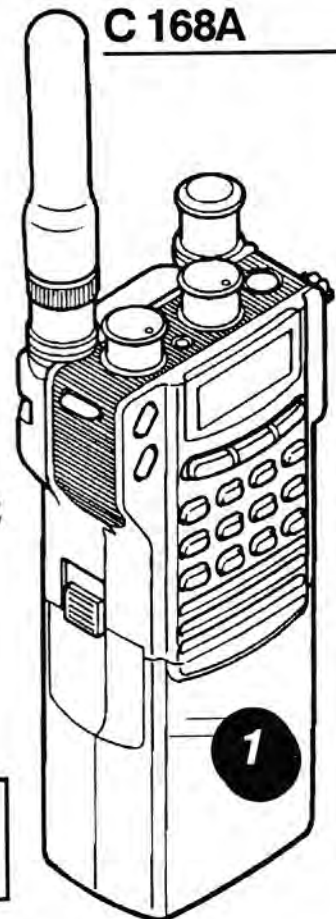
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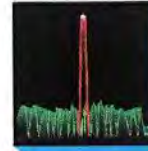
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