

QST 

CANADA

Official Journal of the Canadian Radio Relay League
Journal officiel de la Ligue Canadienne de la Radio Amateur

**Skitrek
Wrapup**

**CRRL
Board
Meeting**

**\$2.50
September
septembre
1988**





ALINCO ELECTRONICS INC.

20705 South Western Ave., Suite 104 Torrance, CA 90501 • (213)618-8616

Tiny, Tough & Terrific



The **NEW** Generation of T.T.& T. Hand Held Transceivers From Alinco Are Just Around the Corner!

Introducing The DJ-100T 2 Meter Hand Held Transceiver

- **Tiny** = 1-3/16" D x 2-3/8" W x 6-5/8" H
- **Tough** = 6.5 Watts (With Optional EBP-8NAZ Nicd Battery Pack)
- **Terrific** = Features and Benefits
 - LCD with Switchable Backlighting
 - 10 Memories
 - BNC Antenna Connection
 - 16 Button DTMF Pad
 - Easily Accessible Dip Switches For Encoding Sub Audible Tones
 - Battery Save Draws 15ma For Extended Battery Life
 - .16uv Sensitivity
 - 144.00 MHz to 147.995 MHz
 - CAP and MARS Modifiable
 - Standard Battery, EBP-9NAZ Has DC/DC Converter Built In
 - Stores Standard Repeater Offsets In Memory
 - Full Range of Accessories
 - 220 MHz and 440 MHz To Follow Shortly



AVAILABLE AT AUTHORIZED DEALERS
ACROSS CANADA

CANADIAN DISTRIBUTOR

TEMPER SALES CANADA INC.

5035 North Service Rd., Unit D-16, Burlington, Ontario L7L 5V2
TEL: 1-416-332-5944

FAX: 1-416-332-5946

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



The Canadian Radio Relay League (CRRL) 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 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. CRRL is incorporated under the Canada Corporations Act. Its affairs are governed by a seven-member Board of Directors elected every two years by the CRRL general membership.

CRRL is noncommercial, and no one who could gain financially by the shaping of its affairs is eligible for membership on its Board. "Of, by and for the Canadian Radio Amateur", CRRL 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 CRRL Headquarters, Box 7009, Station E, London, ON N5Y 4J9 (519-660-1200).

Officers and Directors

President: Thomas B J Atkins, VE3CDM*, 55 Havenbrook Blvd, Willowdale, ON M2J 1A7 (416-494-8721)

Honorary Vice President: Noel Eaton, VE3CJ

Vice President: Harry MacLean, VE3GRO*, 500 Riverside Dr, London, ON N6H 2R7 (519-473-1668)

Secretary-Treasurer: William Loucks, VE3AR

Atlantic Director: Andrew McLellan, VE1ASJ*, 2316 Rothesay Rd, Saint John, NB E2H 2K5 (506-847-5656)

Quebec Director: Claude Brunet, VE2ZZ*, 1022 Marguerite Bourgeois, Trois Rivières, PQ G8Z 3S9 (819-375-4300)

Ontario Director: Raymond Perrin, VE3FN*, 128 Withrow Ave, Nepean, ON K2G 3N7 (613-225-8132)

Midwest Director: William Gillespie, VE6ABC, 10932 68 Ave, Edmonton, AB T6H 2C1 (403-438-2510)

Pacific Director: David Fancy, VE7EWI*, 14455 104A Ave, Surrey, BC V3R 1R2 (604-584-6517)

Staff

General Manager: Raymond Staines, VE3ZJ

Field Services Manager: Jack Strangleman, VE3GV

Awards Manager: Garry Hammond, VE3XN

Outgoing QSL Bureau Manager: Don Welling, VE1WF, Box 113, Rothesay, NB E0G 2W0 (506-696-2913)

General Counsel: B Robert Benson, QC, VE2VW, Suite 1600, 2020 University Ave, Montreal, PQ H3A 2A5 (514-288-1744)

QST Canada

Publisher: Thomas B J Atkins, VE3CDM

Editor: Harry MacLean, VE3GRO

Contributing Editors: Bob Boyd, VE3SV, Garry Hammond, VE3XN, George Murphy, VE3ERP, Mitch Powell, VE3OT, Dana Shtun, VE3DSS, Ray Staines, VE3ZJ, Jack Strangleman, VE3GV

Advertising: Al d'Eon, VE3AND, 22 Broadlands Blvd, Don Mills, ON M3A 1J2 (416-447-9360)

Production: WEBCO Division of Bowes Publishers, Ltd, Hyde Park, ON N0M 1Z0

*Member, CRRL Board of Directors

QST Canada, the official journal of the Canadian Radio Relay League, Inc (CRRL), is published twelve times a year by CRRL Publishing, Inc, Box 7009, Station E, London, ON N5Y 4J9 (519-660-1200). Membership in CRRL, which includes *QST* and *QST Canada*, is \$39 a year. Discounts are available for seniors over 65 and for multi-year memberships. Contact CRRL for details. Copyright 1988 by CRRL Publishing, Inc. Printed in Canada.

“It Seems to Us... /Il nous semble...”

A New Direction

At the 1988 Annual Meeting of the CRRL Board of Directors, Board members voted to move in a new direction: to make CRRL membership available *with or without QST*.

What were the reasons for this move? There were at least three.

First, the CRRL Board felt strongly that the price of CRRL membership with *QST* had to go up. In April, the US Postal Service announced that the cost of mailing *QST* to Canada would increase from \$US 0.76 per copy (\$US 0.84 for the larger issues) to \$US 1.06 (\$US 1.20 for the larger issues). You don't have to be a mathematician to figure out that, in Canadian funds, this represents an increase of \$5 per year per member. In addition, CRRL was already covering an increase in the cost of *QST* itself, about \$1 per year per member. Total bill: \$6 per year per member.

An increase of this magnitude translates into \$35,000 per year. If CRRL had simply absorbed this increase, it would have played havoc with CRRL's ability to provide representation and service. Thus, the dues had to go up. Now an increase in dues in any organization always causes a few members to rethink their membership, and the CRRL Board wanted to maintain CRRL membership at its present high level. Thus the decision to offer an alternative: a less expensive a form of membership without *QST*.

Second, the CRRL Board knew that, for several years, there had been a need for this kind of membership. Certainly as long as we have been with CRRL, we have met amateurs who wanted to join the organization and support its good work, but who had only a borderline interest in *QST*. A few even sent money. Only recently, CRRL Headquarters received a \$20 bill from an amateur who felt this way. The money was added to the treasury under "donations" and CRRL was grateful, but there was no way that CRRL could offer him membership. Now that has changed.

Finally, the Board's decision was an affirmation of CRRL's autonomy from ARRL. For many years, CRRL depended on ARRL to provide CRRL members with an official journal. And as long as *QST Canada* remained a supplement to *QST*, one could argue that CRRL was still depending on ARRL. The Board's decision has put *QST Canada*, however

modest it may be, into the ranks of stand-alone publications. It eliminated a last bit of dependence on ARRL. National Amateur Radio societies have their own independent journals, and now, CRRL does too.

Thus, effective immediately, CRRL membership is available *with or without QST*. We hope everyone understands that CRRL membership without *QST* is not second-class membership. All CRRL members, whether they receive *QST* or not, will continue to receive *QST Canada* (either mailed with *QST* or mailed alone), have full use of the CRRL Outgoing QSL Bureau, and receive discounts on books and materials ordered from CRRL. All members who are licensed will continue to be eligible for appointments in the CRRL Field Organization, to run for CRRL elected office and to vote in CRRL elections. The only difference from before will be that some CRRL members will receive *QST* while others will not.

Cost of CRRL membership *with QST* is now as follows:

Regular: 1 yr:\$45 2 yrs:\$86 3 yrs:\$126
Senior: 1 yr:\$42 2 yrs:\$80 3 yrs:\$117

Cost of the new CRRL membership *without QST* is as follows:

Regular: 1 yr:\$27 2 yrs:\$50 3 yrs:\$72
Senior: 1 yr:\$24 2 yrs:\$44 3 yrs:\$63

Family and Blind memberships continue to be available at \$3 per year.

Two last thoughts. In a sense, it is unfortunate that the increase in dues for CRRL membership with *QST* comes at a time when CRRL is just getting started with *QST Canada*. Many people will think that the real reason for the increase is to pay for producing the new publication. This is not the case. Cost of producing *QST Canada* is covered totally by revenues earned from advertising. (Now get out there and support those advertisers, hi!) *QST Canada* is paying its own way.

Finally, we hope all of you will continue to receive *QST*. *QST* remains one of the finest Amateur Radio journals in the world. It is part of our CRRL heritage. Whether your interests are operating or technical, *QST* will extend your horizons beyond our national boundaries. By continuing to receive *QST*, you'll continue to be a more knowledgeable radio amateur.
—Harry MacLean, VE3GRO

September/septembre 1

KENWOOD

KENWOOD TRANSCEIVERS and RECEIVERS ARE NOW AVAILABLE FROM: ATLANTIC HAM RADIO LTD.

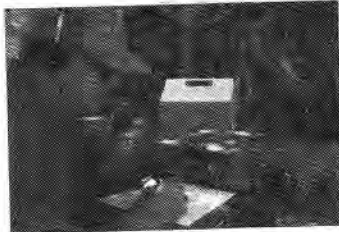
Affordable DX-ing!

TS-140S

HF transceiver with general coverage receiver.

Compact, easy-to-use, full of operating enhancements, and feature packed. These words describe the new TS-140S HF transceiver. Setting the pace once again, Kenwood introduces new innovations in the world of "look-alike" transceivers!

- **Covers all HF Amateur bands with 100 W output.** General coverage receiver tunes from 50 kHz to 35 MHz. (Receiver specifications guaranteed from 500 kHz to 30 MHz. Modifiable for HF MARS operation. (Permit required))
- **All modes built-in.** LSB, USB, CW, FM and AM.
- **Superior receiver dynamic range** Kenwood DynaMix™ high sensitivity direct mixing system ensures true 102 dB receiver dynamic range.



- **New Feature! Programmable band marker.** Useful for staying within the limits of your ham license. For contesters, program in the suggested frequencies to prevent QRM to non-participants.
- **Famous Kenwood interference reducing circuits.** IF shift, dual noise blankers, RIT, RF attenuator, selectable AGC, and FM squelch.

- **M. CH/VFO CH sub-dial.** 10 kHz step tuning for quick QSY at VFO mode, and UP/DOWN memory channel for easy operation.
- **Selectable full (QSK) or semi break-in CW.**
- **31 memory channels.** Store frequency, mode and CW wide/narrow selection. Split frequencies may be stored in 10 channels for repeater operation.
- **RF power output control.**
- **AMTOR/PACKET compatible!**
- **Built-in VOX circuit.**
- **MC-43S UP/DOWN mic. included.**

TS-940SAT HF Transceiver
 TS-440SAT HF Transceiver
 TS-440S HF Transceiver
 TS-140S New HF Xcvr
 TS-680S New HF & 6M Xcvr
 PS-430 Power Supply
 PS-50 Heavy Duty Pwr Supply
 R-5000 New Gen Cov Receiver
 R-2000 Gen Cov Receiver
 TM-721A Deluxe 2M/440 Dual
 TH-25AT New Mini Handheld
 TH-215A New Deluxe Handheld

KENWOOD PRODUCTS AVAILABLE:



TS-680S

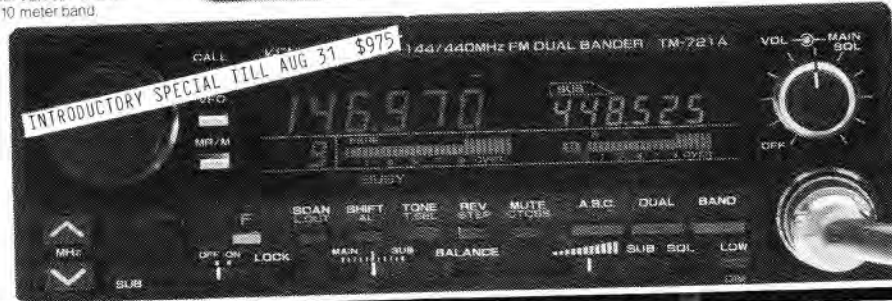
All-mode multi-bander

- 6m (50-54 MHz) 10 W output plus all HF Amateur bands (100 W output)
- Extended 6m receiver frequency range 45 MHz to 60 MHz Specs guaranteed from 50 to 54 MHz
- Same functions of the TS-140S except optional VOX (VOX-4 required for VOX operation)
- Pre-amplifier for 6 and 10 meter band



KENWOOD PRODUCTS ARE IMPORTED INTO CANADA BY ATLANTIC HAM RADIO LTD. and CARRY A FULL 90 DAY WARRANTY BY ATLANTIC HAM RADIO and TRIO-KENWOOD.

TM-721A
Deluxe FM dual bander



Insured Shipping & Handling -- Please add 2% (\$5.00 Minimum) to all orders. Some heavy or long items are subject to freight collect. ONTARIO RESIDENTS ADD 8% SALES TAX AFTER ADDING SHIPPING. All prices are subject to change without notice. Please send 2 first class stamps for catalogue and info requests. Special prices are based on cash or cheque with order. Credit Card orders add 2% to discount prices only.

ATLANTIC HAM RADIO LTD.

Tues.-Fri. 10 a.m.-6 p.m.
 Saturdays 10 a.m.-2 p.m.
 After 7 p.m. Call (416) 222-2506
 For Orders.

NEW!

Icom IC-32AT Dual Band Handy
 138-174, 440-450 Full Duplex
 Lots more.....List \$849

Icom IC-2GAT New 2M Handy
 138-174, 7W 20 Mem.List \$629

Icom IC-4GAT New 440....\$669

Icom IC-3210 New DualBander
 Full Duplex 20 Mem ITMic LCD
 138-174, 440-450...List \$18A

Icom IC-228A/H New 2M Mobile
 25W or 45W 138-174 ITMic LCD
 20 Mem Independent.List \$749

Cushcraft R-4 10 12 15 20M
 Vertical, No Radial....\$399

Cushcraft AP-8 New 8 Band
 Vertical 10-80M.....\$299

Trylon Towers.....Call

Canadian Callbook CRRL..\$ 20

PICK - A - PACKET !!

A.E.A. PK-232-----\$539
 AEA Packratt with Fax---\$ 65
 AEA Compackrat/64 & Fax-\$109
 Kantronics KAM-----\$519
 Kanterm PC-----\$ 65
 Kanterm C-64-----\$ 50
 WeFax PC-----\$ 40
 WeFax Com-64-----\$ 40
 M.F.J.-1278-----\$429
 M.F.J.-1274-----\$329
 M.F.J.-1270B-----\$269
 MFJ-1282 Disk Com64 Vi20\$ 40
 MFJ-1283 Above in Tape--\$ 40
 MFJ-1284 Disk for PC----\$ 40

SUPER SPECIALS !!

Yaesu FT-726R Band Modules:
 HF 15M - 10M Was\$539 Now\$349
 6M 50-54MHz Was\$579 Now\$349
 2M 144-148MHzWas\$449 Now\$199
 430-440MHz Was\$699 Now\$349
 440-450MHz Was\$699 Now\$299
 Yaesu FT-290R-----Now\$499
 Butternut HF-2V Vert-Now\$169
 Kantronics UTU-XI/P---Now\$349
 A.E.A. CP-100-----Now\$349
 Icom IC-27A & Speach-Now\$499
 Icom IC-27H & Speach-Now\$539
 Icom IC-271A All ModeNow1099
 Icom IC-477H A/M----Now\$1499
 Yaesu VP-150Z DL/Meter--\$149
 Yaesu FV-700DM VFO---Now\$199
 Icom IC-290H 25W 2M A/M \$699
 Icom GC-4 World Clock---\$ 99
 Yaesu FT-290R MkII ITMic\$799

Polar Bridge Skitrek Wrapup

Three months across the ice with Amateur Radio — a success!

By David Adams, VE3HBF
R. R. 1
Sutton West, ON L0E 1R0

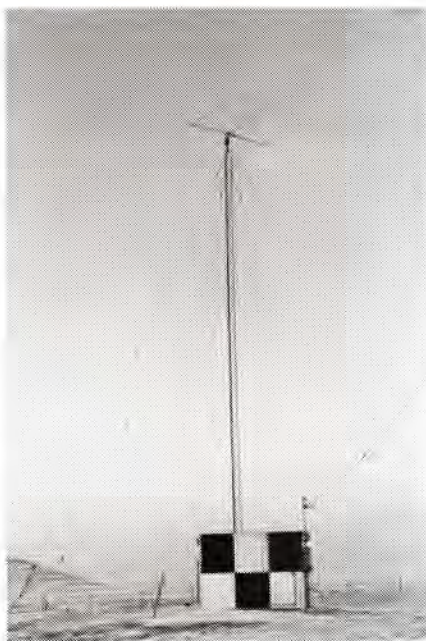
This year, thirteen skiers made polar history by skiing without motorized transport, dogs or sleds from the Soviet Union to Canada by way of the North Pole, a distance of some 1750 km. The four Canadian and nine Soviet skiers reached Ward Hunt Island at 1035 on the morning of June 1, ninety days after setting out from Cape Arktichesky in the Severnaya Zemla Archipelago on March 3. They stepped ashore in line abreast so that no one could claim to be first, symbolizing the teamwork and cooperation that made this unique event successful.

This splendid feat, the Polar Bridge Skitrek Expedition, was supported by an Amateur Radio communications network that also made history. Never before had this kind of international expedition relied solely on Amateur Radio for all its communications needs.

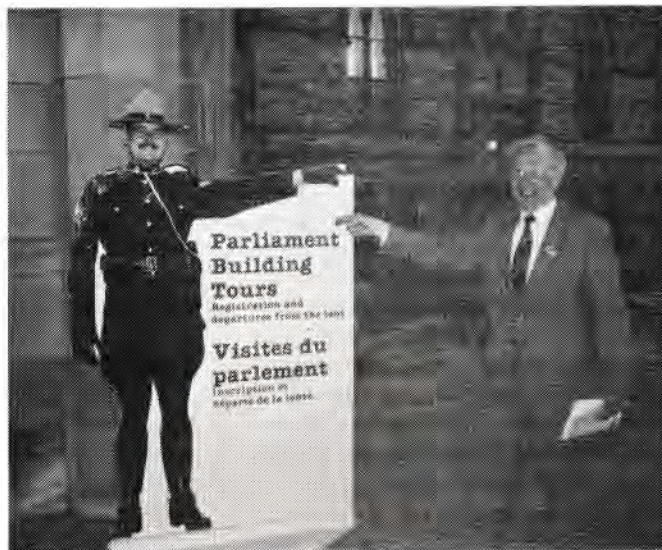
Coordinators of the Amateur Radio effort were Tom Atkins, VE3CDM, President of the Canadian Radio Relay League, and Leonid Labutin, UA3CR, a veteran of several previous Soviet polar expeditions. Leonid approached Tom in March 1987, asking for the support of Canadian amateurs. The basis for cooperation would be a unique reciprocal operating and third-party traffic agreement between the two countries, the first such agreement ever for the USSR, allowing Soviet and Canadian amateurs to operate from each other's countries, and to handle messages between them, without restrictions, through base stations in the Arctic.

Chief Operator Barry Garratt, VE3CDX, recruited the team of Canadian operators that would man the Canadian base station at Resolute Bay, C18C. Both Tom, VE3CDM, and Barry went to Moscow to make final arrangements with Leonid and the Soviet amateurs. While visiting UK3KP, the club station of *Kom-*

somolskaya Pravda (a Soviet youth newspaper), Tom and Barry became the first Canadians amateurs to operate from the USSR under the newly signed reciprocal agreement. Soon after, Rick Burke, VOISA joined Leonid at EX0CR, the main Soviet base station at Sredniy Island, some 200 km south of Cape Arktichesky, the point from which the skiers started their trek. Rick's own call, VOISA/UA0, was often heard S9 by scores of Canadians and others monitoring further to the south, as he passed traffic to Resolute Bay, Toronto and Ottawa.



Top right: Leonid Labutin, UA3CR, Soviet coordinator for Skitrek communications, meets a real Canadian on the steps of the Parliament Buildings, Ottawa. Above: C18C at Resolute Bay, NT. Yes, it's a tiny building. Those squares painted on the side measure only 4' by 4'. (VE3CDM photos)



In Ottawa, Ron Bellville, VE3AUM, was the expedition's tireless anchorman, passing messages to and from Expedition Manager Peter Baird and between the skiers and their families, and dealing with the government and the media. In Toronto, it was Tom, VE3CDM, who was besieged with phone calls and visits from the media as he effectively dealt with problems of logistics, movement of equipment and operators, and a score of other matters as new situations arose.

ICOM supplied a full range equipment: HF and VHF transceivers and amplifiers for the base stations, 2-metre FM handheld transceivers and a VHF-AM transceiver that would permit communication with the aircraft bringing supplies for the skiers. The base station equipment, in the hands of Barry, VE3CDX, and his team of experienced operators, provided contacts between the skiers (known as the "moving group"), and their families, their support groups and suppliers, and the worldwide Amateur Radio community. Never before did an expedition like this have communications that functioned so smoothly around the clock, or did more to keep up the morale of its participants through every kind of hardship. Much credit must go to the Soviet operators, most of whom had worked together for many years in the remote and harsh climate of the polar regions, and to the Canadians whose experience and teamwork resulted in plaudits from radio amateurs around the world.

Besides the ICOM equipment, the moving group carried a Soviet-designed miniature transceiver operating on crystal-controlled frequencies in the 20, 40 and 80-metre bands, and a dipole antenna that could be raised on a mast made of 3-4 ski poles connected end to end. All of this was developed over years of Arc-

tic travel and experimentation.

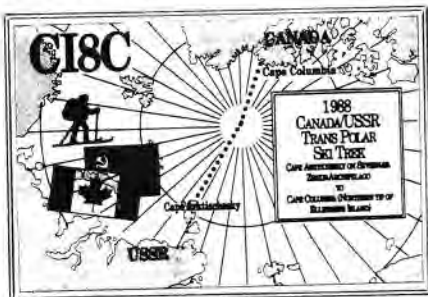
Garth Hamilton, VE3HO, who operated CI8C during the critical first two weeks of the expedition, later became the principal backup for Tom, VE3CDM. Garth maintained a constant watch on expedition frequencies and forwarded messages and technical advice. Olle Ekblom, SM0KV, and his Swedish colleagues also maintained a daily watch throughout the Skitrek, recorded daily satellite position reports, checked in daily with CI8C, and kept an eye on Soviet radio and television reports. Active support also came from AMSAT, through President Vern Riportella, WA2LQQ, Richard Ensign, N8IWJ,



Some of the Skitrek communications group on their visit to Ottawa: (l-r) David Adams, VE3HBF, Stan White, VE3FFD, Tom Atkins, VE3CDM, Ron Belleville, VE3AUM, Leonid Labutin, UA3CR, and Tony Fegan, VE3QF. (VE3CDM photo)



Skiers Dr Max Buxton (left) and Dr Dmitri Shparo, UA3AJH, demonstrate the Soviet-built 10-watt transceiver used by the "moving party" during the Polar Bridge Skitrek expedition. (VE3AND photo)



QSL cards for CI8C were provided courtesy of Fred Hammond, VE3HC, and the Hammond Manufacturing Co of Guleph, Ontario. QSL Manager David Adams, VE3HBF, has sent many thousands of these cards to amateurs all over the world, to confirm contact with Skitrek's Canadian base station at Resolute Bay.

and AMSAT Director John Henry, VE2VQ.

Once the skiers approached the North Pole, "mission control" shifted from Sredniy Island to the base station at Soviet Ice Island NP28, then located only 20-30 km from the pole. Here, Barry, VE3CDX, joined Piotr, operator of 4K0DC, and used his personal Soviet call sign, 4K0DX, for a month of intensive traffic handling.

On April 26, when the skiers arrived at the North Pole, they were greeted by a gathering of almost 200 Soviet and Canadian officials and media people. Barry was up to his ears in official and unofficial duties and was delighted when Mike, G0/PA0BHF, the UoSAT technician from the University of Surrey, UK, offered to assist by operating CI8UA and giving scores of amateurs their first ever QSO with the North Pole. Mike had been flown in with the Soviet group, in recognition of his key role in operating the UoSAT OSCAR II digiwalker that gave the skiers their daily position reports.

Now, CI8C at Resolute Bay became the communications hub. Just before Barry, VE3CDX, left for Resolute, he had a chance to experience a danger that the Soviet team on NP28 faced daily. The ice island split apart, breaking the runway for supply aircraft in two and sending Barry's camera, some supplies and some valuable ICOM equipment to the bottom of the Arctic Ocean.

Canadian Participants in the USSR- Canada Polar Bridge Skitrek Expedition:

Expedition Manager: Peter Baird

The Skiers: Dr Max Buxton, 32, Calabogie, ON; Rev Laurie Dexter, 43, Fort Smith, NT; Chris Holloway, 31, Old Chelsea, PQ; and Richard Weber, 29, Kingsmere, PQ

Canadian Communications Coordinator:

Tom Atkins, VE3CDM/VE8UA

Chief Operator: Barry Garratt, VE3CDX/VE8CDX/4K0DX

Ottawa Communications: Ron Bellville, VE3AUM

The Operating Team: Joe Adams, VE3CPU; Rick Burke, VO1SA; Garth Hamilton, VE3HO; Garry Hammond, VE3XN; Bill Hardie, VE3EFX; Larry Horlick, VE8HL; John Hutchinson, VE3CKF; Terry Keim, VE8TF; Dennis Laliberty, VE3MFP; Garry Letford, VE3COP; Andy McLellan, VE1ASJ; Wally Mansz, VE7HQ; Dale Sackfie, VE3LVW; Staley White, VE3FKD; Don Whitty, VO1QF; Glen Wyant, VE3ICR; and Rolf Ziemann, VE8RZ

Publicity and Information: Al d'Eon, VE3AND

AMSAT Liaison: John Henry, VE2VQ

Packet Radio: Tony Fegan, VE3QF

CI8C QSL Manager: David Adams, VE3HBF

Canadian Base Station CI8C: Resolute Bay, NT, courtesy Transport Canada and VE8MB (Ron Lupack, VE8AZ, operator)

Media coverage of the Skitrek expedition was considerable. The job of keeping everyone informed was handled by Al d'Eon, VE3AND. Al issued regular news releases and made direct contact with key media people. Interviews with an Amateur Radio flavour appeared on *The Journal*, *Midday* and other television programs across the country. Newspapers carried feature articles and radio stations carried frequent reports. Amateur Radio publications around the world, including *QST*, gave prominent coverage to what was clearly recognized as a major milestone in Amateur Radio communications.

Throughout Skitrek, Tony Fegan, VE3QF, provided the Amateur Radio community with OSCAR II orbital data and advice for would-be monitors. Any radio amateur with a 2-metre handheld could hear the digiwalker on board OSCAR II by listening at appropriate times on 145.825 MHz. Many amateurs who were teachers made a strong effort to involve their students in monitoring and charting the progress of the skiers across the Arctic. The Ontario Science Centre in Toronto (an educational facility where, for students of any age, science becomes fun) mounted a display that included a large map, recordings of the digiwalker and a special on-the-air message from CI8C.

Following the completion of expedition, both the Government of Canada and the Soviet ambassador in Ottawa gave official receptions. Energy Minister Marcel Masse presented the Skitrek team to the House of Commons in session. All the Soviet radio amateurs who had provided communications for Skitrek were flown to Canada courtesy of MacDonalds Restaurants, a major sponsor of the expedition. During a four-day stay in Toronto, the entire Soviet team, with Dr Max Buxton representing the four Canadian skiers, took part in a program at the Ontario Science Centre, demonstrating equipment used during Skitrek: skis mounted in a circle like a "rib cage" over which the tent was slipped, and ski poles that could be joined to serve as a support for a dipole antenna.

Questioned in Ottawa about "What next?", the expedition's leader Dmitri Shparo, UA3AJH, hinted at the possibility of an Antarctic expedition. Now that the USSR-Canada Skitrek had laid the foundation for closer cooperation between these two countries, it might be possible for the USSR to achieve something similar with the United States. Hopes were also expressed that members of the Canadian communications team might visit Moscow in the near future.

Expédition "Pont-Polaire" URSS- Canada: les Russes nous visitent

Par Claude Brunet, VE2 ZZ

Claude Brunet, VE2 ZZ, Directeur de CRRL pour le Québec, et son adjoint, Jean-Serge Labelle, VE2 ED, ont pris en charge le groupe de communicateurs Russes (ceux qui ont été impliqués dans l'expédition "Pont-Polaire" URSS-Canada) lors de leur séjour de trois jours à Montréal les 15, 16 et 17 juin dernier. Ces derniers étant sur leur voyage de retour, s'embarquaient à bord d'un avion Aeroflot en partance de Mirabel à 18h00 le 17 juin à destination de Moscou.

Après avoir passé par Ottawa et Toronto, nos distingués visiteurs arrivaient à Montréal au Sheraton Laval mercredi soir



À VE2 ED: (g-d) Yuri, UA3 HR, Jean-Serge, VE2 ED, Vassily, RW3DR, Claude, VE2 ZZ, Léonid, UA3 CR, Peter, UA3 AOC, et Kirill, SWL. (photo VE2 ZZ)

où une rencontre se tenait entre Léonid Labutin, UA3 CR, Directeur-adjoint d'expédition, et Claude, VE2 ZZ, afin de planifier l'emploi du temps qu'ils pouvaient bien nous accorder. A travers leurs multiples autres engagements, deux visites furent donc planifiées pour ce groupe visiteur: la première le jeudi soir au "shack" de Jean-Serge, VE2 ED, et la deuxième au Siège Social de l'Association Radio Amateur du Québec, Inc (RAQI) le vendredi matin.

Le jeudi soir, les Soviétiques ont été accueillis très chaleureusement par Jean-Serge, VE2 ED, et son XYL Estelle. Vendredi matin ce fut au tour de Jean-



Léonid Labutin, UA3 CR (à gauche) remet en cadeau à Jean-Serge Labelle, VE2 ED, une bouteille de "Vodka Russe" lors de la visite du groupe de communicateurs de l'expédition polaire URSS-Canada au QTH de VE2 ED. (photo VE2 ZZ)

Pierre Rousselle, VE2 AX (Directeur-Général de RAQI) d'accueillir avec très grande cordialité nos visiteurs au Siège Social de RAQI.

Les deux groupes respectifs se sont mutuellement offerts quelques petits cadeaux en souvenir de leur passage en territoire Montréalais. D'après les échanges de conversation animée, tenus dans la langue de Shakespeare (l'anglais est la langue seconde en Russie), nos visiteurs ont semblé apprécier notre hospitalité en rajoutant qu'un jour ils espéraient pouvoir réciproquer dans leur propre pays.



A RAQI: (g-d) Vassily, RW3 DR, Kirill, SWL, Jean-Pierre, Directeur Général de RAQI, VE2 AX, Claude, VE2 ZZ, Yuri, UA3 HR, Léonid, UA3 CR, Peter, UA3 AOC, Ron, VE3 AUM et Alex, entraîneur. (photo VE2ZZ)

Letters/Lettres

Conducted By Harry MacLean, VE3GRO

All letters will be considered carefully. We reserve the right to shorten letters in order to have more members' views represented. The publishers of *QST Canada* assume no responsibility for statements made by correspondents.

SKITREK SAFETY THOUGHTS

□ The Canada-Soviet Skitrek was interesting, including the picture of Barry Garratt, VE3CDX, climbing the tower (cover, 1988 July *QST Canada*). I just hope some hams will not get the idea that climbing a tower without wearing a safety belt is OK. —John Brisbane, VE3COY

□ Like take off, eh! We figure that's what Barry Garrett, VE3CDX, will soon be doing (cover, 1988 July *QST Canada*) if he insists on doing hosehead things like climbing a radio tower without wearing a safety belt!—Bob and Doug Mackenzie VE8GWN

[The staff of *QST Canada* received many letters and phone calls on this subject. Barry says he won't do it again.—Editor]

DE VE3SR XYL

To all Ham Radio operators and clubs: Please accept my heartfelt thanks for all you have done for my husband, Jack Ravenscroft, and for me, in your support of the JRSD Fund.

When Jack retired, he was looking forward to coming home (we were from Ottawa) and we settled in Kanata so he could have his Ham Radio and continue "DXing". It was wonderful to have Jack home as, at times, I am disabled and need his help. That is why Ham Radio has been important to both of us.

We've been grateful for the phone calls and encouraging letters. However, we still need

your help to keep us going.

I marvel at the Miracle of the Air Waves. It will always intrigue me. Thank you everyone. —Helen Ravenscroft, XYL VE3SR

VIOLATIONS

We amateurs have had to work hard for our licenses. As a group, we tend to protect and police the privileges allowed by our license class. When violations occur, it reflects not only on the violator but on the whole Amateur Radio fraternity. In the event that a violation is noted on the amateur bands, the following steps are suggested: 1) Tape the infraction, 2) log the time, date, band, transmission type and length, and 3) report the incident to Communications Canada for processing. —John Pedersen, VE3MGR

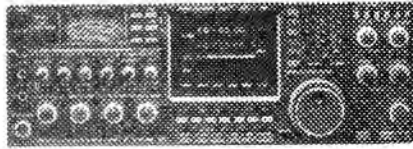
September/septembre 5

ICOM

YAESU

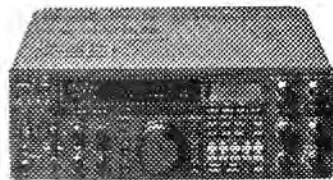
KENWOOD

HF TRANCEIVERS



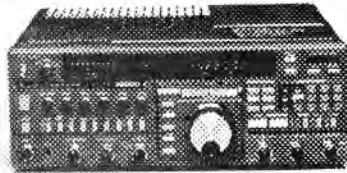
ICOM

IC781	7995
IC761	3699
IC751A	2199
IC735	1599



KENWOOD

TS940SAT	3399
TS940S	3099
TS440SAT	1899
TS440S	1699
TS140S	1449
TS680S	1549



YAESU

FT767GX	2999
FT757GXII	1749
FT747GX	1249

We are a **Factory Authorized** dealer
for Icom, Kenwood and Yaesu!

VHF/UHF TRANCEIVERS



ICOM

IC275A	1769
IC275H	1899
IC475A	1979
IC475H	2279
IC900	879
IC3210	T.B.A.
IC228A	719
IC228H	729
IC32AT	T.B.A.
IC2GAT	569
IC02AT	539
ICu2AT	459

KENWOOD

TS711A	1349
TS811A	1589
TM721A	999
TR751A	949
TM2570A	799
TM2550A	699
TM2530A	649
TM421A	599
TM221A	549
TH215A	529
TH205AT	399
TH25AT	489

YAESU

FT736R	2599
FT212RH	679
FT727R	769
FT23R	399
FT73R	429

Hobbytronique

8100-H Trans Canada Hwy,
South Service Rd.
St. Laurent, Que. H4S 1M5
(514) 336-2423

Hobbytronics

Applewood Village Shopping Center
1077 North Service Rd. #34
Mississauga, Ont. L4Y 1A6
(416) 897-7125

Le tour de l'île de Montréal

Dimanche le 5 juin, fut le jour... le jour où plus de 30 000 cyclistes se sont mis en branle pour parcourir 66 km à Montréal. Le parcours, du Stade Olympique via Sherbrooke est jusqu'au bout de l'Île, ensuite Gouin le long de la rivière Des Prairies jusqu'à O'Brien, à l'ouest de l'Acadie, et ensuite diverses rues en direction du Stade. Quatre relais permettaient de se reposer ou de casser la croûte. Sept autobus et six camions ont permis à ceux qui abandonnaient en cours de route d'être transportés. Environ une quinzaine d'enfants ont été séparés de leurs parents. Au delà de 3000 bénévoles veillaient au bon déroulement de l'activité, incluant

treinte radioamateurs, pour la plupart, membres de l'Union Métropolitaine des Sans-Filistes (UMS), qui assuraient les communications entre les divers responsables, centre de contrôle, relais, camions, autobus, divers points stratégiques le long du parcours et même des cyclistes radioamateurs dans la foule. Les parents et enfants furent rassemblés, les entorses soignées et enfin ce fut une journée bien remplie pour tous, incluant Pierre Fisher, VE2 GGN, responsable de l'organisation des communications par les radioamateurs. Félicitations et remerciements, Pierre, ainsi qu'à tous les radioamateurs qui ont participé. Les répéteurs

utilisés furent VE2 MRC pour les urgences, VE2 RMB pour les relais et enfin VE2 REM pour le parcours. Les deux derniers étant les répéteurs de l'UMS. La couverture fut excellente et les amateurs se trouvaient réellement dans leur élément: Servir Avec la Radio.

Nous n'osons pas donner les noms des amateurs qui ont participé de crainte d'en oublier. Les participants ont eu l'occasion de faire d'intéressantes connaissances et à la fin de la journée, les souhaits n'étaient que des "Au revoir". —*Claude Cossette, VE2 FUR*

CNIB AMATEUR RADIO PROGRAM

Have you ever wondered how the Canadian National Institute for the Blind (CNIB) Amateur Radio Program has been sustained over the past two decades? How CNIB could afford to purchase and lease, on very favorable terms, over 200 HW12 and HW32 transceivers, and more recently, 60 Ten-Tec Argosy II transceivers — along with accessories? The answer is donations.

The CNIB Amateur Radio Program is now conducting a drive for funds. There are three ways to make a tax-deductible donation: 1) A memorial donation: CNIB will inform your next of kin of your thoughtfulness. 2) A do-

nation of cash and/or Amateur Radio equipment. 3) A gift or bequest in your will. This could be cash and/or Amateur Radio equipment. A lawyer can advise you of the wording. Inquiries and donations should be directed to The Manager, Amateur Radio Program, CNIB, 1929 Bayview Ave, Toronto, ON M4G 3E8.

NOTES FROM ALL OVER

□ The Radio Society of Ontario will hold an Annual General Meeting on September 17, location to be announced. Apparently, at this meeting, members will vote on a resolution to dissolve the Society. All amateurs who were RSO members in 1987 have had their membership extended and are eligible to attend.

□ CRRL Secretary-Treasurer Bill Loucks, VE3AR, represented CRRL at the June 14 meeting of the Electromagnetic Compatibility (EMC) Committee of RABC. What was learned? The Department of National Defence is concerned about industrial RF interference affecting military aircraft; residents of Barhaven, Ontario, located adjacent to seven commercial radio installations including CHU, are experiencing severe susceptibility problems in consumer electronic equipment; and across Canada, during the twelve months preceding, Communications Canada received 18,000 reports of "interference". Of these, 2800 were lack-of-immunity or "swamping" problems.

□ Al d'Eon, VE3AND, is putting together a presentation on the recent Polar Bridge Skitrek expedition. If you have any material that might be useful (newspaper clippings, a recording off the air, etc) please contact Al at 22 Broadlands Ave, Don Mills, ON M3A 1J2.

□ Don Welling, VE1WF, Manager of the CRRL Outgoing QSL Bureau, reports that during the first six months of this year, the

bureau forwarded some 78,225 cards to QSL bureaus across Canada, the US and overseas. Use of the Outgoing Bureau is free for CRRL members.

□ *Glasnost* has hit the Soviet Amateur Radio community. Soviet amateurs are now permitted to give their addresses and telephone numbers on the air and print them on their QSL cards. Further, Soviet amateurs are now permitted to contact amateurs in all countries including Israel.

CRRL WRITES CC ON PROPOSED RESTRUCTURING

□ CRRL has written to Communications Canada (CC) expressing concern that CC is going ahead with Restructuring the Amateur Service without further input from the Amateur Radio community. At the February 20 meeting of the CC-Industry Working Group on Restructuring the Amateur Service (in this case the "industry" was Amateur Radio), CC indicated that "nothing was cast in stone" and that there would be a second meeting in May, presumably to work out some of the problem areas in the CC proposal. By mid-July, the meeting had not yet taken place.

MOVED AND SECONDED

Minutes of board meetings usually don't make exciting reading, but the minutes of the July 2-3 CRRL Board Meeting which appear on the "Moved and Seconded" page are well worth delving into. What did the CRRL Board decide? To recommend a new set of band plans for amateur bands between 30 and 1300 MHz, to adopt an increase in CRRL membership dues, forced on CRRL by recent increases in the cost of supplying *QST*, and to offer a new form of CRRL membership without *QST*. What else? To find out, grab a coffee, sit back and read the minutes.



Claude Brunet, VE2 ZZ, Directeur de CRRL pour le Québec, remet en guise de cadeau un répertoire des radioamateurs du Canada à chacun des amateurs de la région de Trois-Rivières qui ont contribué à la correction des épreuves de ce volume. Pauline, XYL de VE2 ZZ, ayant aussi contribué à ce manuel en tant que dactylo a reçu une grosse bise de celui-ci. Sur la photo (g-d): Pierre, VE2 GKX, Normand, VE2 MED, Jacques, VE2 JAD, Claude, VE2 ZZ, Alain, VE2 CAE, Pauline, XYL de VE2 ZZ, et Lionel, VE2 AUS. N'appartait pas sur la photo: Léo-Paul, VE2 DMX. (Le Centre Japonais de la Photo J-159)

CRRL BOOKSHELF

STUDY MATERIALS	NON		STOCK #	POSTAGE	
	MEMBER	MEMBER			
Canadian Amateur Licensing Manual	\$18.75	\$17.00	100	\$1.50	<input type="checkbox"/>
Canadian Amateur Question Bank	10.00	9.00	112	.75	<input type="checkbox"/>
Canadian Amateur Regulations Book	10.00	9.00	190	.75	<input type="checkbox"/>
Canadian Amateur Code Tapes	OT 38.00	34.25	200	2.50	<input type="checkbox"/>
Canadian Advanced Question Bank	10.00	9.00	116	.75	<input type="checkbox"/>
Manuel de formation	18.75	17.00	101	1.50	<input type="checkbox"/>
Banque de questions d'examens premiere	10.00	9.00	113	.75	<input type="checkbox"/>
Banque de questions superieur	10.00	9.00	117	.75	<input type="checkbox"/>
First Steps in Radio	8.00	7.25	470	.75	<input type="checkbox"/>

OPERATING AIDS

Canadian Amateur Call Directory	OT 20.00	18.00	220	1.50	<input type="checkbox"/>
Log Book	OT 3.50	3.00	121	.75	<input type="checkbox"/>
Super Log Book	OT 5.25	4.50	125	.75	<input type="checkbox"/>
Radiogram Forms	OT 2.00	1.75	170	.75	<input type="checkbox"/>
ARRL 1988 Repeater Directory	OT 7.00	6.00	192	.75	<input type="checkbox"/>
World Maidenhead Atlas	OT 2.00	1.75	250	.75	<input type="checkbox"/>
North American Maidenhead Locator	OT 2.00	1.50	800	.75	<input type="checkbox"/>
1988 DXCC Countries List	OT 2.00	1.50	811	.75	<input type="checkbox"/>
1988 Net Directory	OT 2.00	1.50	822	.75	<input type="checkbox"/>
World Map	OT 13.50	12.25	840	2.50	<input type="checkbox"/>

CRRL INSIGNIA

Lapel Pins	OT 2.50	2.50	130	.75	<input type="checkbox"/>
Large Cloth Diamond (5")	OT 3.00	3.00	141	.75	<input type="checkbox"/>
Small Cloth Diamond (3")	OT 2.00	2.00	151	.75	<input type="checkbox"/>
ARES Circular Patch (4")	OT 4.00	4.00	161	.75	<input type="checkbox"/>
CRRL Logo Decals	OT 1.00	1.00	180	.50	<input type="checkbox"/>

ANTENNA BOOKS

1988 Antenna Book	24.00	21.50	411	1.50	<input type="checkbox"/>
RSGB HF Antennas for all Locations	21.25	19.00	330	1.00	<input type="checkbox"/>
Antenna Compendium	15.75	14.25	420	.75	<input type="checkbox"/>
Antenna Notebook	11.50	10.25	405	.75	<input type="checkbox"/>
Novice Antenna Notebook	10.75	9.50	425	.75	<input type="checkbox"/>
Transmission Line Transformers	14.00	12.50	880	.75	<input type="checkbox"/>
Yagi Antenna Design	21.00	19.00	630	1.00	<input type="checkbox"/>

PACKET & COMPUTERS

PACKET & COMPUTERS	NON		STOCK #	POSTAGE	
	MEMBER	MEMBER			
AX.25 Packet Protocol	\$12.75	\$11.50	430	\$.75	<input type="checkbox"/>
#6 Computer Network Conference	14.00	12.50	601	.75	<input type="checkbox"/>
Gateway to Packet Radio	14.00	12.50	900	.75	<input type="checkbox"/>
Get *** Connected to Packet	18.25	16.50	620	.75	<input type="checkbox"/>
RSGB Amateur Radio Software	21.25	19.00	310	1.00	<input type="checkbox"/>

VHF-UHF

Basic Guide to VHF-UHF	10.75	9.50	790	.75	<input type="checkbox"/>
Proceedings 21 Central States VHF	14.00	12.50	910	.75	<input type="checkbox"/>
Proceedings '87 MidAtlantic VHF	14.00	12.50	930	.75	<input type="checkbox"/>
Proceedings '87 Microwave Update	14.00	12.50	920	.75	<input type="checkbox"/>
RSGB Microwave Newsletter Collection	16.75	15.00	340	1.00	<input type="checkbox"/>
RSGB VHF-UHF Manual	32.25	29.00	370	1.00	<input type="checkbox"/>

OPERATING

1988 ARRL Handbook	32.25	29.00	493	2.00	<input type="checkbox"/>
1987 Operating Manual	21.00	19.00	522	1.50	<input type="checkbox"/>
Radio Frequency Interference	5.75	5.25	532	.75	<input type="checkbox"/>
Test Equipment for Radio Amateurs	21.25	19.00	360	1.00	<input type="checkbox"/>

OTHER

RSGB Radio Data Reference Book	21.25	19.00	380	1.00	<input type="checkbox"/>
Passport to World Band Radio	OT 21.25	19.00	871	1.00	<input type="checkbox"/>
Complete DXer	15.75	14.25	440	.75	<input type="checkbox"/>
Fifty Years of ARRL	5.75	5.25	460	.75	<input type="checkbox"/>
Gil	7.00	6.25	860	.75	<input type="checkbox"/>
Low Band DX	14.00	12.50	890	.75	<input type="checkbox"/>
Morse Code - The Essential Language	8.00	7.25	610	.75	<input type="checkbox"/>
QRP Notebook	8.00	7.25	590	.75	<input type="checkbox"/>
Satellite Experimenters Handbook	16.00	14.50	540	.75	<input type="checkbox"/>
Solid State Design	17.00	15.25	551	1.00	<input type="checkbox"/>
200 Metres and Down	6.00	5.50	560	.75	<input type="checkbox"/>
KGATX CQ Ghost Ships	7.00	6.25	851	.75	<input type="checkbox"/>
KGATX Death Valley QTH	7.00	6.25	853	.75	<input type="checkbox"/>
KGATX DX Brings Danger	7.00	6.25	852	.75	<input type="checkbox"/>
KGATX Grand Canyon QSO	7.00	6.25	854	.75	<input type="checkbox"/>
KGATX SOS at Midnight	7.00	6.25	850	.75	<input type="checkbox"/>

CRRL PUBLISHING INC.
PO BOX 7009 STN "E"
LONDON ON N5Y 4J9

Ontario residents must add sales tax for items marked "OT". Tax is calculated on the total of cost and shipping.

Please check items required

CRRL Member? Yes No

POSTAGE Add the amount shown for postage to your order.

HOW TO ORDER Please check the box at the end of the line for each item you want. Complete your name and address below. Enclose your personal cheque, or money order, for the total amount of the order.

SHIP TO:

Name _____ Call _____

Address _____

I enclose \$ _____

Postal Code _____

Signature _____

The CRRL Field Organization Forum

MEET YOUR SECTION MANAGER



VE4JA
JACK G. ADAMS
202 Davidson Ave. E.
Dauphin, MB R7N 2Z4

Jack Adams, VE4JA, was first licensed as VE4AJE in 1980. Over the years, he's been active in almost every aspect of Amateur Radio: ragchewing, DXing, traffic handling, RTTY, AMTOR, packet, and satellites. Jack has served as Manitoba Section Manager since 1983. When not on the air, you'll find him working as a mines inspector for the Manitoba government. His territory covers the entire western half of the province. Interests besides Amateur Radio? Jack served as a volunteer fire fighter and ambulance driver for 23 years, and, of course, there's his family. Jack is married and has four children. This July, Jack was named Manitoba Amateur of the Year. Congratulations, Jack!

Alberta: SM/STM/DEC: VE6ABC, ASM: VE6AMM, SEC/TC: VE6AFO, OO: VE6TY. Field Day has passed for another year. Clubs throughout Alberta active and looking to do it again in 1989. Alberta Motor Association program "Bring 'Em Back Alive" worked well again over the July long weekend. CRRL Board meeting was held on the long weekend as well. Gus, VE6AKY, Net Manager of APSN needs net control stations. Please give Gus your help in keeping our daily net active. Inquiries can be directed to Gus or to Bill, VE6ABC.

British Columbia: SM: VE7FB. British Columbia Public Service Net meets on 3729 kHz at 0130 UTC. High 172, low 119, total 4174. This is Jim, VE3BLO's last month as Net Manager. Thanks for a good year of managing the net. New Net Manager is James Williamson, VE7JN, alias Jim. British Columbia Emergency Net meets on 3651 kHz at 0600 UTC. Net Manager Fergie, VE7EJU, reports 755 check-ins. Net is running smoothly. There are fewer QNILs, perhaps due to holidays. Welcome back from England, Angela, VE7ANG. Net is always looking for traffic. Sure must say thanks to our faithful NCSs for BCEN and RN7. We appreciate newsletters from Victoria, Surrey and Burnaby ARCs. 73

Manitoba: SM: VE4JA. How many of us CRRL members have encouraged new membership? To be effective, we must be strong and to be strong we need a large membership. CRRL is *us*, the membership, and only as good as the people who belong to it. While I'm on the subject of *us*, who in the last year have gone out of their way to help an amateur who is unable or having difficulty helping themselves? We tend to get wrapped up in our own world and forget about others less fortunate. In my opinion, we should not only be known as Amateur Radio operators, we should be known as helpers. Haven't heard much lately on Restructuring the Amateur Service. Question most asked is, "When will Restructuring take place?" There is still casual comment on why should we soften Amateur Radio

Section Managers of the CRRL: For purposes of the CRRL Field Organization, Canada is divided into seven Sections, each headed by an elected Section Manager (SM). Your SM welcomes reports of individual and club activities. CRRL Field Organization appointments are available for a wide range of volunteer interests. Check with your SM for details.

Alberta	William Gillespie, VE6ABC, 10932 68th Ave, Edmonton, AB T6H 2C1 (403-438-2510)
British Columbia	Ernest Savage, VE7FB, 4553 West 12th Ave, Vancouver, BC V6R 2R4 (604-224-5226)
Manitoba	Jack Adams, VE4JA, 227 Davidson Ave E, Dauphin, MB R7N 2Z4 (204-638-9270)
Maritimes-Nfld	Carl Anderson, VE1BQO, 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	Harold Moreau, VE2BP, 80 rue Principale, St-Simon PQ J0H 1Y0 (514-798-2173)
Saskatchewan	*Bruce Rattray, VE5RC, 128 Durham Dr, Regina, SK S4S 4Z2 (306-584-2059)

licensing: "I had to earn mine the hard way. Mind you, I seldom use or listen to CW!" A couple of years ago when I was going to school, we had to use brain power to figure out calculations. Now it's done on calculators or computers. Does this mean students today should not use these? Hope you had a great summer.

Maritimes-Newfoundland: SM: VE1BQO. Many Maritimes-Newfoundland radio clubs mounted Field Day operations in June. Your SM received formal FD messages from VE1WRC, West Cumberland ARC; VE1FO, Halifax ARC; and from the VE1QST operation. Thanks to the Maritimes Phone Net and APN for handling the traffic. The Rossignol Senior Citizens ARC has established VE1RSC at the Queens County Museum in Liverpool, NS. Club members have also set up an exhibit of antique radio equipment at this museum. Halifax ARC special station VE0MMA, aboard the retired hydrographic survey vessel *CSS Acadia* in Halifax, is working CW weekends and holidays on 40 metres (1200-1400 UTC) and 20 metres (1400-1900 UTC). Send news items you wish to appear in this space to your Section Manager.

Ontario: SM: VE3GT, BM: VE3GSA, SEC: VE3GV, STM: VE3CYR, TC: VE3EGO. The Amateur Radio Emergency Service (ARES) plays an important role in the CRRL Field Organization and several recent meetings and exercises serve to emphasize this further. Law enforcement, civil defence and Amateur Radio groups from Canada and the United States were represented at a meeting in Baudette where the emphasis was on a cooperative effort for communications during search and rescue, weather warning or disaster situations on either side of the border. Amateurs now have wide radio coverage via repeater stations near Warroad, Kenora and Souix Narrows, providing extensive coverage of all of the Lake-of-the-Woods area stretching from Karlstad to near International Falls. Canadian amateurs also cover a large portion of the wilderness area north, east and west of Kenora. In the Soo, VE3GF and VE3TNL presented a packet radio demo to the local Disaster Response Team. They were quite impressed. And in Chatham, new EC VE3FUN conducted an exercise involving a downed aircraft, establishing a 2-metre emergency net with 22 active participants. Nice to hear VE3GSQ back on the traffic nets again after an unfortunate accident. VE3LKI is new EC for the Huronia district. VE3MAC has a new TS-140S. The Ontario Phone Net on 3742 kHz, under the guidance of NM VE3BUO, continues to be a real traffic mover. Windsor ARC conducted its first theory exams at the home of club president VE3LFM. Advance dates are October 8 and December 3. Let's welcome new amateurs VE3TFC, VE3TRA, VE3RIG, VE3PZD, VE3PZU and VE3THC, and congratulate VE3PVN and VE3OXQ on obtaining their Advanced. Our sympathies to VE3KK on the passing of his XYL, Maudie.

Quebec: SM: VE2BP, SEC: VE2LYC, STM: VE2EDO, BM: VE2ALE. Club and non-club stations were active for Field Day in spite of very bad weather. Look in November issue of *QST* for results. Le reseau des Joyeux Copains a terminé 15 années d'opération, le 23 juin, 1988. 53066 stations, 6169 heures et 37 minutes, 4229 messages et 1965 records téléphonique. Félicitations à tous. Avec regret, j'ai à vous annoncer le décès de Eugène, VE2 RA.

Saskatchewan: SM: VE5RC. Congratulations to Prince Albert-area new hams Bill K., VE5BF; Dean S., VE5BP; Bob S., VE5BS; Ken B., VE5KB; Fred S., VE5FMS; Ron H., VE5IF; and Gord, VE5GT, and more coming! Other PA news: New repeater installed: Motorola MSR-2000 with new ROMs in the RC-850 controller. Link with Saskatoon abandoned. Minatins Hill being prepared for new repeater site. Next order of club jackets for new hams being readied. PS events: Founders' Day Raft Race on June 19, Longest Day Run on June 25, and then, annual Field Day contest. Jim, VE5EB, has donated Bluebell Hill repeater, VE5BBI, to PA club for their linking project. Thanks to Ron, VE5AB, for this news. VE5AGM sporting a new Butterfly beam. PS events in Regina area on Canada Day: City of Regina Relay Run with VE5s EE, GHC, AGA, AGF, WWW, JML, and YMCA Triathlon at Camp Ta-Wa-Si, Fort Qu'Appelle, with VE5s WM, RN, BW, ELJ and UU. VE5GGC will be the call for the Girl Guides International Jamboree at Echo Valley, Fort Qu'Appelle, July 12-22.

LATE FLASH! ANNOUNCING CRRL VHF-UHF FALL SPRINTS!

Open to VHF-UHF operators throughout North America...

- 2 m: Monday, October 3
- 135 cm: Tuesday, October 11
- 70 cm: Wednesday, October 19
- 33 cm: Thursday, October 27
- 23 cm: Thursday, November 3
- 13 cm: Thursday, November 10

All contests above begin at 1800 local time and end at 0300 local time. Operators may choose their own 4-hour contest period.

6 m: October 29-31

The 6-metre contest begins at 1800 UTC, October 29 and ends at 0300 UTC, October 31. Operators may choose their own 24-hour contest period.

For further information, contact CRRL Fall Sprints Chairman Dana Shtun, VE3DSS, or check for complete rules in *QST* or next month's *QST Canada*.

September/septembre 9

ICOM

Mobile & Hand

Dual band full duplex 25 watt mobile transceiver. Will function as a pager with optional tone squelch unit.



NEW!

ICOM

IC-3210A

Call for price

UT-40 Tone Squelch & Beep Unit \$65.00

NEW!

ICOM

IC-32AT

\$819.00



Dual band full duplex 5 watt handheld transceiver, with Priority Watch. Supplied with BP-70 battery pack.

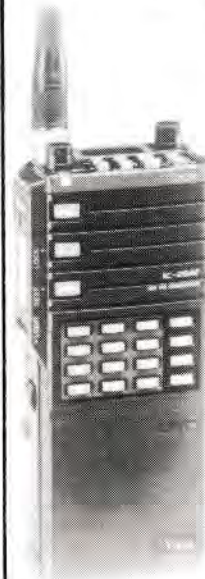
BC35	Desk Charger	\$119.00
BP7	Battery Pack 13.2V 450mAh	\$119.00
BP8	Battery Pack 8.4V 800mAh	\$119.00
CP1	Power Cord w/Clg. Plug	\$ 18.75
HM46	Speaker Microphone	\$ 47.50
LC42	Case (BP70, BP5)	\$ 34.00
LC43	Case (BP7, BP8)	\$ 34.00
UT40	Tone Squelch & Beep Unit	\$ 65.00

NEW!

ICOM

IC-2GAT

\$669.00



2 meter 7 watt splash-resistant handheld transceiver, with DTMF keyboard. Supplied with BP-70 battery pack.

AD12	External Power Adapter	\$ 35.00
BC35	Desk Charger	\$119.00
BP7	Battery Pack 13.2V 450mAh	\$119.00
BP8	Battery Pack 8.4V 800mAh	\$119.00
HM46L	Speaker Microphone	\$ 49.00
LC39	Case (BP70, BP5)	\$ 34.00
LC40	Case (BP7, BP8)	\$ 34.00
UT40	Tone Squelch & Beep Unit	\$ 65.00

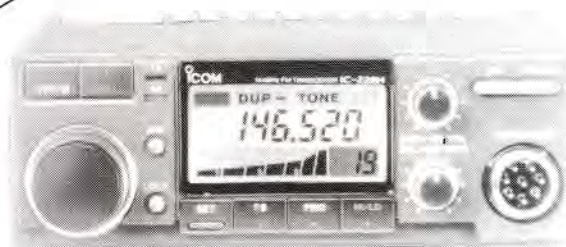


ICOM

NEW!

IC-228H

\$859.00



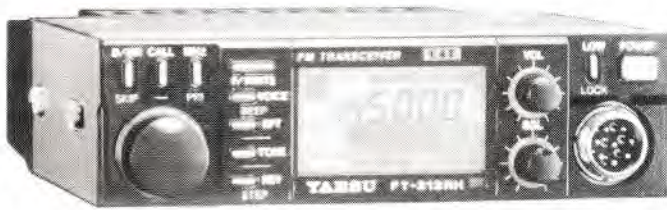
Compact 2 meter 45 watt mobile transceiver, with multi-color Liquid Crystal Display.

UT-40 Tone Squelch & Beep Unit \$65.00

held Transceivers



YAESU FT-212RH \$739.00



Ultra-compact 2 meter 45 watt mobile transceiver. Optional digital voice system for local or remote voice recording and playback available. Includes MH15D8 10-memory DTMF auto-dialler microphone.

DVS-1 Digital Voice System \$169.00

YAESU FT-23R

\$459.00

Compact, full featured microprocessor controlled handheld 2 meter transceiver. Optional DTMF keyboard unit is available.

FIT4	DTMF Pad	\$ 79.00
FNB12	Battery Pack 12V 500mAh	\$105.00
NC18B	Wall Charger (FNB12)	\$ 21.00
NC29	Desktop Charger	\$119.00

We invite you to call or write us for additional information.

YAESU FT-211RH

Reg. \$739.00

Special \$699.00



Compact 2 meter mobile transceiver, 45 watts, with reversible sloped front panel. Includes MH15D8 10-memory DTMF auto-dialler microphone.

COMING SOON!!

YAESU's new compact dual band handheld transceiver!

Watch for it!



COM-WEST
Radio Systems Ltd.

(604) 321-1833

Fax: (604) 321-6560

8179 Main Street Vancouver, B.C. V5X 3L2

Store Hours:

Monday - Thursday 9:00 a.m. to 5:00 p.m.
Friday 9:00 a.m. to 6:00 p.m.
Saturday 9:00 a.m. to 4:00 p.m.



September/septembre 11

Moved and Seconded.../Proposée et appuyée...

MINUTES OF THE 1988 ANNUAL MEETING OF THE BOARD OF DIRECTORS THE CANADIAN RADIO RELAY LEAGUE, INC LA LIGUE CANADIENNE DE LA RADIO AMATEUR, INC 1988 JULY 2-3

AGENDA:

- 1) Roll Call
- 2) Moment of Silence
- 3) Consideration of Agenda
- 4) Approval: Minutes of Board Meeting No 10
- 5) Reports of Officers and Directors
- 6) Report of the Counsel
- 7) Report of the General Manager
- 8) Committee Reports
- 9) New Matters
- 10) Additional Items as per Directors' Requests
- 11) Appointment of Officers for 1989
- 12) Approval of Actions of Executive Committee
- 13) Date of next Board Meeting
- 14) Closing Comments
- 15) Adjournment

MINUTES:

1) Pursuant to due notice, the Board of Directors of the Canadian Radio Relay League, Inc, met in annual session at the Airport Marriott Hotel, Rexdale, Ontario, on July 2 and 3, 1988. President Tom Atkins, VE3CDM, called the meeting to order at 0900 EDST, July 2. The following were present: Vice President Harry MacLean, VE3GRO, and Directors Andrew McLellan, VE1ASJ (Atlantic Region), Claude Brunet, VE2ZZ (Quebec Region), Ray Perrin, VE3FN (Ontario Region), William Gillespie, VE6ABC (Midwest Region) and David Fancy, VE7EWI (Pacific Region). Also present as observers or to present reports were: Honorary Vice President Noel Eaton, VE3CJ; Secretary-Treasurer William Loucks, VE3AR; Counsel Robert Benson, Q C, VE2VW; General Manager Raymond Staines, VE3ZJ; Field Service Manager Jack Strangleman, VE3GV; Public Relations Committee Chairman Al d'Eon, VE3AND; Education Committee Chairman George Spencer, VE3OZW; VHF-UHF Advisory Committee Chairman Dana Shtun, VE3DSS; Assistant Director William Hardie, VE3EFX; and ARRL President Larry Price, W4RA.

2) President Atkins welcomed everyone and then observed a moment of silence in memory of amateurs who had passed away, especially former CRRL Atlantic Director Ronald Hesler, VE1SH.

3) It was agreed to follow the agenda provided.



VE6ABC makes a point at the 1988 CRRL Board Meeting. Left (backs of heads only - sorry!): VE3OZW, VE6ABC, VE7EWI, VE3CJ and VE2VW; Back (l-r): VE3AR, W4RA, VE3CDM, VE3GRO and VE3ZJ; Right (l-r): VE2ZZ, VE3FN and VE1ASJ. (VE3AND photo)

Moved by Mr Gillespie, seconded by Mr Brunet, CARRIED that the Minutes of CRRL Board Meeting 10 be adopted as distributed.

4) Mr Atkins then presented his report. He asked that everyone actively seek out interested and willing amateurs to assume responsibility in some part of CRRL. He noted that two major achievements this year were the compilation and publishing of the *Canadian Amateur Call Directory* and the inauguration of *QST Canada*. He also noted the success of the joint USSR-Canada Polar Bridge Skitrek Expedition for which all communications were handled by Amateur Radio. The Triennial Region 2 General Assembly of IARU would take place in Orlando, Florida, in October, 1989, hosted by ARRL which would celebrate its 75th Anniversary that year.

5) Mr MacLean reported on his activities as Vice President and as Editor of *QST Canada*. In addition to editing and assembling the first three issues of *QST Canada*, he had attended the ARRL Executive Committee Meeting in Montreal, edited and assembled weekly bulletins for the CRRL News Service, served on the Communications Canada-Industry Working Group on Restructuring the Amateur Service, worked with Field Services Manager Strangleman in developing certificates for the CRRL Field Organization, and represented CRRL at hamfests throughout Southwestern Ontario.

6) Mr Loucks, as Secretary-Treasurer, reported that, because of the recent increase in cost of the supplying QST, he expected this year's operation would result in a deficit of several thousand dollars. An immediate increase in membership fees was indicated. He noted that tighter control over expenditures had been instituted, requiring the approval of the Executive Committee for all expenditures over budget.

7) Mr Atkins then asked each Director to comment on previously submitted written reports, which they did.

8) Counsel Benson reported on the current status of customs duty on certain items such as stand-alone transmitters and receivers, power supplies and amplifiers. Apparently, these were unintentionally omitted from a rewrite of the customs regulations, with the result that duty is now being charged. He noted that the Townsend Report on antennas was affecting municipal by-laws and was being extensively quoted. He noted that a trademark application was being made for *QST Canada*.

9) Mr Staines, as General Manager, reported that a display area for *QST* and other items had been set up in the vestibule at CRRL Headquarters and that pre-war *QSTs* would be welcome. He made the point that all expenditures must be in a budget to receive reimbursement and that no commitments above budget should be made without prior approval of the Treasurer.

10) ARRL President Price brought greetings from the ARRL Board and noted that several CRRL officials had attended the ARRL Executive Committee meeting held in Montreal. He stated that the 75th Anniversary of ARRL would be celebrated at the ARRL Convention in Dallas, Texas, in June, 1989. He mentioned that ARRL would welcome any contributions Canadians might make to the WIAW rebuilding fund. \$400,000 would be required; \$150,000 had been received so far.

11) Mr Strangleman, as Field Services Manager, reviewed the work and status of the Field Organization in each CRRL Section. In response to a question, he noted that each "QST" call was assigned to an individual who acted as a trustee for CRRL. He reported good participation in the ARES Cana-

da Net which meets Sundays at 2000 UTC on 14.115 kHz, and noted that work on the new Technical Information Service discussed at the last Board Meeting would begin soon.

12) Mr Shtun, as Chairman of the VHF-UHF Advisory Committee, reported on his work in relation to the wind profilers assigned to frequencies in the 430-450 MHz band, and on the CRRL response to Spectrum 30-890 issued by Communications Canada. He then asked for approval of interim band plans for amateur frequencies between 50-1300 Mhz, as recommended by his committee. Moved by Mr Perrin, seconded by Mr MacLean, CARRIED that CRRL adopt these plans, copies to be available from CRRL Headquarters. He then recommended that CRRL sponsor a series of short VHF-UHF contests, similar to the ARRL Spring Sprints, but in the fall. The Board gave approval for Mr Shtun to proceed to develop these contests.

13) Mr d'Eon, as Chairman of the Public Relations Committee, then reviewed his written report. In addition to his usual activities, he was involved in writing press releases for Skitrek for over 35 major newspapers, many radio and television stations, several magazines, as well as US newspapers and Amateur Radio publications. Thanks were forwarded to Fred Hammond, VE3HC, of Hammond Manufacturing Co for the QSL cards for CI8C, and to David Adams, VE3HBF, QSL Manager for CI8C. Mr d'Eon reported on his work as Advertising Manager for *QST Canada* and the *Canadian Amateur Call Directory*. He recommended that CRRL publish its logo and list of officers and directors in a 400-page reference book called *Sources*. The only commitment would be to purchase two copies a year. The Board agreed with this recommendation.

14) At the last Board meeting, Mr Perrin was appointed to establish an ad hoc committee to study changes in the CRRL By-laws with particular reference to the feasibility of CRRL having vice directors. He reported that no committee had been established, but his personal views were that (1) it was premature to consider the establishment of vice directors, and (2) CRRL's first priority should be to work towards the establishment of a single national organization. The report was received by the Board with thanks.

15) Mr Loucks reported on his investigations into the possibility of CRRL providing low-cost liability insurance for clubs and repeater groups. Because the prices quoted by insurance companies were still high, surveys of such groups indicated little interest. Moved by Mr Brunet, seconded by Mr MacLean, CARRIED that this investigation into insurance be terminated.

16) Mr MacLean, as Editor of *QST Canada*, then presented a report. He outlined his production schedule, the process used to produce each issue, and some alternate methods of production which would reduce time required and, ultimately, costs. He was requested by the Board to explore these further and develop a specific recommendation. Mr Atkins then proposed that copies of *QST Canada* be sent to the Department of National Defence for distribution to amateurs in the military overseas, and also to Communications Canada offices across Canada, and further, that CRRL establish a means of supplying *QST Canada* to members temporarily out of the country. These proposals were approved by the Board.

17) Mr Staines reported that he had received 9000 replies to the request for information for the *Call Directory*. Added to listings from clubs and provincial Amateur Radio societies, this gave over 23,000

listings. Sales of the *Directory* were going well. Thanks went to all amateurs who supported this endeavour.

18) Mr Atkins then reported on the Skitrek project. He noted that congratulations on a job well done had been received from many sources: Canada, the US and overseas, including the Canadian Department of External Affairs and Communications Canada. Mr Atkins voiced his personal thanks to Chief Operator Barry Garratt, VE3CDX, and the team of Canadian radio amateurs that had made the venture so successful. On motion of Mr MacLean, the Board extended a hearty vote to thanks to Mr Atkins for his untiring efforts on this project. Mr Atkins then presented two achievement certificates to Mr McLellan for awards won from the Radio Sports Federation of the USSR.

19) Mr Spencer, as Chairman of the Education Committee and liaison to Communications Canada (CC) and CARF, reported on developing the questions for the CC Amateur Radio examinations. CRRL Past President Mitch Powell, VE3OT, and Ralph Zbarsky, VE7BTG, were assisting him in this work. The questions bank project had been completed, but before the questions could be transmitted to CC, a new document was received which renumbered questions for the proposed Restructured Amateur Service. This created much additional work.

20) Mr MacLean reported on progress on Restructuring the Amateur Service. Several meetings, one formal, the rest informal, had been held with CC. All members of the CRRL Board strongly objected to the CC requirement that amateurs without the Class D technical certificate be limited to "commercial transmitting equipment only". A draft of a letter to CC stating CRRL's position on this and other matters related to Restructuring the Canadian Amateur Service, was approved.

21) Mr Atkins, as President, then proposed the establishment of three standing committees and two ad hoc committees with terms of reference as follows:

STANDING COMMITTEES:

Education: Maintains a continuing liaison with Communications Canada (and CARF) on all matters pertaining to the qualifying and training of radio amateurs in Canada and is responsible to the CRRL Board for creation and publication of all CRRL training materials for all classes of licence.

Publications: Supervise and approves all printed material distributed in quantity bearing the name CRRL, to ensure accuracy and quality.

QST Canada: Is responsible for the production and publication of *QST Canada*. **AD HOC COMMITTEES:**

Constitution and By-Laws: Reviews and updates the Constitution and By-Laws of CRRL, Inc, to reflect CRRL's autonomous status and the current thinking of the CRRL Board. Makes interim recommendations to the Board 90 days prior to the Board's 1989 meeting and final report at that 1989 meeting.

Strategic Planning: Considers alternatives and produces a plan for CRRL for the next five years. Makes preliminary report to the CRRL Board no later than January 31, 1989.

The Board approved these terms of reference. Mr Atkins then made the following appointments to these and other committees:

Executive (as per CRRL By-laws): Atkins as Chairman, MacLean and Loucks

Management and Finance: MacLean as Chairman, Brunet, Loucks and Staines (*ex officio*)

QST Canada: Atkins as Chairman, MacLean, d'Eon, Loucks, Staines

Education: Spencer as Chairman, Fancy, MacLean

Publications: Atkins as Chairman, Maclean, Brunet, d'Eon

Constitution and By-Laws: Loucks as Chairman, Eaton, Perrin

Strategic Planning: Perrin as Chairman, McLellan, Gillespie, Shtun

22) Mr Perrin then raised some questions about the authority and procedures used by the Executive Committee, with particular reference to the overriding authority of the Board and the three-step procedure used to obtain ratification of CRRL budgets. He requested that all actions taken by the Executive Committee be reported in writing to the CRRL Board. This was agreed. It was noted that the budget process involved the Management and Finance Committee. At the CRRL Board's request, ARRL President Price reported on procedures followed by the ARRL Management and Finance Committee. It was agreed that the responsibilities defined in the CRRL *Procedures Manual*, whereby the Management and Finance Committee approves the Operating Budget and forwards it to the CRRL Board of Directors for ratification, would continue to apply.

23) Messrs Staines and Loucks spoke to the proposal that Directors' publication stocks be limited, as suggested by the auditor. It was agreed that present procedures be continued, but with greater emphasis on minimizing stock held locally and on prompt accounting for sales. Publications that were not moving would be returned to CRRL Headquarters.

24) The meeting recessed at 1730 EDST until 0830 EDST the following day, July 3. The following were no longer present: Messrs Eaton, Strangleman, d'Eon, Spencer, Shtun and Hardie, leaving only the seven Directors and the Secretary-Treasurer, General Manager, Counsel and President of ARRL.

25) Messrs Loucks, Staines, Perrin and MacLean each presented information on CRRL membership rates. New rates were necessary to offset a recent and unexpected increase in the cost of supplying QST. (In April, CRRL was notified that within the month, the US Postal Service would increase the cost of mailing QST to Canada from \$US .76 an issue to \$US 1.06 an issue. Certain larger issues would cost \$US 1.20 each to mail and more increases were projected. There was also a small increase in the actual price of *QST*.) It was agreed that, in the future, CRRL membership would include *QST Canada*, but *QST* would become optional. After lengthy discussion, moved by Mr Atkins, seconded by Mr Gillespie, CARRIED that effective immediately 1) annual CRRL membership *without QST* be priced at \$27 regular and \$24 for seniors, and 2) annual CRRL membership *with QST* be priced at \$45 regular and \$42 for seniors. Six Directors voted in favour with Mr Perrin voting opposed on the grounds that he did not favour an increase in fees at this time. Multiyear membership rates were then considered. Mr Loucks provided figures in support of a total discount of \$4 for two-year rates, and a total discount of \$9 for three-year rates. Moved by Mr MacLean, seconded by Mr McLellan, CARRIED that CRRL multiyear membership, for all classes of membership, be made available on this basis. Mr Perrin abstained. 26) Mr Brunet inquired about the recognition of 50-year members. Mr Atkins noted that CRRL members are still automatically Associate Members of ARRL and that ARRL would, no doubt, continue to provide recognition as they had done in the past. This would require a request from the member to ARRL.

27) Mr Gillespie reported on a request from Winnipeg Amateur Radio Club for CRRL sponsorship of a national convention. Moved by Mr Perrin, seconded by Mr Atkins, CARRIED that CRRL accept in principle a CRRL National Convention to be held in Winnipeg in the fall of 1989, subject to terms and conditions approved by the Executive Committee.

28) Mr Gillespie then indicated he had received requests for third-party traffic agreements with Brazil, Ecuador, Columbia and Belize. Mr Atkins pointed out that there would be no problem obtaining these from Communications Canada, but the requests must come from the countries concerned. Mr Perrin left the meeting to return to his home at 1250 ESST.

29) Mr Gillespie asked that consideration be given to establishing a new CRRL Region which would include Northwestern Ontario, Manitoba and part of Saskatchewan. The matter was referred to the Strategic Planning Committee.

30) Mr Fancy spoke in favour of establishing a bulletin board system for Directors and other CRRL officials, to facilitate communications, distribution of the CRRL bulletins and forwarding of news for *QST Canada*. He requested that funds for such a system be included in the 1989 budgets. The General Manager agreed to investigate and report to the Executive Committee.

31) Mr McLellan then reported on the CRRL Central Incoming and VE1 Incoming QSL Bureaus. Mr McLellan personally runs the Central Incoming Bureau. So far this year, he had processed 500,000 cards. The VE1 Bureau is now computerized. The



VE3CDM takes a break at the CRRL Board Meeting to present CRRL Atlantic Region Director Andy McLellan, VE1ASJ, with two Soviet operating awards from RSF, the Radio Sports Federation. (VE3AND photo)

system keeps track of receipts and disbursements for each user and provides a record of mailing. Cards are shipped once a month providing five or more cards are on hand. In any event, cards are shipped at least once every three months. It was recommended that Mr McLellan make this computer program available to other bureaus. Mr McLellan then presented a report by Don Welling, Manager of the CRRL Outgoing QSL Bureau, who handled 102,000 cards last year and expects 140,000 cards this year. He also handles all outgoing cards for the Canadian DX Association. The Board thanked Mr McLellan and Mr Welling for their valued service.

32) Moved by Mr Atkins, seconded by Mr MacLean, the following appointments were made by the Board:

Secretary-Treasurer: William Loucks, VE3AR
Auditor: Thomson, Fisher and Bossy, Chartered Accountants

General Manager: Raymond Staines, VE3ZJ
Counsel: B Robert Benson, Q C, VE2VW
Field Services Manager: Jack Strangleman, VE3GV

Awards Manager: Garry Hammond, VE3XN
Chairman, Elections Committee: Noel Eaton, VE3CJ

33) Moved by Mr Brunet, seconded by Mr Gillespie, CARRIED that the actions of the Executive Committee, taken since the last Board meeting, be approved.

34) The date for the next Board meeting was set for Saturday and Sunday, May 20-21, 1989.

35) Closing comments were made by officers and directors present. Mr Brunet asked when Restruc-

(continued on page 20)

KENWOOD



TS-940, 440, 140



TM-721
TM-721A FM DUAL BANDER
TW-4100A DUAL BANDER



TH-215AT, 315A,
415A, TH-205AT



TH-25AT, 45AT

ICOM



IC-735, 761, 751A, 781



IC-02AT, 03AT, 04AT, IC- μ 2,



IC-28H, 38A, 48A



YAESU



FT-767



FT-767GX, 757GX, 747GX



FT-23R, 33R, 73R



FT-727R
DUAL BAND HT

WE WILL MEET OR BEAT ANY PRICE!

- Quick, reliable service
- We trade



CENTURY 21 COMMUNICATIONS INC.

4610 Dufferin Street, Unit 20-B, Downsview, Ontario M3H 5S4
Telephone (416) 736-0717

Commercial - Cellular - Marine - Amateur
Sales - Service - Installations

ANTENNAS

- Larsen Antennas
- Van Gorden
- ANTENNA WIRE

ANDREW HELIAX & CONNECTORS



ACCESSORIES

- Power Supplies
- Accessories
- Bencher Paddles
- Meters



PUBLICATIONS

- ARRL
- Radio Amateur Callbook
- World Radio TV Handbook
- Gordon West Radio School



ANTENNAS

- Cushcraft AP8, A3, ARX-2B, 215 WB + more
- **hy-gain**
- Hustler Mobile HF, Mobile VHF, etc.



ACCESSORIES



MFJ
Antenna Tuner
Plus Full Line
Of Accessories

AMERITRON

MIRAGE

VHF & UHF Amps



PACKET Kantronics



AEA PK-232, PK-87



1278

MFJ

1270B, 1274, 1278

Some Ideas for Your Classes

This month, it's on to the chalkboard. By now I hope you have considered some sort of Amateur Radio course for your club or community. Here a mix of ideas that will help motivate your group, keep their interest up and move them along to their licence. The ideas may not be original, but they will make you think of common things that are a part of Amateur Radio, things that are often taken for granted things like...

QSL Cards

As you are aware, the QSL is an exchange of card in acknowledgement of a contact. The card can vary from a simple hand-written one to something very elaborate (and even gold-trimmed). Standard printed cards are available from printers that advertise in Amateur Radio journals, or you may know a local printer. Samples or catalogues are also available and all these can be used as teaching aids for your class. Another source of QSL cards is the local Amateur who is either an active DXer or an awards chaser. This is a person you should invite to your class for a short meeting with your students. Half an hour with this "expert" will be worth months of frustration and questioning later.

Have a *DXCC Countries List* available (order from CRRL). Students can then learn the principles of ITU prefixes (they're in the *Handbook*) and apply them to the prefixes on the QSL cards. Remember, if the students have receivers for the HF bands, they'll be hearing all kinds of strange prefixes. Relate the ITU prefix list to the *DXCC Countries List* to the QSL cards.

Logbooks

Communications Canada (CC, formerly DOC) no longer requires that contacts be recorded in a logbook, but I'll bet most of you still have a logbook that can be used as a teaching tool. Remember? A logbook used to list time, call, power, emission, mode, RST, band and finally, personal info like name and QTH. Now, if you look at all those items, you will see that each poses a question for the Amateur Radio student and each is worth some time in class. *Time* leads into a lesson on 24-hour time or UTC, universally used by Amateurs in contests or QSLing. *Calls* — again refer to the ITU prefix chart or *DXCC countries list*. *Power* may be used to introduce your students to dc power calculations, PEP calculations and CC power regulations. *Emission and mode* — Have a receiver set up and check the HF bands for different types of emissions. Relate to the mode definitions in the regulations. *RST* is the standard signal reporting technique. Give your students a demonstration of how it works by listening to signals on the receiver. *Band* can introduce concepts of wavelength and

propagation, and give meaning to relevant CC regulations.

The Ham Bands

This can be a busy and interesting subject. Don't treat it too lightly, as many other topics can be related. Lots of material is available on the HF and VHF bands. The 1987 *ARRL Operating Manual* is an excellent source of material offering tables, charts and other aids dealing with operating techniques for the various bands. After a brief description of each band, it seems natural to introduce propagation. Propagation and the radio spectrum are interesting subjects for the non-technical student, so these topics are fine to introduce early in the course. CC has an excellent spectrum chart that you can purchase from the Queen's Printer. I usually start with an audio generator and a scope so we can all see and hear the wave, and then increase frequency until it disappears around 15 kHz. Now I can introduce LF, the MF broadcast band, HF short-wave, VHF-UHF with TV and FM frequencies noted in particular, and finally, satellites. It is interesting and probably useful to relate wavelength to antenna size as you move through the spectrum.

Geography

I find geography a very important part of the course. I may not teach geography as a subject, but it is always weaving through other material. I keep a provincial map nearby to discuss close-in propagation on the HF and VHF-UHF bands, relating this to net operation. I keep a world map nearby, one with Amateur Radio prefixes on it, and a Great Circle map with prefixes, to discuss long-path and short-path propagation, night-day relationships, directivity with antennas, and the old familiar call signs and prefixes. Two other useful aids are the *World Maidenhead Atlas* and the *North American Grid Square Locator* (both are on the CRRL Bookshelf). By using these and referring to distance records, you can demonstrate that VHF-UHF is not only for FM communications, but is an exciting and challenging part of the spectrum that is increasingly populated by CW, SSB and packet radio signals.

Computers

There is a rich assortment of computer programs available for the Amateur Radio operator and instructor. Certain programs have proved useful for demonstrating or proving theory. Antenna design programs are very useful as are MUF or propagation programs. There are both good and bad Morse code programs. We'll have more on computers later.

A Final Thought

This column is being written primarily for

those interested in teaching Amateur Radio. I would like to suggest that you consider "team-teaching" a course. There could be a coordinator who might not even teach the course, but who would act to introduce various members of the Amateur Radio community that would form part of the team. The course could be divided into different areas of interest, allowing different people to instruct different classes. It might work best if two worked together for a particular class. If you are doing the entire job yourself, remember, there are enthusiasts for every facet of Amateur Radio. Ask for their help and have them visit your class.

This is a monthly column, and, through the fall and winter, I'll try to help you or your team of Amateur Radio instructors so you will have a core of material to work with. I am limited by the size of a page in *QST Canada*, so I would offer to correspond directly with you and share materials for our mutual benefit. As time passes, my intention is to deal with increasingly more difficult material, either suggested by you or initiated by myself, and specific examination questions. —VE3OT

Silent Keys

Administered By Ray Staines, VE3ZJ

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

VE2TJ, Paul H Guay, Montreal, PQ
VE3AMG, George Scantlebury, Stratford, ON
VE3AYN, Bruno Niezen, Bracebridge, ON
VE3BWY, Maxwell Whyte, Scarborough, ON
VE3FU, John Forster, Windsor, ON
VE3II, A E "Ted" Roberts, Agincourt, ON
VE3KPK, Friedhelm "Fred" Kuznick, Owen Sound, ON
VE3NKX, W "Wally" Krumwiede, St Catharines, ON
VE3OS, Ray G Anthes, Waterloo, ON
VE4ANI, Bill Dunfield, Dauphin, MB
VE4GRW, Graham Watt, Winnipeg, MB
VE4HT, George Hodgson, Winnipeg, MB
VE7ANA, W E Winter, Duncan, BC
VE7APF, Clarence LaBounty, Oliver, BC
VE7BUP, Fr R P Frappier, Maillardville, BC
VE7FDX, H "Vince" Vaclac, Victoria, BC
VE7GAA, Charles R Minton, Courtenay, BC
VE7FVI, Gordon McEachern, Chilliwack, BC
VE7XX, Howard A Walker, Sidney, BC
VO1QH, Max B Ralph, Glovertown, NF

Note: Silent Key reports sent to CRRL Headquarters must include name, address and call sign of reporter in order to be listed. 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 CRRL Headquarters.

CELLULAR TELEPHONES • PAGING • BUSINESS RADIO

WHETHER BUSINESS IS YOUR LIFE ... OR LIFE IS YOUR BUSINESS



The phone to pick up when you can't afford to be out of reach

Cellular car telephones from NEC



Lease-to-own from \$35./mo.



Cellular-Paging-Two-Way Radio-Amateur-Shortwave
Leasing-Sales-Service-Installations
4610 Dufferin Street, Unit 20-B, Downsview, Ontario M3H 5S4
Telephone (416) 736-0717 • Fax (416) 736-0610

A PAGER THAT DOES MORE THAN JUST BEEP! FROM CENTURY 21 AND



NEC

- Information Display
- Digital Display
- Tone/Voice Paging
- Tone-Only Paging

For the features you need in an in-touch environment

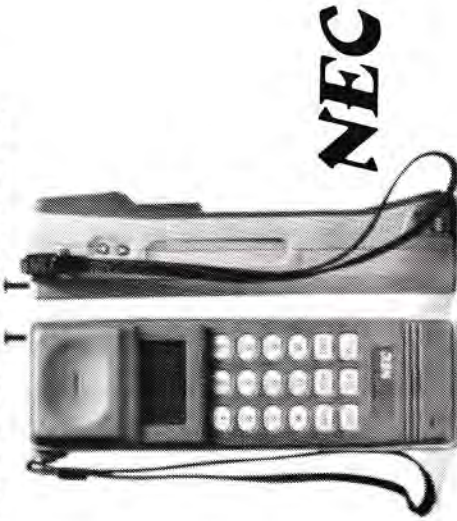
Why rent when you can own the very best?

Lease NEC's top-of-the-line information display pager for only 25.99/mo. Tone-only pagers start at just 7.95/mo.

NEC

NEC is a Trademark of NEC Corporation

WHEN YOU CAN'T AFFORD TO BE OUT OF REACH...A PHONE THAT GOES ANYWHERE!



NEC

The NEC handheld cellular A little phone with a big future 7.2 x 2.4 x 1.5 inches

All the features of a car telephone in a 2-pound package!

The NEC handheld sells for \$



Cellular-Paging-Two-Way Radio-Amateur-Shortwave
Leasing-Sales-Service-Installations
4610 Dufferin Street, Unit 20-B, Downsview, Ontario M3H 5S4
Telephone (416) 736-0717 • Fax (416) 736-0610

Emergency Plans

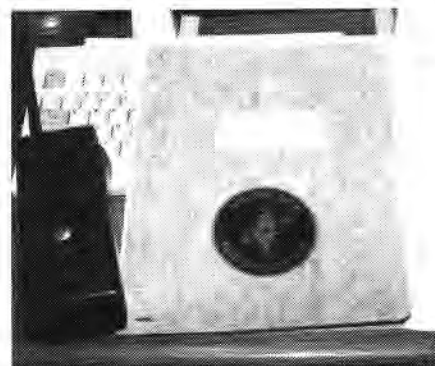
According to the Ontario Emergency Plans Act, each municipality should have "an Emergency Plan governing the provision of necessary services during an emergency, and the procedures and manner in which... persons will respond to the emergency". The requirements of other provinces are similar. By the same token, each ARES group should have an Emergency Communications Plan to cover its *modus operandi* in emergencies.

Such a plan should indicate the things that each ARES member should know in order to carry out his or her responsibilities in an emergency. The contents of the plan will depend completely on the local situation. The plan for a small ARES group oriented only towards 2-metre voice communications will be different from that for a large metropolitan area where high speed message handling using RTTY and packet is an essential component.

It is a good idea, before the final plan is issued, to review a draft copy at a meeting of ARES members. Discussion will likely lead to useful suggestions for improvement and will certainly create a better understanding of the contents. In an emergency, a good plan will serve as a ready reminder of information which, with the passage of time, may become hazy in some minds. Also, a good plan can be an important training and exercise tool.

Since emergencies come in different shapes and sizes, the plan should not be too rigid. It should cover the essentials but should also have sufficient flexibility to permit the ARES group to adapt its operations to the communications demands of a particular disaster. While a plan is intended primarily for the guidance of ARES members, it should also be suitable for distribution to the emergency response agencies that may be served: the Red Cross or a municipal emergency control group. The finished plan will carry more authority if it is neatly typed and provided with a suitable cover. Our Kingston ARES plan is produced on a word processor so revisions can be readily incorporated.

- Any emergency plan should include
- 1) duties and responsibilities of the EC, AEC and individual members,
 - 2) how the plan will be activated and how ARES members will be mobilized; this would include a telephone tree,
 - 3) operating instructions including net procedures, use of tactical call signs, use of standard message form and operating frequencies,
 - 4) a list of ARES members including their addresses, and
 - 5) the names and telephone numbers of key individuals in other emergency response or-



"The finished plan will carry more authority if it is neatly typed and provided with a suitable cover."

ganizations who may need to be contacted quickly.

My file of emergency communications plans is far from complete. The only Canadian plans I have are for Ontario municipalities. I'd appreciate receiving plans from other parts of this vast country and will pass on any novel features I find in them.

The Quinte ARES Plan, prepared by John Lester, VE3MB, has, in addition to the basics listed above, a very useful glossary of terms and a list of prowords for voice communications. The plan stresses that the function of

continued on page 20

CRRL Field Organization Reports 1988 June

CRRL Section Emergency Coordinator Reports

Reports were received from the following SECs (DECs and ECs reporting to SECs are listed in brackets), denoting a total ARES membership of 662:

Reporting	ARES Members
VE3GV (VE3s BU, EFX, FUN, GNW, KXB, LBU, LKI,	555
HNH, HSF, ITT, JJA, LJV, JPP, MB, PK, SV, TNL VE5WM	
VE6AFO (VE6XD) VE7FB	107

Brass Pounders League

This listing is available to amateurs who report to their SM a traffic total of 500 or a sum of origins 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.

Service and Specialized Nets

Independent Net Managers: Your monthly reports are welcomed. Send to CRRL HQ, Box 7009, Station E, London, ON N5Y 4J9.

Net (Mgr)	Sess	QNI	QTC
BCPS	30	4174	-
CRRL ARES			
CANADA (VE3GV)	4	91	2
CRRL ARES			
ONTARIO (VE3GV)	1	6	-
ONTARS (VE3AQ)	30	12450	-

CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Dlvd	Total
VE1BKM	-	21	13	2	36
VE1VX	2	6	4	6	18
VE1IH	-	-	4	3	7
VE1BTV	-	3	2	-	5
VE2BP	6	19	16	16	57
VE2EDO	4	17	18	8	47
VE2WH	2	16	14	14	46
VE2EC	4	7	11	7	29
VE2GEJ	7	7	8	7	29
VE2JN	3	9	10	3	25
VE3FAS	-	123	112	-	235
VE3GNW	1	61	82	-	144
VE3GSSQ	1	88	53	1	145
VE3CYR	-	65	29	2	96
VE3GT	-	30	48	-	78
VE3EAM	12	23	12	22	69
VE3DPO	-	43	14	-	57
VE3BCZ	5	17	22	3	47
VE3SB	4	13	19	1	37
VE3BUO	-	32	1	3	35
VE3ORN	-	12	14	1	27
VE3AJN	-	17	8	-	25
VE3NVJ	4	6	5	5	20
VE3BAJ	-	6	3	6	15
VE3KZC	-	5	5	2	12
VE4JA	17	24	32	15	88
VE4JR	5	30	30	16	81
VE4KE	-	2	29	-	31
VE4TE	-	30	1	-	31
VE4LB	-	26	-	-	26
VE4IX	-	18	8	4	30
VE4FP	-	10	10	5	25
VE7BNI	16	96	155	34	301
VE7EJU	6	95	73	-	174
VE7EJW	3	30	27	12	72
VE7XA	-	12	24	9	45
VE7CCJ	4	19	18	1	42
VE7FME	2	10	18	3	33
VE7ANG	-	18	14	1	33
VE7FB	1	10	9	1	21
VE7EGM	1	4	10	1	15
VE7BCF	4	1	4	-	9
VE7BZI	1	2	1	2	6

National Traffic System

Net (Mgr)	Sess	QNI	QTC
KTN (VE3AJN)	13	-	13
OLN (VE3POJ)	26	-	18
OPN (VE3BUO)	30	-	123
OQN-1 (VE3GSSQ)	26	-	29
OQN-D (VE3GSSQ)	29	-	34
OQN-E (VE3CYR)	30	-	81
OQN-L (VE3GSSQ)	28	-	41
MEPN (VE4LB)	30	729	29
MMN	30	410	30
MTN	18	220	50
SATN	11	34	2
APSN (VE6AKY)	26	661	13
ATN (VE6XV)	33	192	55
BCEN (VE7EJW)	30	755	233

Public Service Honour Roll

This listing is available to amateurs whose public service performance during the month indicated qualifies for 60 or more points in the following nine categories (as reported to their SM). Please note maximum points for each category: (1) Checking into CW nets, 1 point each, max 30; (2) Checking into phone/RTTY nets, 1 point each, max 30; (3) NCS CW nets, 3 points each, max 12; (4) NCS phone/RTTY nets, 3 points each, max 12; (5) Performing assigned NTS liaison, 3 points each, max 12; (6) Delivering a formal message to a third party, 1 point each, no max; (7) Handling an emergency message, 5 points each, no max; (8) Serving as an EC or NM for an entire month, 5 points max; (9) Participating in a public-service event, 5 points each, no max. Amateurs who qualify for Public Service Honour Roll 12 consecutive months, or 18 months out of a 24-month period, will be awarded a special certificate from CRRL Headquarters.

PSHR: VE4JA (129), VE4IX (104), VE4LB (104), VE3DPO (89), VE7BNI (88), VE4JR (83), VE7EJU (81), VE4FP (74), VE3BCZ (65), VE7FB (65), VE3CYR (64), VE3GSSQ (60), VE2EDO(53)

Wholesale/Retail

W. J. FORD SURPLUS ENTERPRISES

Buy/Trade



Our warehouse 21 Market St., Smiths Falls.
(corner Market & William)

Mail to: P.O.Box 606
Smiths Falls, Ontario
K7A 4T6

Phone: (613) 283-0637 or (613) 283-5195

We are now open Saturdays from 9 am to 5 pm. Weekdays, for the present, are restricted to appointments for any time between 5 am to 10 pm. We normally are not maintaining a regular schedule during the week and therefore an advance appointment is essential to ensure your visit is successful. Sundays and holidays we are closed.

We carry a vast assortment of items ranging from medical, laboratory, scientific, photographic, optical, antiques and other strange pieces for the experimenter and enthusiasts as well as schools, labs and electronic firms. If in the area when we are open, feel free to drop in and browse through two floors loaded with surplus.

We are always happy to answer queries by phone or mail. If the latter, a postage stamp to defray the cost of a reply would be appreciated. Due to the nature of surplus very few items are stocked in depth and as a result it is impossible to prepare a catalogue or listing which would remain valid for even a short period of time.

We are pleased to report many new items received including:

- (1) Good assortment of manual typewriters at \$15.00
- (2) Large 1MFD 20KV capacitors for the experimenter at \$5.00
- (3) Panasonic RE7680C FM/AM/multiplex stereo receivers at \$75.00
- (4) Hugh antenna gearbox rotator (?), hollow centre shaft, enclosed worm drive, 6" thrust bearings, weighs at least 400 lbs, no data plate, very large reduction. \$175.00
- (5) Wet battery cells Jungner KAP-3 made by Cipel & Lecarbone, 5¹/₄x1³/₄x8 high, plastic container fill cap and terminals on top. \$2.50 each
- (6) Selective voltmeter, HP Model 3591A with 3594 Sweep Local Oscillator plugin (digital display) \$250.00
- (7) For the builder, commercial 1KW linear PA deck fully metered with 4 panel meters for PA Ip/Ig, fwd pwr, rev pwr, PA voltage; 3 roller coils, 3 variable vacuums. Covers approx 1.6 to 28MHZ. Requires cabinet and high voltage supplies. 4CX1000 in final with blower. Parts alone worth much more than the price of \$500.00
- (8) Light tables designed for vertical wall mounting or horizontal table top use. Overall size 26"x32"x8", illuminated area 16"x28". Stainless steel trim. \$90.00.

Calendar/Calendrier

Conducted By Ray Staines, VE3ZJ

Attention: Deadline for items is the 1st of the second month preceding the month of publication. For example, information would have to reach CRRL Headquarters by January 01 to be included in a March issue.

Smithers, BC: 10th Annual Northern Net Hamfest, 1988 September 3-5 at Riverside Park. Sponsored by Bulkley Valley Amateur Radio Society. On-site camping, flea market, code contest, homebrew contest, activities for the XYLs and kids, and barbecue. Talk-in on 146.28-88 Mhz. For more information, contact Northern Net Hamfest, Box 23, Smithers, BC V0J 2N0.

Perrysburg, OH: To commemorate Oliver Hazard Perry's victory in the Battle of Lake Erie (War of 1812- 1814) and 175 years of Canada-US friendship that followed, WD8LKI will operate from Perry's Victory and International Peace Memorial, September 9 beginning at 2100 UTC. Frequencies: 3.965, 7.265, 14.265, 21.365 and 28.365 Mhz. For special certificate, contact Como Wills, 30372 Bates Rd, Perrysburg, OH 43551-3828.

Sidney, BC: Hamfest, 1988 September 10-11 at Saan-cha Hall, Beacon Ave. Sponsored by Victoria Short-wave Club. Opens 10 AM. Admission \$5 per family, students \$1. Swapshop, auction, forums, seminars, contests, refreshments, pot luck dinner and Vancouver Island Club Conference. Talk-in: Call VE7EZ on 147.92- .32 MHz, 146.52 MHz simplex or on 80 or 20- metre phone. For more information, contact Larry Michaels, VE7GBY, 975 Tattersall Dr, Victoria, BC V8X 2X1, Tel 604-385-3237.

Barrie, ON: Barrie Flea Market and Packet Radio

Symposium, 1988 September 17 at Georgian College. Sponsored by Hex-9 Group, Barrie ARC. Opens 9 AM. Registration \$5. Talks, "Educate for '88" on basic packet radio start at 9:30. Talk-in on VE3LSR, 146.25- .85 Mhz. For more information, contact Hex-9 Group, Box 254, Barrie, ON L4M 4T2.

Calgary, AB: Fourth Calgary Flea market, 1988 September 17 at Parkhill Community Centre, 4013 Stanley Rd SW. Sponsored by Novatel ARC. Opens 9 AM. Admission \$2. Talk-in on VE6RYC, 146.25-.85 MHz. For more information, contact Novatel ARC, Box 7578, Calgary AB T2E 3M3.

Kingston, ON: Fourth Annual Flea market, 1988 September 17 at St Margaret's United Church, 690 Sir John A Macdonald Blvd. Sponsored by Kingston ARC. Opens 9 AM. Admission \$1. Refreshments. Talk-in on 146.34-94 Mhz. For more information, contact Bernie Burdsall, VE3NB, 304-91 King St E, Kingston, ON K7L 2Z8, Tel 613-544-4438.

Can-Am Contest: Phone portion, 1800 UTC 1988 September 17 to 1800 UTC September 18. CW portion 1800 UTC 1988 September 24 to 1800 UTC September 25. Sponsored by CRRL and the International Radiosport Association to increase friendship among Canadian and US amateurs, and to test operating skills and equipment performance. Complete rules appear in 1988 August QST and in Radiosporting magazine. For more information, contact CRRL, ARRL or W2/VE3BMV, Box 82, Pine Brook NJ 07058- 0282.

Northeastern Quebec, Zone 2: Mini-Dxpedition

sponsored by Union Métropolitaine des Sans-Filistes de Montréal. Work this rare zone between 0000 UTC 1988 October 01 and 2400 UTC 1988 October 2. Primary band: 20 metres, other bands if conditions warrant. Frequencies: CW: 3.685, 7.025, 14.025, 21.025 and 28.025 MHz. Phone: 3.785, 7.085, 7.185, 14.185, 21.185 and 28.525 MHz.

Hamilton, ON: Sixth Annual Radio and Computer Symposium, 1988 October 8 at Marriatt Hall, Ancaster Fairgrounds, 625 Highway 53 E. Sponsored by Hamilton ARC. Opens 8 AM. Inside. Space for 150 vendors. Admission: \$3.50. Talk-in on VE3NCF, 146.76-16 MHz, or 146.52 MHz simplex. For more information, contact Paul Hazen, Tel 416-664-5247, or Hamilton ARC at Box 253, Hamilton, ON L8N 3C8.

31st Scouts Jamboree-on-the-Air: Begins 0000 local time, 1988 October 15; ends 2400 local time, 1988 October 16. Jamboree should be the biggest ever with improved radio conditions due to the new sunspot cycle. Call "CQ Jamboree". CW: 3.59, 7.03, 14.07, 21.14 and 28.19 MHz. Phone: 3.74, 3.94, 7.09, 14.29, 21.36 and 28.99 Mhz.

ABOUT THE COVER

The Polar Bridge Skitrek Medal presented to CRRL President Tom Atkins, VE3CDM, for his work in organizing the Amateur Radio communications for the Skitrek expedition, and the expedition's chief Canadian radio operator, Barry Garratt, VE3CDX. (VE3AND photo)

A Great 6-Metre Season

September is a good month to look back at the summer's VHF activity with an eye on assessing the impact of the various modes of propagation on our grid square, province, state and DXCC country totals. It is also a good month to look forward to the September VHF QSO party, possible fall tropo openings, ducting, and hopefully to some interesting 50 MHz DX.

A brief review of summer propagation may be of interest. We have seen some extraordinary DX openings on 50 MHz Sporadic E, into Europe and the Caribbean.

On May 23, 2230 UTC, VE2DFO (FN25) reported strong backscatter signals from W1 stations, with the beam south. May 24, 2300 UTC, VE3ASO (FN25) reported strong single hop Es into W0. May 27, VE3BGH (FN03) reported strong Es into the Gulf states. June 4, 0000 UTC, VE2DFO and VE2FUT (FN25) reported reception of the VP5D beacon for over 2 hours. June 6, 2230 UTC, VE3BGH reported working GM4WYL in Scotland. Both stations were running 25 watts to four 6-element yagis. Three hours later VE3FN (FN25) reported midwest FM broadcast signals at 100 MHz. The next morning, VE2DFO called CQ on 50.11 MHz and worked CTIWW near Lisbon, Portugal, and FCIDTU in Corsica at 1030 UTC! VE2FUT reported that CTIWW's signal was 56 at 1100 UTC. Don commented that the band might have been open all night.

The June Contest provided many treats for VHFers. Ken, VE6AFO (DO31), was noted working ZF2BL (FK09) at 0359Z on June 12

and both coasts! June 20, Ray, VE3FN, reported the MUF to the south at 2230 UTC was near 100 MHz. We noted the N4LTA beacon at 50.070 (EM94) loud and clear until 0230 UTC June 21. The morning of June 25, WWV's geomagnetic forecast 18 minutes after the hour brought reports of a major solar proton event. This may have resulted in the fantastic E opening from Eastern Canada and the US, to England, France and the Caribbean on June 25. VE2DFO's log now resembles that of a 20-metre DXer! Contacts noted include KV4FD (FK78), G4ASR (IO81), G4IOG (IO80), G3LTF (IO91), GW4LXO, GM8COX, GJOJSY (IN89), and a half dozen others.

The evening of June 26 brought weaker than anticipated aurora. The conductor of this column heard some strong auroral carriers peaking northwest at about 0230 UTC on 50.001 MHz. We suspect these were propagation beacons. Stu, VE3MWM, reported working K2OS on 432 aurora during this event. As expected, signals peaked sharply and required skill at tracking the UHF "hot spot".

On June 28, we found a promising Sporadic E opening around 2300 UTC. The band was open briefly from Toronto (FN03) to WA4AID (FM15), with long-haul signals such as W4FNR (EL96), and ND2X (EL09) in around 0200 UTC. Many propagation beacons were heard (EL87, EM55, EM28), as were unidentified digital signals on 50.2 MHz and two strong steady carriers at 50.031 and 50.1 MHz. Has anyone else heard these? Many stations were reporting short skip from Georgia into the Dayton, Ohio, area. However, no reports



VE3AUI operates VE3QST (EN92), June VHF QSO Party, Hawk's Cliff, Ontario (VE3GRO photo)

of 144 E were noted.

July 4 netted VE2DFO contacts with CTIWW, and CT4KQ at about 2200 UTC. On July 7, we caught a short E opening into the Carolinas while looking for PJ0M. PJ0M, Saba Island, was to be on the air from July 7 through 14, thanks to Mario, WB2CZB, and crew from the 6-Metre DX Society. QSL via K2MUB. Your editor spent a week on St Maartin in June (honeymoon, hi!) and discovered that Saba Island is a super VHF DX location thanks to the volcanic peak, Mt Scenery, which rises to about 3000 feet above sea level. The local FM broadcast facilities are located there and signals were superb all over St Maartin, 50 miles away. Any Canadian hams going south this winter would certainly help DXCC efforts by taking along a 6-metre rig.

MORE 50 MHz NOTES

□ Look for possible 50 MHz F layer DX in October! If the E season didn't provide enough excitement, Mother Nature might have some interesting F-layer propagation for us in late October. Watch those solar flux and A and K indices on WWV. During Cycle 21, flux numbers above 200 produced 6-metre openings and numbers of 350 pushed the MUF up to at least 70 MHz. Keep a look out for auroral openings during the equinox periods when the WWV K index exceeds 4. Also remember that during times of geomagnetic activity, there could be 50 MHz openings into South America, Africa and the South Pacific via transequatorial propagation, and into Europe via transauroral E.

□ The June 23 issue of *Nature* contained an interesting letter from Wilson et al entitled, "The Extended Solar Activity Cycle". If these gentlemen are right, we may be in for the treat of the century on 50 MHz.

□ Don, VE2DFO, reports that an SB110 has been found for CO2KK, thanks to the efforts of Bob VE1YX, Bill W3XO and crew. Hope-

fully, by the time you read this, Don will have shipped this rig and Cuba will be on the air on 50 MHz.

□ Listen for the following European Beacons on six metres: VP5D: 50.097, HH9PV: 50.116, GB3SIX: 50.060, OX3VHF: 50.045, GB3NHQ: 50.060, GB3RMK: 50.060, 5B4CY: 50.500, WD400J (EL87): 50.080, W4HHK (EM55): 50.070, W0VB (EM28): 50.068, K4TZR (EM61): 50.059, ZD8VHF (II22): 50.032, and W5VAS: 50.060. Let us know if you hear other beacons. □ Review of VE6AFO's (DO20) June contest logs revealed the following Alberta stations on 50 MHz: VE6MX (DO20), VE6ZL (DO30), VE6QR (DO30), VE6LH (DO30), VE6SW (DO21), VE6JW (DO33), VE6CMY (DO30). How about some activity reports!

CRRL VHF UHF ADVISORY COMMITTEE

Your committee members are VEIUT, VE2FUT, VE2DFO, VE2DUB, VE3EMS, VE3CRU, VE3MWM, VE3DSS, VE4MA, VE5LY, VE6AFO, VE7BQH. All are availa-

ble to answer questions or solve problems related to the VHF-UHF-bands.

WIND PROFILER FOLLOWUP

Technical discussions with Communications Canada (CC) took place on July 6. According to CC, Atmospheric Environment Service (AES) will be using three operating modes instead of two used in the US. The third mode would cause significant interference to the SARSAT/COSPAS search and rescue satellite if the profiler were operated at 404.37 MHz, but would not cause serious problems for Amateur Radio if the profiler were operated at 441 MHz. After performing a detailed and independent computer analysis, verified by VE2DFO, it is the opinion of the conductor of this column, a veteran VHF'er (19 years) and a professional engineer, that the AES wind profiler planned for Egbert, Ontario, can operate at 441 MHz with a minimum of interference. We can expect the Egbert site to be activated in 1989. AES and the amateurs will be working together. Perhaps we will even see the formation of a Severe Weather Watch team

September/septembre 19

working with AES and Metro Toronto ARES. Apparently, this kind of teamwork works well in Western Canada.

Copies of the interference analysis are available from the conductor of this column. Please send \$4 to cover cost of printing and postage.

RANDOM SCATTER

Don't forget this year's ARRL September VHF QSO Party on September 10-12. The contest begins at 1800 UTC and ends at 0300 UTC, September 12. Awards are available for single-operator entries, QRP entries and more. Operation is permitted on all modes.

Canadian trophies are available for the September contest. The post-contest roundup will be held four weeks after the September VHF QSO Party at the QTH of Richard, VE3FAC. If you are interested in being considered for one of these trophies, send us a copy of your contest log.

Stu, VE3MWM, says there is growing in-

terest in Southwestern Ontario in 10 GHz operation. Steve, VE3SMA, is one of the sparkplugs responsible for this. Perhaps he and Mike, VE2DUB, should get together to challenge the current 10 GHz DX record, 666 km, set by N6GN and W6SFH in the summer of '87.

Packet Radio activity continues to increase steadily in the Toronto area. Unfortunately it seems to be growing mostly on 144 MHz. Result: congestion on 145.03 MHz at peak evening hours. We should be pushing for the creation of a LAN system on 223/430/902 MHz. Transverters are an inexpensive way to get there. CRRL VUAC is interested in hearing from users. Contact the VUAC Chairman, VE3DSS, via VE3KOI.

On July 2, 1988 the CRRL Board of Directors approved interim bandplans for the Canadian VHF-UHF bands from 50 through 1300 MHz. The plans, modifications of plans ap-

proved by IARU, show where Canadian amateurs should operate each mode in our VHF-UHF bands. They are available from the conductor of this column for an SASE or a prepaid diskette mailer.

Toronto ARES has been horsing around again. Congratulations to Gord, VE3HSF, and company for providing communications for the Pre-Olympic Horse Trials at Ridgewood Farms, near Orangeville, Ontario, on June 25. Using three simplex frequencies and the VE3ZAP 2-metre repeater, the ARES group won accolades from show organizers for the professional manner in which they handled routine communications and emergency traffic.

At press time (mid-July), the OSCAR Phase 3C had been boosted into elliptical orbit and dubbed OSCAR 13. Congratulations, AMSAT!

Remember to submit reports of *your* activities of the bands above 50 MHz. Pictures are especially welcome!

Public Service - continued from page 17

the group is to provide communications and not to offer interpretations or opinions on how to carry out rescue work.

Jack Strangleman, VE3GV's plan for London and the Counties of Middlesex and Oxford contains maps showing the dependable coverage of each of eight available repeaters. There is also a section on Weather Watch procedures dealing with what and how to report. A copy of the Ontario Section agreement with the Ontario Division of the Canadian Red Cross is also included.

Metro Toronto, whose EC is Gord Fraser, VE3HSF, has, as you might expect, quite a sophisticated plan. It includes emergency repeater assignments, digital traffic formats and digital transmission formats for Red Cross inquiry and registration cards. The duties and responsibilities of AMTOR, packet and National Traffic System gateway station operators are all included. The plan notes that Metro ARES is not a first-response organization. It is expected that four to twenty-four hours will be allowed before this group is fully operational.

The plan for Chester County, Pennsylvania, includes a checklist of things each ARES member will need in an emergency. This includes radio equipment, writing gear, personal gear, tools and other items, the lack of which could seriously impair the ability of an operator to do his or her job.

Does your ARES group have an emergency plan? If not, you should develop one, incorporating some of the best features of these plans. —Bob Boyd, VE3SV

(Moved - continued from page 13)

turing of the Amateur Service might take effect. The best guess was January 1, 1990. He inquired about the source of Silent Key listings. These were accepted from anyone, but not published until verified by family. It was reaffirmed that the QSL bureaus report to the Director of the CRRL Region in which they operate. Mr Fancy inquired about obtaining advance copies of *QST Canada*. The General Manager was requested to ensure that all Directors and Section Managers receive advance copies. Mr Benson inquired if he should register the *QST Canada* logo as well as the name. Mr MacLean would respond

to this. Mr MacLean requested even more contributions to *QST Canada* including photographs. Mr Price reported on the status of the fight to save a portion of the US 220 MHz band. The outcome there would certainly affect Canada.

36) During the meeting, the Board moved into a Committee of the Whole twice, once to discuss Headquarters administration and set a management fee, and once to review the outlook for a single Canadian Amateur Radio organization. Lunch break on July 1 was from 1230 to 1320 EDST, and on July 3 from 1200 to 1250 ESST. On motion of several directors, the meeting adjourned at 1425 ESST. Total time of meeting including time as a Committee of the Whole: 13 hours, 45 minutes.

Respectfully submitted,

W. W. Loucks, VE3AR, Secretary-Treasurer

If you qualify for the Ploar Bridge Diploma (see 1988 April *QST* "Canadian News-Fronts", p 77), submit your logs soon to CRRL Awards Manager Garry Hammond, VE3XN, 5 McLaren Ave, Listowel, ON N4W 3K1. There's an attractive certificate waiting for you.

QSL CARDS/CARTES DE QSL



- ITEM B - RED MAP, BLUE PRINTING ON BUFF BRISTOL
 ITEM W - RED MAP, BLUE PRINTING ON WHITE BRISTOL

250 - \$35.75
 (THIS FORMAT ONLY)
 Price Valid until December 31/88

ADDITIONAL 250's
\$11.75 (when ordered
 at the same time)

ONTARIO RESIDENTS ADD SALES TAX

CALL _____ NAME _____

ADDRESS _____

QUANTITY _____ PRICE _____

INDICATE CALL SIGN STYLE
 1. (as sample)

OST _____
 TOTAL _____

4. VE3GDZ

INDICATE LOGOS TO BE PRINTED
 (maximum of 3)

CARF _____ CRRL _____

FOR SAMPLES SEND \$1.00 OR A LARGE STAMPED (74c) SELF-ADDRESSED ENVELOPE. ALLOW 6 TO 8 WEEKS DELIVERY. SEND COMPLETED ORDER AND FULL PAYMENT TO CANADIAN QSL-VE3GDZ, 1128 BRYDGES ST. (REAR) LONDON, ONTARIO, N5W 2B7

ARMACO

ARMACO Electronics Ltd.

Mailing Address:

P.O. Box 24625, Station 'C', V5T 4E2

224 West 5th Avenue, Vancouver, B.C. V5Y 1J3

Telephone: (604) 876-4131 Telex: 04-53490

IMPORTER & DISTRIBUTOR

ENHANCED FEATURES

... making the best, better!

YAESU FT757GXII



YAESU FC-757AT



NEW FEATURES INCLUDE:

- MORE MEMORIES: NOW TEN IN ALL
- IF NOTCH
- Mode Storage (with frequency) in Memory
- New Bandswitch allows 'CAT' control
- CAD/CAM Design and Construction

CALL FOR YOUR
DEALER'S SUMMER PACKAGE PRICE _____ **YAESU**

ICOM

Handhelds



HOW DO YOU PACK 7 WATTS, 20 MEMORIES AND SCANNING INTO A HANDHELD?

IC-2GAT: 7 Watts Rx 138-174MHz, Tx 140-150MHz

IC-4GAT: 6 Watts 440-450MHz

IC-32AT: 5 Watts Rx 138-174MHz/440-450MHz,
Tx 140-150MHz/440-450MHz

A New Generation of Powerful, Versatile Handhelds.

Select a new "G Series" or dual band ICOM transceiver and enjoy full base station luxury in a portable unit designed especially for you!

- **Maximum Frequency Coverage.** The IC-2GAT receives 138-174MHz, including NOAA, and transmits 140-150MHz to include CAP and MARS frequencies. The IC-4GAT operates 440-450MHz, and the IC-32AT receives 138-174MHz and operates 140-150MHz/440-450MHz.
- **Most Powerful Handheld!** The IC-2GAT delivers seven watts! The IC-4GAT is six watts and the IC-32AT is five watts! One watt level selectable for local QSO's.
- **20 Memories.** Store any frequency, Tx offset and subaudible tone in any memory. Total flexibility!
- **Programmable Scanning** of band and memories plus easy lockout and instant memory recall.
- **Additional Features.** Battery saver, call channel, all subaudible tones, multi-function LCD readout and DTMF pad.
- **Compatible Accessories.** All ICOM IC-2AT/02AT series battery packs, headsets and speaker mics are interchangeable.
- **Optional UT-40 Beeper** silently monitors a busy channel for your calls. When the pre-programmed subaudible tone is received, the unit beeps and the LCD flashes.



IC-32AT
2 Meters and
440MHz

IC-2GAT
2 Meters

IC-4GAT
440MHz

ICOM

First in Communications

ICOM America, Inc., 2380-116th Ave. N.E., Bellevue, WA 98004

Customer Service Hotline (206) 454-7619

3150 Premier Drive, Suite 126, Irving, TX 75063

1777 Phoenix Parkway, Suite 201, Atlanta, GA 30349

ICOM CANADA, A Division of ICOM America, Inc., 3071 - #5 Road, Unit 9,
Richmond, B.C. V6X 2T4 Canada

All stated specifications are subject to change without notice or obligation. All ICOM radios significantly exceed FCC regulations limiting spurious emissions. HI488.