

# QST CANADA

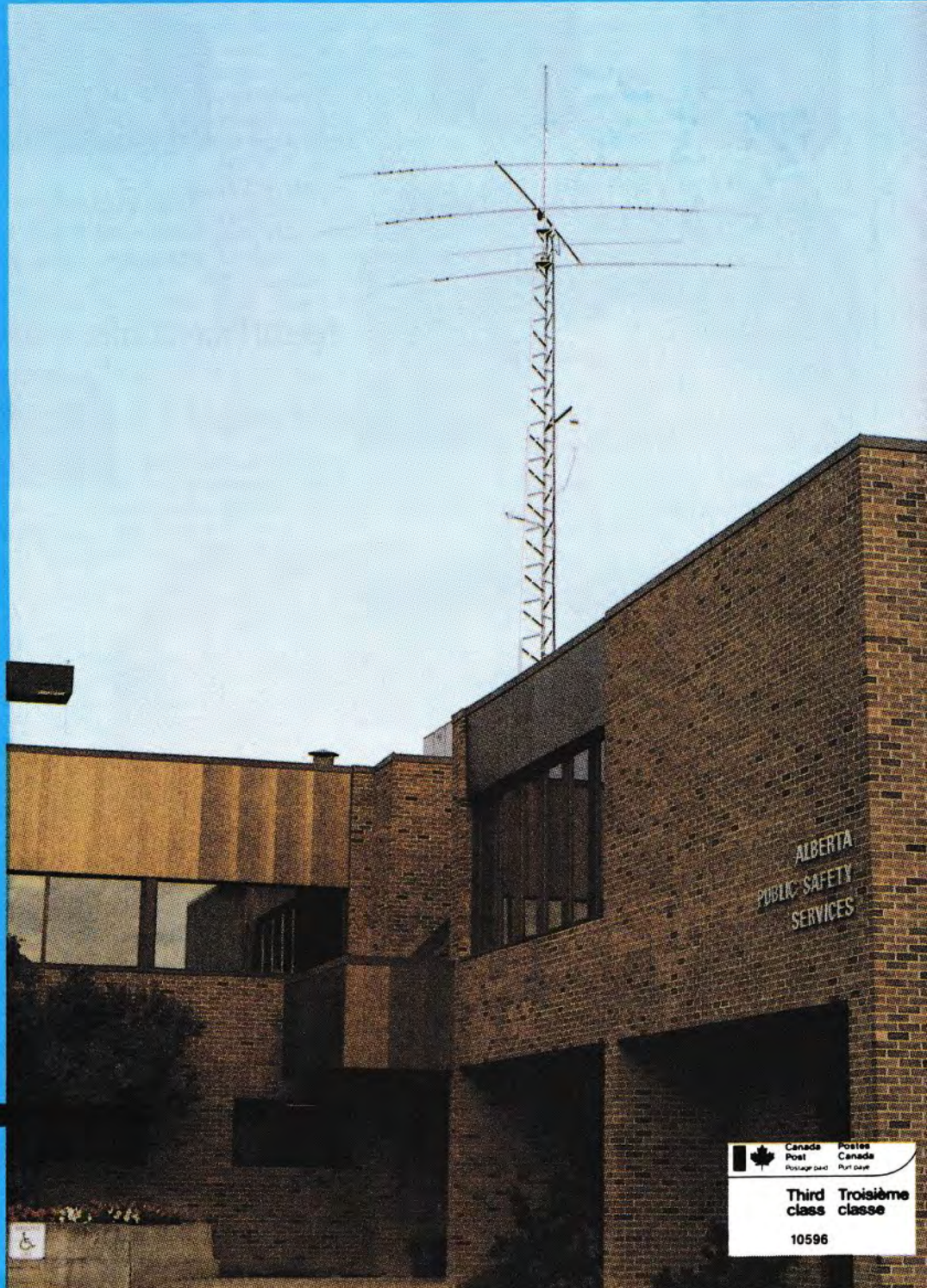
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## ABOUT THE COVER



The VE6GOC HF and VHF antennas tower above the Edmonton Headquarters building of Alberta Public Safety Services. A good looking setup! (Photo courtesy VE6BLY)

## Thanks, Tom

Tom Atkins has retired and will CRRL ever be the same? We doubt it, because as CRRL president, Tom brought a unique credibility and competence to the job.

CRRL has always been fortunate to have had good leaders. We remember Ron Hesler, VE1SH, for his vision in getting CRRL off the ground. We remember Mitch Powell, VE3OT, for the energy and enthusiasm he projected as he undertook to make amateurs aware of the potential that CRRL had to offer. But we remember Tom the most, not just because he was president the longest or because we've worked with him the longest, but because he consolidated what the others had begun and brought CRRL to where it is today.

Just look at the changes that have taken place during Tom's seven years in office. When Tom took over, CRRL, in most amateur's minds, was just another name for the Canadian Division of ARRL. But under Tom's leadership, a process was set in place whereby CRRL

became a totally stand-alone organization. The CRRL Board was expanded from three to five to seven elected directors. The CRRL Headquarters office in London, Ontario, was established. CRRL added dozens of new membership services. *QST Canada* was begun and CRRL became a strong presence in Ottawa and around the world.

If you were to ask Tom what part of his CRRL work pleased him most, he would probably say "the international work and IARU". Fortunately for IARU, Tom may be retiring as CRRL president, but he is not retiring from organized Amateur Radio. Tom was recently elected IARU Region 2 secretary, and to a seat on the IARU Administrative Council. Those will be important posts with WARC-92 on the horizon. Expect to hear lots about Tom Atkins in the Amateur Radio press.

Thanks, Tom. You have much to be proud of. CRRL has benefitted from your leadership. We wish you well in your retirement. —Harry MacLean, VE3GRO ■

## An Opportunity for Input

The following was a recent joint release from the President of the Canadian Radio Relay League (CRRL) and the President of the Canadian Amateur Radio Federation (CARF):

*A preliminary merger meeting between CRRL and CARF was held in Cobourg, Ontario, on November 25. The main purpose of this meeting was to set the timetable and agendas for future meetings. The committee agreed to recommend to both its Boards of Directors that a single Canadian organization be formed. To that end, the committee will meet at least three times in the next year, the first meeting being on February 10. Alternate meetings will be held in London and Kingston. The committee also agreed on procedures which will be used in future meetings. Any news releases will be identical and released by both CARF and CRRL on the same date, under the signatures of both presidents. The committee consists of Harry MacLean, VE3GRO, Francis Salter, VE3MGY, George Spencer, VE3OZW, Clayton Bannister, VE3LYN, Dana Shtun, VE3DSS and George Samson, VE3GWS.*

We don't think we'll be breaking protocol if we add that the meeting was friendly and left us feeling optimistic about the future. But now it's your turn.

We need and want your input.

Suppose CRRL and CARF were to step aside in favour of a new organization. What features of CRRL and CARF would you like to see in the new organization? What new features would you like to see? What about a name? Canadian Amateur Radio League and Radio Society of Canada are two names often suggested. Do you have a better idea? Remember, the name has to work in French as well as English. What about a logo? Most national Amateur Radio societies use a diamond logo, but not all. Argentina uses a circle and Panama uses a triangle. What about a magazine? And what about CRRL's limited but special status with ARRL? We're thinking here of Canadian participation in NTS and ARRL contests like Field Day and Sweepstakes, and the way the CRRL and ARRL presidents are invited to each other's board meetings. We think this is a tremendously useful arrangement, one that the envy of many national Amateur Radio societies. However, this arrangement could be a stumbling block for some CARF members. They may feel uncomfortable with it.

Whatever, if a new organization is created, it should reflect your ideas. That's why we want your input. Please write soon. —Harry MacLean, VE3GRO ■

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

## DECEMBER QST CANADA

I read the December *QST Canada* with great interest—particularly the flashback to former radio stations and VE3OZW's writeup on IARU. The December issue brought back memories of my start in radio in 1947, when my station consisted of a junkbox-parts TRF receiver and an 807 crystal oscillator on 40 metres. 807s were \$ 0.75 each surplus. It was crude but it was fun—and it worked! I didn't know any better in those days and I still don't since I'm QRT for now, hi!

Keep up the good work with *QST Canada!* —John Ash, VE4OC, Flin Flon, Manitoba

## ATTENTION CONTESTERS

Re "Attention Contesters" in the November 3 *ARRL Letter* [in which ARRL says there's some confusion, but yes, it's fine to "borrow" another amateur's "more effective station" and use it with your own call sign to snag a rare DX country or build up a score in a contest]; CRRL should create an endorsement for DXCC and other certificates: "All contacts made at the QTH of the above-named amateur with only his or her own equipment."

Where is the real sense of accomplishment among my fellow amateurs that this matter should even be raised? —Mel Lever, VE1VX, Dartmouth, Nova Scotia

## 20-METRE SQUEEZE

As a frequent operator on the 14.100–14.150-MHz portion of 20 metres, I feel we are being squeezed out. Packet radio has eaten up the bottom 10 kHz. Some amateurs would like 5 kHz on either side of the 14.140-MHz Canadian calling frequency kept clear. (If it's idle, foreign amateurs use it for their QSOs.) Add this to the evening Spanish-speaking net on 14.130 MHz where they want 3 kHz clear on each side, and 26 out of a possible 50 kHz are gone. This leaves only 24 kHz—room for about five or six QSOs. Perhaps QRM has become an acceptable tradeoff. —Dick Reiber, VE3IBV, London, Ontario

*Editor's note: Dick is a friend of ours, but this letter wasn't "a plan". We don't know what anyone can do, Dick. All the operations you mention—even the packet radio—are in there legally. Maybe our readers have some ideas...*

### 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 the event of disasters or other emergencies, for the advancement of the radio art and the public welfare, for the representation of radio amateurs in legislative and other matters, and for the maintenance of fraternalism and a high standard of conduct.

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.

CRRL is the Canadian member-society of the International Amateur Radio Union (IARU). "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.

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\*Voting member, CRRL Board of Directors

## Calendar



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

**Bramlea, ON:** Fleamarket, Saturday, March 3, at North Peel Secondary School, 1305 Williams Pkwy. Sponsored by Peel ARC. Opens at 9 am, vendor setup at 7:30 am. Admission: \$3. Tables: \$5 plus admission. Commercial tables: \$10 plus admission. Contact James McMurray, VE3BDI, 20 Hillbank Trail, Bramlea, ON L6S 1P6, Tel (416) 458-0505.

**St Catharines, ON:** Twelfth Annual Big Event, Saturday, February 3, at Canadian Auto Workers Hall, 124 Bunting Rd. Sponsored by Niagara Peninsula ARC. Hamfest: 8 am–2 pm. Admission: \$3. 12 and under free. Tables: \$5. Dealer tables: \$12. Dinner Dance 7 pm–?. Tickets must be paid for by January 27: \$20 each. Contact George Spencer, VE3OZW, R R 1, Jordan, ON L0R 1S0, Tel (416) 562-4891.

## Silent Keys

Conducted By Ray Staines, VE3ZJ

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

VE3AOH, Andrew MacIntosh, Coldwater, ON  
VE3ILB, John Wright, London, ON

**Note:** Silent Key reports sent to *QST Canada* 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 *QST Canada*.

# A PBC Photo Album

Some of the amateurs who won the Polar Bridge Certificate...

By Garry Hammond, VE3XN  
5 McLaren Ave  
Listowel, ON N4W 3K1

It's been over eighteen months since nine Soviet and four Canadian skiers completed the Polar Bridge Skitrek Expedition. Amateur Radio was the lifeline of this expedition, and while only a handful of amateurs were allowed direct contact with the skiers, thousands of amateurs and shortwave listeners (SWLs) around the world followed the expedition with great interest and contacted or monitored the stations supporting the expedition. We'd like you to meet some of these people, all winners of the Polar Bridge Certificate (PBC).

## PETER KUHFUS, SWL



Peter Kuhfus, DE0DXM, is a top German SWLer. He now has close to 500 awards including PBC and his newest, the YASME Supreme Trophy which he is shown holding. Peter is working to achieve the Maple Leaf-100 (MLA-100) walnut plaque, but laments, "Unfortunately, the number of QSLs coming from VE land has been rather poor. I have 60 Canadian prefixes confirmed, but 35 are still in my log unconfirmed!"

## W2AS



Marc Sullivan, W2AS, made all his Skitrek contacts with a TS-440 and a G5RV. He's 42, self-employed and was formerly WB2PRS. Marc is QRV on

80-10 metres, all modes, on 2-metre FM, SSB and packet, and even on satellite. His PBC is framed and ready to display. Marc admits, "I don't always operate the radio with a tie on. This photo opportunity took place just before leaving for work, hi."

## VE8TF/VE8QST



That's Terry Keim, VE8TF, at the microphone of VE8QST in Yellowknife. It's on the tenth floor of the DOC office where Terry is DOC District Manager for the Northwest Territories. Terry is now in his twenty-second year as a VE8. He has been QRV as VE8OK, VE4TF, VE6ZY, VE8AH, and now is VE8TF. Terry was born in 1940 and graduated from the Southern Alberta Institute of Technology as a professional radio operator in 1960. From his home station, Terry has worked about 300 countries. He runs an FT-ONE, a Henry 3-KA and a 203BA beam. At work, he uses a TS-940S to a B and W inverted-V and all-band vertical.

Terry earned two PBCs, one of which is on display at CRRL Headquarters in London, Ontario. He says, "I especially enjoyed working with all my fellow amateurs during Skitrek. I was grateful to Skitrek organizers in Resolute Bay for scheduling my sked times before office hours."

## DL1XAY/DK3PZ



XYL Hilde, DL1XAY, proudly stands beside her engineer OM, Hans, DK3PZ, who earned PBC with an FT-757GX, MLA 1200-watt Dentron amplifier, and a two-element beam. Hans' local newspaper did an FB photo story about his achievement. Too bad we don't see a lot of similar "human interest" coverage of Amateur Radio activities in Canadian newspapers.

## VE6VK/VE6TPA



Russ Wilson, VE6VK, earned PBC for his own call and for VE6TPA. Russ says, "I built my own SSB equipment during the earlier years, but have since joined the rest of the world with commercial gear." That's an SB-220 linear on top of a homebrew 4-1000A rarely used amplifier. His VK suffix is very appropriate. Russ was born in Australia.

## VE7BAV/VE7ARK



Gordon Burlson, VE7BAV, a math and physics teacher at North Island Secondary School (NISS) at Port McNeill, Vancouver Island, British Columbia, arranged to put VE7ARK on the air from colleague Pat Parker's geography class. This photo, taken by the local newspaper, the *North Island Gazette*, shows four NISS students who QSO'd VO1SA/UA0 one noonhour for one of the contacts needed for PBC.

Says Gord, "Long live ham radio in the schools!"

**WA4ACL**



Dixie Grinnalds, WA4ACL, of Melfa, Virginia, likes working special-event stations. He is personally active in RACES, ARES, and local events like the March of Dimes and Health Fair. A TS-830, AL-80 and numerous antennas keep him on most bands and most modes. Amateur Radio is Dixie's number one hobby since retiring from the Telephone Company of Virginia.

**PETER SINKE, SWL**



Peter Sinke, an SWL in Koln, West Germany, has confirmed more than 1000 stations in 315 DXCC countries with his Drake R-7 receiver and a 33-metre long-wire. He's 44 years old and has been a DXer since 1973. Peter is keen on exchanging stamps from tropical countries related to telecommunications. You can reach him at Sum Hedeisberg 71, 5000 Koln 50.

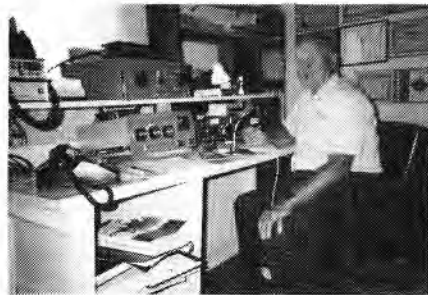
**N9GPK**



John Reisenauer, N9GPK, is 39 and has been an amateur since 1979. As editor of the "Arctic DX" column in the SWL *Messenger* magazine of the Canadian International DX Club, he actively monitors for any type of polar activity. John was recently active from VY1. His equip-

ment includes a TS-130S, R2000, Astro 150A and FT-207R. John particularly appreciated the efforts of a number of Skitrek operators who provided him with material for his column.

**VE3BTQ**



Jack Spall, VE3BTQ, was first licensed in 1933 as VE3ER. He has also been VE5TD, VE8AS, VE3AGP and VE7QH. For eight years, you could find him /W4 in Florida, where as a snowbird, he worked 260 countries. Jack is now active with an IC-745 and an SB-200 from his home in Barrie, Ontario.

**WD9GQV**



Betty Reich, WD9GQV, says, "I wanted a challenging hobby when I retired after 34 years of teaching, so I chose Amateur Radio. It has provided me with the opportunity to make friends around the world, correspond with many of them, learn about different cultures and assist in emergencies. I have operated as VP2MFT, VR6BR and /EA8." Her next challenge is to operate from the USSR.

**BASIL WOODCOCK**



Basil Woodcock, BRS-44266 is one of the best known British Receiving Station operators. He began SWLing in 1936 when he used to check and repair Eddystone receivers at his work in Abadan, Per-

sia (now Iran). During 1947-1977, he worked in the instrument section of Babcock and Wilcox in the UK. Since retiring, he uses Trio-Kenwood receivers, listening about six hours a day. IOTA listening is his specialty.

**G4RFV**



The first UK PBC went to Brian Adams, G4RFV, of Poole, Dorset, England. A TS-930S to an FL-2100Z and a tribander have netted Brian more than 275 countries since 1982.

**WICRL**



Lad Hlavaty, WICRL, of Ramsey, New Jersey, has been an amateur for some forty years. Professionally, Lad is a retired broadcast engineer. Lad enjoyed working towards PBC with his Ten-Tec Paragon and Titan amplifier. Working for certificates is nothing new, though. Note the Worked All USA Counties Award, 5BDXCC and 5BWAS on display in the photo.

**ON5FP**



Marc de Brabandere, ON5FP, has lots of enthusiasm for DX. Since becoming licensed for HF operation in 1986, he has worked over 250 countries with his 100 watts and a two-element beam.

**Photo Album**—continued on page 7

# Packet Radio in the Toronto Area

The latest developments...

By Eric Meth, VE3NUU  
48 Whiteleaf Cr  
Scarborough, ON M1V 3G2

The LAN (Local Area Network) in Toronto operates mainly via VE3YYZ which is the LAN digipeater. VE3YYZ is located on the fourth highest building in downtown Toronto, a former commercial site vacated when the CN Tower and First Canadian Place were built. The radio hardware consists of a Motorola Flexar base station running 25 watts, two Sinclair bandpass cavities, 225 feet of 7/8-inch Heliac cable and a Sinclair SRL-210C2 antenna (5-db gain) at approximately 750 feet above ground. The terminal node controller (TNC) is a GLB PK-1L operating as a digipeater and interfaced with the above radio. Coverage from this location is approximately 50 miles in all directions—sometimes farther from base stations operating with high power and beam antennas. The primary purpose of this LAN digipeater is to provide consistent signals for the many base, mobile and portable packet stations in the Metropolitan Toronto area.

The above configuration was modified in October 1989 to operate as a TheNet node connecting into SORN, the Southern Ontario Regional Network. The new node allows connection to the UHF/220-MHz backbone system being implemented throughout Southern Ontario. This will allow users from the Toronto area to access a plethora of file servers, database operations, gateways and other experimental systems as they become integrated into the network system. The node will consist of TAPR TNC-2s operating with TheNet or NetRom® firmware. All operations on the LAN will connect through the node and digipeating will be disabled. This will allow channel control via the node firmware.

Future expansion of the LAN will incorporate a full-duplex data repeater which will allow direct connection via the LAN repeater to the desired station. This will increase the range and the throughput. A similar system is currently in operation in Vancouver.

## Individual BBS Operations

The following BBS stations operate on the Toronto LAN:

VE3NUU Mail Forwarding operates on 145.01, 145.03 and 21.097 MHz. This

is the main mail forwarding BBS on the 145.01-MHz network. The BBS uses the MSYS BBS program written by WA8BXN with the following features: multiple ports (up to 6), multiple connects on the same port (up to 10 but it slows things down), TCP/IP (Transmission Control Program/ Internet Protocol) operation and various user databases

Ted Thorpe, VE3HPL's BBS, operates on 145.03 and 145.65 MHz. It provides gateway operation to the HAPN (Hamilton Packet Network) at 4800 baud on 145.65 MHz. Ted operates the MSYS BBS system as well.

Phil Thompson, VE3RD, operates a WØRLI system in one partition and a landline BBS (416-827-0704 in Oakville) in the other partition. All bulletins are forwarded to the BBS for forwarding to the landline network. Phil operates on 145.03 MHz.

Dennis Brickenridge, VE3GSS of North York, is in the process of implementing a Unix to packet gateway in the Toronto area. It will provide users the capability to interface to the worldwide UUCP Landline network. Dennis will also be implementing a TCP/IP switch to add a new dimension to packet radio operations.

## Network Operations

SOPRA (Southern Ontario Packet Radio Association) operates a packet backbone on 221.50 MHz using GLB NetLink radios (currently 9600 baud) and NetRom nodes. It interconnects 2-metre drops at HALTON (VE3PKG, 1200 baud, 145.57 MHz), TORONT (VE3PRC, 1200 baud, 145.01 MHz), OSHAWA (VE3OSH, 1200 baud, 145.59 MHz), PETERB (VE3SSF, 1200 baud, 145.59 MHz), and NIAGAR (W2EUP, 1200 baud, 145.59 MHz). It also operates the following services: MAIL (VE3INF, 221.50 MHz, mailbox operating on the backbone; interfaces with VE3NUU on 145.01 MHz), and SOPRA (VE3YAP, 221.50 MHz, conference node)

SORN (Southern Ontario Regional Network) is an ad hoc group which operates digipeaters and BBS stations for the benefit of packet stations in southwestern Ontario. It consists of the following sta-

tions: VE3WZL (Goderich), VE3GYQ (London), VE3EUK (Kitchener, VE3KSR/VE3IC), VE3NUU (Toronto, VE3YYZ), VE3FJB (Barrie, VE3LSR/VE3PBA) and VE3SNP (Wainfleet).

HAPN (Hamilton Amateur Packet Network) operates on 145.65 MHz (4800 baud). The network is ported to 145.59 MHz for 1200-baud users in the Oakville-Hamilton area. The network includes stations in Mississauga, Hamilton and Guelph: VE3PKT and VE3RKL.

## Packet Network in Southern Ontario

This includes:

SOPRA on 221.50, 145.57, 145.59 and 145.01 MHz;

SORN on 145.01-MHz NetRom/ TheNet nodes; and

HAPN on 145.65 MHz.

## City-to-City Forwarding Scheme

This includes:

SORN, on 145.01 MHz, now 441.00 MHz west and south of Toronto; and 445.95 MHz north and east of Toronto; and

SOPRA on 221.50 MHz connecting to Geogetown, Toronto, Oshawa, the Buffalo TeleSat satellite link, the Calgary-Ottawa TeleSat satellite link, and the proposed Toronto-Ottawa link.

## Local Area Networks

These include: VE3LSR (Barrie, 145.07 MHz), VE3RFI (Hamilton, 145.05 MHz), VE3IC (Kitchener, 145.09 MHz), VE3GYQ (London, 145.07 MHz), VE3YRA (Newmarket, 144.93 MHz), VE3OCR (Ottawa, 145.07 MHz), VE3SPA (Oshawa, 145.05 MHz), and VE3YYZ (Toronto, 145.03, 144.91, 446.90 and 446.95 MHz).

## Regional Area Networks

These include:

SOPRA: see the description above; and

SORN, which will be operating using the WAN (Wide Area Network) approach of interconnected LANs. Here are the guidelines:

1. Each node on the WAN will be able to hear all other nodes. It is assumed that WAN nodes will be dual-ported and co-

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This is the most comprehensive edition since the **Handbook** was first published in 1926. The sixty-seventh edition contains over 1200 pages and over 2100 tables, figures and charts. Added to this edition are new antenna projects including three high-performance Yagis for 144, 220 and 432 MHz designed by Steve Powlishen, K1FO. Dick Jansson, WD4FAB, has completely revised the space communications chapter, which includes his innovative helical array for AO-13 Mode L.

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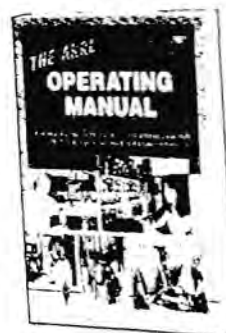
# The ARRL ANTENNA BOOK



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—sited with the LAN. Connection to BBS stations will be via the LAN port or a separate BBS port on the node. This will prevent any Hidden Transmitter Syndrome (HTS).

2. All stations will operate NetRom or TheNet nodes.

3. The first implementation will be at 1200 baud with 9600-baud G3RUH (PacComm 9600) modems in place by the end of 1989. The intention is to speed up the backbone operation as required—and as possible—with no effect on LAN users.

TORLAN:VE3YYZ will have two LAN ports (145.03 and 446.90 MHz).

#TO441:VE3YYZ will operate on 441.00 MHz with VE3SNP (Fonthill), VE3KSR (Kitchener), WB2OIF (Buffalo) or K2IMF-1 (Weathersfield), and a station in the Burlington-Oakville area. This will be the south and west WAN and will cover the western end of Lake Ontario.

#TO445:VE3YYZ will operate on 445.95 MHz with VE3YRA (Newmarket), VE3LSR (Barrie), and stations in Oshawa and Peterborough to form the north and east WAN. The 445.95-MHz frequency will be temporary. The WAN will ultimately move to the 433-MHz subband which has been set aside for high-speed packet operation. ■

John Uhl, KV5E, of Gretna, Louisiana, and Extra-class amateur, has worked 304 countries. Current equipment includes a KWM-380, a 30S-1, and a TH5DXX. John holds a degree in chemistry and is secretary of the Delta DX Association.

#### N7BSA AND KY7U



At a recent Arizona swapmeet, two PBC winners, Russ, N7BSA (left) and Lou, KY7U (right), took time out to photograph one of the framed awards. Russ enjoys working special Canadian prefixes. Like many, he has sent money for Canadian stamps to use on self-addressed envelopes. Remember, if you really want someone's QSL, this is a good procedure to follow. You know that Lou is serious about DX when you see his crank-up tower and three five-element monobanders. (Sorry, it's not in this photo.) A final thought: is one of these fellows into classic cars? ■

Don Chatto, N6BOI, was born in Winnipeg. In 1954, he emigrated to the US to work as a chemist. Don has been retired since 1985. He has taken up collecting islands for IOTA and Canadian prefixes for the Maple Leaf Award plaques (note the MLA-50 on his TS-820S), and new countries for DXCC (he has over 275).

#### I8IYW



Giuseppe "Pino" Iannuzzi, I8IYW, who lives in the Napoli area, is a 35-year old electronics engineer who has been active on VHF since 1974 as IW8AJP, and on HF since 1984 as I8IYW. Pino, a long-time collector of awards, is currently working on several five-band awards.

We have more photos, but we've run out of room! Maybe later. Thanks to all who sent a photo and made the PBC program a success. ■

#### Photo Album—continued from page 4

##### G3JBR



Since 1953, D P Tipper has been G3JBR. Peter says that PBC appealed to him "...because the personal efforts of those who took part in the walk, together with those who provided the communications and logistical support, presented a real challenge."

##### KV5E



##### DF7GK



"I'm not a technician; fashion is my profession," says Rainer Scheer, DF7GK. Rainer is an active DIG (Diploma Interest Group) member with over 100 awards. His QTH is in the southern Black Forest region just north of Basel. Are you one of the 10,000 QSOs Rainer has made since first being licensed in 1976? ■

##### N6BOI



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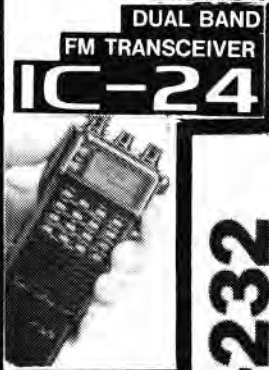
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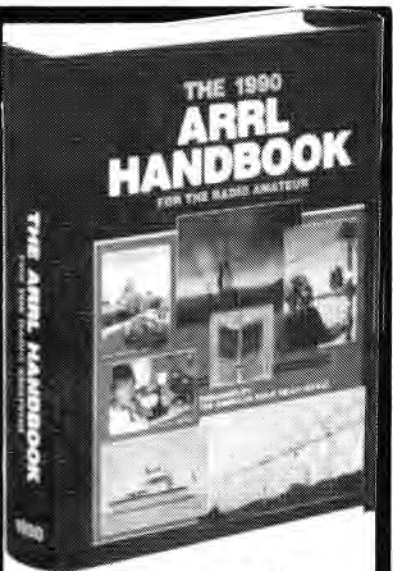


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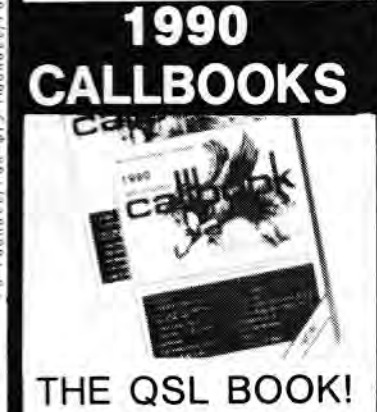
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## New Faces on Restructured CRRL Board

There will be several new faces around the table when the CRRL Board meets again in May. CRRL President Tom Atkins, VE3CDM, has retired to permit him to devote more time to his family and to IARU work. Tom was recently elected Secretary of IARU Region 2 (North and South America) and has also taken a seat on the worldwide IARU Administrative Council. Effective 1990 January 01, new CRRL President is Bruce Balla, VE2QO, of Dorval, Quebec. Pat Franklin, VE2EDO of Pointe Claire, replaces Bruce as CRRL Quebec Director. George Gorsline, VE3FIU of Toronto, becomes director for the new CRRL Ontario South Region (L, M and N postal code areas), while Dave Syndal, VE4XN of Brandon, becomes director for the new CRRL Midwest Region (Manitoba and Saskatchewan). Earlier, Carl Anderson, VE1UU of Dartmouth, Nova Scotia, was appointed Atlantic Director following the retirement of Andy McLellan, VE1ASJ. Dana Shtun, VE3DSS, becomes Second Vice President and George Spencer, VE3OZW, becomes Vice President for International Affairs.

There will also be several familiar faces on the CRRL Board. Harry MacLean, VE3GRO, continues as First Vice-President, and Bill Loucks, VE3AR, continues as Secretary-Treasurer. Ray Perrin, VE3FN continues as a director, but for the new CRRL Ontario North region (K, L and P postal code areas). Ken Oelke, VE6AFO, also continues as director, but for the new CRRL Alberta Region. David Fancy, VE7EWI, continues as Pacific Director.

A word about how the new directors got their jobs. These are interim one-year appointments, necessary because of changes in the CRRL by-laws that expanded the number of regional directors from five to seven. Elections will be held in the coming year. Two jobs you won't be able to vote for this year are CRRL president and CRRL vice-president. Under the new by-laws, these officers are now elected by the CRRL Board.

### NEW ADDRESS CRRL OUTGOING QSL BUREAU

The address of the CRRL Outgoing QSL Bureau has changed. New address for the CRRL Outgoing QSL Bureau is Box 56, Arva, Ontario N0M 1C0. New Bureau Manager is John Henderson, VE3HFT (Thanks, John!). Does this mean that present Outgoing Bureau Manager, Don Welling, VE1WF, is going to retire? No way! Don has become Manager of the CRRL Central Incoming QSL Bureau. Of course, address for the incoming bureau,

Box 51, St. John, New Brunswick E2L 3X1, remains unchanged. A final word about the CRRL Outgoing QSL Bureau. Use of the bureau is free to CRRL members—a good reason to join CRRL. Others may use the bureau at a rate of one dollar for fifty cards.

### SATELLITE NEWS

□ On October 29, OSCAR 13 was put off limits for general amateur use. Apparently solar radiation affected the operation of the satellite's on-board computer or Internal Housekeeping Unit (IHU). AMSAT personnel hoped to be able to restart the computer soon.

□ Launch of the four Microsats, scheduled for mid-November, has been rescheduled for January 09. The extra time did allow the Microsats to undergo further refinement.

□ AMSAT North America (AMSAT-NA) is seeking to expand its operations team to include Canada, Mexico and the Caribbean. If you are an active satellite user interested in becoming a volunteer on the AMSAT Field Operations Team, Contact AMSAT-NA Vice President of Field Operations Jack Crabtree, AAØP, 4327 West Bellwood Drive, Littleton, Colorado 80123.

□ After three years of operation, the Japanese satellite, FUJI OSCAR 12 (FO-12), has been shut down. FO-12 was gradually losing power. At the time of shut-down, it was able to produce only three watts to run its on-board computers and transponders. FO-12 is expected to be replaced by a new Japanese satellite early this year.

### WHAT'S HAPPENING ACROSS CANADA...

□ CRRL's Ray Perrin, VE3FN, and CARF's Bill Wilson, VE3NR, represented Canadian amateurs at the initial meeting of the Canadian Preparatory Committee (CPC) for WARC '92. CPC did not feel a need to have the Amateur and Amateur Satellite Services on their agenda for WARC-92. However, other counties may place the Amateur and Amateur Satellite services on their agendas. For this reason, representatives of CRRL and CARF will continue to attend CPC meetings and monitor developments. There does appear to be important needs for new spectrum at 1-3 GHz and above 20 GHz, and the amateur bands in those ranges soon may begin to look very attractive to commercial users.

□ IPARN, the Inter-Provincial Amateur Radio Network, continues working towards a Canada-wide communication

network using existing VHF-UHF links and a commercial geostationary satellite. The first satellite terminal, complete with 1.8-metre dish, has been acquired and installed in the Vancouver area. IPARN hopes to acquire a second terminal, to be placed outside British Columbia, very soon. For more information on this project, contact IPARN, Box 3156, Langley, British Columbia V3A 4R5.

□ Congratulations to Garry Hammond, VE3XN, who was Canadian winner in the 1989 Bermuda Contest. Garry did go to Bermuda to pick up his trophy. We'll run the full story in March *QST Canada*.

### SOUTH OF THE BORDER...

□ The US FCC has received a second court challenge to its recent decision to reallocate the 220-222-MHz portion of the 220-225-MHz amateur band to the US Land Mobile Service. The first challenge came from ARRL, but the new challenge has come from the US Department of Justice (DOJ), on the grounds that the FCC decision was "arbitrary, capricious and an abuse of discretion." According to the *Westlink Report*, court action to overturn a US federal agency decision is rare. In most cases, agencies that have been challenged maintain their original decision, simply developing a new rationale to please the court. Whatever, the DOJ challenge offers additional hope.

□ New Jersey's 25,000 amateurs are concerned about a new law that requires police permission to have any kind of shortwave radio in a car. To alleviate this problem and prevent the spread of this kind of law, ARRL will be requesting FCC to declare preemption of all state and local receiver laws.

### AND ABROAD...

□ There may soon be restructuring of the Amateur Service in the UK. Officials of RSGB, the Radio Society of Great Britain, recently presented DTI, the UK licensing authority, with a proposal for a UK Novice Licence. This licence would require about 30 hours of study with an approved instructor, and completion of a multiple-choice examination on "licensing conditions, technical matters and operating techniques". There would also be an optional Morse Code test at 5 WPM. Privileges would include 5 watts, all modes, on portions of the 50-, 430- and 1250-MHz and 10-GHz bands. HF privileges added with the Morse code test would include 5 watts CW on portions of the 1.8-, 3.5-, 10-, 21- and 28-MHz bands, and 5 watts phone on portions of the 1.8 and 28-MHz bands. ■

# KENWOOD

## NEWS RELEASE

Kenwood Electronics Canada, Inc.  
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### For Immediate Release

**Subject:** Kenwood TS-950S Digital HF Transceiver

**For more information, contact:**  
Lloyd Le Blanc, National Sales and Marketing Manager  
Elry Cobeng, Customer Service Representative

The new TS-950S is designed for serious contesting and DXing. Kenwood engineering has now moved the high performance HF envelope using sophisticated digital techniques. The new TS-950SD is the first Amateur Radio transceiver to utilize Digital Signal Processing (DSP) techniques, a high-voltage final amplifier (50 volts), dual fluorescent tube digital display and digital bar meter with peak-hold function. The transceiver comes fully equipped with CW, SSB and AM IF filters.

YG-455CN-1	250 Hz CW filter
YG-455C-1	500 Hz CW filter
YK-88C-1	500 Hz CW filter
YG-455S-1	2.4 kHz SSB filter

### ■ Digital Signal Processor

- Digital processing improves spurious response and unwanted sideband suppression.
- Digital processing delivers flat and clean quality sound with wide frequency response. The user may select any of four possible audio levels on the DSP unit.
- For CW, digital filtering results in a waveform free of key clicks that are sometimes encountered with analog processing. The rise time of the waveform may be adjusted.
- Synchronized with SSB IF slope tuning, a digital AF filter provides sharp characteristics for optimum filter response.

### ■ Dual Frequency Receive Function

The TS-950S is capable of receiving two frequencies simultaneously.

### ■ 150-watt High Power, Heavy Duty Cycle Design

High-voltage (50 VDC) power transistors are used in the 150-watt final section and are mounted on a large die-cast aluminium heat sink.

### ■ Built-In Microprocessor-Controlled Automatic Antenna Tuner

The microprocessor has been pre-programmed to quickly tune for minimum SWR assuring maximum operator convenience. The tuner settings can be stored in memory.

### ■ Outstanding Receiver Performance and Sensitivity

- Superior receiver dynamic range with Kenwood's new Dyna-Mix™ high-sensitivity direct mixing system. The intermodulation dynamic range (IMD range) is 105 dB, with an overall intercept point of +20 dBm, and a noise floor level of -140 dBm.
- Multi-Drive Band Pass Filter (BPF) circuitry: fifteen band pass filters are available in the receiver front end.

### ■ Superior Interference Reduction

The TS-950SD includes all of the famous Kenwood interference reducing controls: SSB IF SLOPE TUNING, CW VBT (Variable Bandwidth Tuning), CW AF TUNE, IF NOTCH FILTER, Dual-mode NOISE BLANKER ("pulse" or "woodpecker") with level control, four-step RF ATTENUATOR (10, 20 or 30 dB), switchable AGC (OFF/SLOW/MED/FAST), and an all-mode SQUELCH circuit.

### ■ Superior Frequency Stability

The built-in TCXO provides superior frequency stability for the dual VFOs. The reference frequency is 20 MHz and is accurate to plus or minus 0.5 ppm between -10° C and +50° C.

### ■ Built-in Keyer

### ■ Easy-to-Operate Microprocessor-Managed Frequency Control

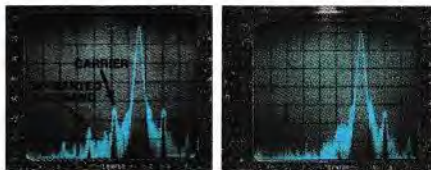
- Direct band-access key
- Easy-to-operate illuminated-keyboard frequency selection
- MCH (Memory Channel)/VFO CH (VFO Channel control)
- 100 memory channels. All store independent transmit and receive frequencies, mode and filter data, auto-tuner data and tone frequency. Ten memory channels are used to establish upper and lower limits for the programmable band marker.

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Digital Signal Processing

### Digital Signal Processing



Without DSP

With DSP

# TS-950SD

"DX-clusive" HF Transceiver



The new TS-950SD is the first Amateur Radio transceiver to utilize Digital Signal Processing (DSP), a high voltage final amplifier, dual fluorescent tube digital display and digital meter with a peak-hold function.

• **Digital Signal Processor.** DSP is a state-of-the-art technique that maximizes your transmitted RF energy. Your signal stands out because it is much more pure than your competition! You can even tailor your transmitted CW or voice signal waveshape!

• **Dual Frequency Receive Function.** The TS-950SD can receive two frequencies simultaneously. The sub-receiver has independent controls for frequency step size, noise blanker, and AF gain and its own digital display!

• **New! Digital AF filter.** Synchronized with SSB IF slope tuning, the digital AF filter provides sharp characteristics for optimum filter response.

• **New high voltage final amplifier.** 50V power transistors are used in the 150W final section, resulting in minimum distortion and higher efficiency. Full-power key-down time exceeds one hour.

• **New! Built-in microprocessor controlled automatic antenna tuner.** The new antenna tuner is faster and you can store the settings in memory! (Manual override is also possible.)

#### Optional Accessories

- VS-2 Voice synthesizer
- SP-950 External speaker w/AF filter
- SM-230 Sta-

- tion monitor w/pan display
- SW-2100 SWR/power meter
- TL-922A Linear amplifier (not for QSK)

# Transmit the ultimate signal.

• **Outstanding general coverage receiver performance and sensitivity.** Kenwood's Dyna-Mix™ high sensitivity direct mixing system provides incredible performance from 100 kHz to 30 MHz. The Intermodulation dynamic range is 105 dB.

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• **Kenwood interference reduction circuits.** SSB Slope Tuning, CW VBT (Variable Bandwidth Tuning), CW AF tune, IF notch filter, dual-mode noise blanker with level control, 4-step RF attenuator (10, 20, or 30 dB), switchable AGC circuit, and all-mode squelch.

- **Built-in TCXO for highest stability.**
- **Built-in electronic keyer circuit.**
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- **Digital bar meter.**

**Additional Features:** • Built-in interface for computer control • Programmable tone encoder • Optional VS-2 voice synthesizer • Built-in heavy duty AC power supply and speaker • Adjustable VFO tuning torque • Multiple scanning functions • MC-43S hand microphone supplied

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Canadian Amateur Question Bank	10.00	9.00	.75	112	<input type="checkbox"/>
Canadian Amateur Regulations Book	10.00	9.00	.75	190	<input type="checkbox"/>
Canadian Amateur Code Tapes (OT)	38.00	34.25	2.50	200	<input type="checkbox"/>
Canadian Advanced Question Bank	10.00	9.00	.75	116	<input type="checkbox"/>
Banque de questions premiere	10.00	9.00	.75	113	<input type="checkbox"/>
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First Steps in Radio, W1FB	8.00	7.25	.75	470	<input type="checkbox"/>
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Super Log Book (OT)	5.75	5.00	.75	125	<input type="checkbox"/>
Radiogram Forms (OT)	2.00	1.75	.75	170	<input type="checkbox"/>
Grid Locator for North America (OT)	2.00	1.50	.75	800	<input type="checkbox"/>
DXCC Countries List (OT)	2.00	1.50	.75	812	<input type="checkbox"/>
1989 Net Directory (OT)	2.00	1.50	1.50	823	<input type="checkbox"/>
ARRL World Map (OT)	13.50	12.25	2.50	840	<input type="checkbox"/>
Callbook Prefix Map of the World (OT)	8.50	7.75	*3.50	RA10	<input type="checkbox"/>
Callbook Prefix Map of North America (OT)	8.50	7.75	*3.50	RA11	<input type="checkbox"/>
Callbook Great Circle Map of the World (OT)	8.50	7.75	*3.50	RA12	<input type="checkbox"/>

\*SPECIAL NOTE: Callbook maps ordered together can be shipped together.  
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## ANTENNA BOOKS

	NON MEMBER	MEMBER	POSTAGE	STOCK #	
ARRL Antenna Book	\$24.00	\$21.50	\$1.50	411	<input type="checkbox"/>
RSGB HF Antennas for All Locations	21.25	19.00	1.00	330	<input type="checkbox"/>
Antenna Compendium #1	15.75	14.25	1.00	420	<input type="checkbox"/>
Antenna Compendium #2	14.50	13.00	1.00	421	<input type="checkbox"/>
Antenna Notebook, W1FB	11.50	10.25	.75	405	<input type="checkbox"/>
Novice Antenna Notebook, W1FB	10.75	9.50	.75	425	<input type="checkbox"/>
Antenna Impedance Matching	18.00	16.25	1.00	450	<input type="checkbox"/>
Yagi Antenna Design	21.00	19.00	1.00	630	<input type="checkbox"/>
All About Cubical Quad Antennas	12.00	10.75	1.00	RP110	<input type="checkbox"/>
All About Vertical Antennas	13.25	12.00	1.00	RP120	<input type="checkbox"/>
Simple, Low-Cost Wire Antennas	14.50	13.00	1.00	RP140	<input type="checkbox"/>
Transmission Line Transformers	14.00	12.50	.75	880	<input type="checkbox"/>

## OPERATING

Operating Manual	21.00	19.00	1.50	522	<input type="checkbox"/>
Complete DXer	15.75	14.25	.75	440	<input type="checkbox"/>
Low Band DX	14.00	12.50	.75	890	<input type="checkbox"/>
Low Band DX Software (available for many computers; send SASE for prices)					

## TECHNICAL

1990 ARRL Handbook	29.00	26.00	2.00	495	<input type="checkbox"/>
ARRL Electronics Data Book	15.00	13.50	.75	516	<input type="checkbox"/>
Radio Frequency Interference	5.75	5.25	.75	532	<input type="checkbox"/>
Solid State Design	17.00	15.25	1.00	551	<input type="checkbox"/>
Hints and Kinks, 12th Edition	6.25	5.75	.75	512	<input type="checkbox"/>
QRP Notebook, W1FB	8.00	7.25	.75	590	<input type="checkbox"/>
Transmitter Hunting	24.00	21.50	1.00	390	<input type="checkbox"/>

## VHF - UHF

All About VHF Amateur Radio	14.50	13.00	1.00	RP130	<input type="checkbox"/>
Satellite Anthology	7.00	6.25	.75	700	<input type="checkbox"/>
Satellite Experimenter's Handbook	16.00	14.50	.75	540	<input type="checkbox"/>

## PACKET AND COMPUTERS

AX.25 Packet Protocol	12.75	11.50	.75	430	<input type="checkbox"/>
Computer Network Conference #7	15.00	13.50	1.00	602	<input type="checkbox"/>
Computer Network Conference #8	15.00	13.50	1.00	603	<input type="checkbox"/>
Gateway to Packet Radio	14.00	12.50	.75	900	<input type="checkbox"/>

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Signature

## The CRRL Field Organization Forum

### SECTION MANAGER ELECTION NOTICE

To all CRRL members in the Manitoba Section: you are hereby solicited for nominating petitions pursuant to an election for Section Manager. Name of the incumbent appears on page 2 of this *QST Canada*. A petition, to be valid, must carry the signatures of five or more CRRL Full members residing in the Manitoba Section. It is advisable to have more than five signatures. Photocopied signatures are not acceptable and signatures must be on the petition. Petition forms, FSD-129-C, are available from CRRL Headquarters in London, Ontario, but are not required. The following form is acceptable:

..... (place and date)

CRRL Field Services Manager  
Box 7009, Station E  
London, Ontario N5Y 4J9

We, the undersigned CRRL Full members residing in the Manitoba Section, hereby nominate ..... (name and call sign) as Section Manager for this Section for the next two-year term of office; ..... (signatures and call signs) ..... (addresses with postal codes).

A Section Manager must be a resident of his or her Section and a licensed radio amateur holding a Canadian Advanced Amateur Certificate or equivalent, and have been a CRRL Full member for a continuous term of two years at time of nomination.

Petitions will be received at the CRRL Headquarters office until 1600 EDT 1990 March 09. If only one valid petition is received, the person nominated will be declared elected. If more than one valid petition is received, a balloted election will take place. Ballots will be mailed from CRRL Headquarters on 1990 April 01. Returns will be counted after 1990 May 20. A Section Manager elected as a result of these procedures will serve for a two-year term of office beginning on 1990 July 01.

If no valid petition is received, the Section will be resolicited in the 1990 July *QST Canada*. You are urged to take the initiative and file a nominating petition immediately. —Jack Strangleman, VE3GV, Field Services Manager

### REPORTS FOR OCTOBER 1989

**Alberta:** SM/STM/DEC: Bill Gillespie, VE6ABC; ASM: VE6AMM; SEC/TC: VE6AFO; OO: VE6TY. On October 16, sixty amateurs from various parts of Alberta had an opportunity to meet King Hussein, JY1, at a reception at the Palliser Hotel in Calgary. King Hussein was presented with his own operating certificate from DOC, and his own Canadian call sign, VE6JY1. He was also presented with a new

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

handheld 2-metre radio on which to make his first contact with his new call. All were very honoured to meet King Hussein and to have a brief moment to chat with him—yours truly included.

**British Columbia:** SM: Ernie Savage, VE7FB. British Columbia Emergency Net Manager Ferdie, VE7EJU, reports a low month again. Yes, traffic is low on all of NTS. British Columbia Public Service Net Manager Jim, VE7JN, reports a high of 195, a low of 111 and a total of 4952. Communications groups from Vancouver, Burnaby and the Fraser Valley supplied communications in the relay race from Mission to Harrison Lake. Forty-eight teams with eight runners per team—a total of 380 runners—took part. Event organizers were well pleased with the amateurs' work. Dogwood QCWA breakfast members equalled their all-time record with 48 out at Newton's breakfast. Thanks to clubs that continue to send us newsletters.

**Manitoba:** SM: Jack Adams, VE4JA; ASM: VE4IX; SEC: VE4TM; ATC: VE4ADP; NMs: VE4LB, VE4IX, VE4TE. Wow! Cold here this morning, November 2. Pleased to report we have a new amateur in the area: Craig Laron, W0UX, who recently moved into Durban between Swan River and Benito. Craig is a minister, and has been quite busy as his congregation has been without a minister for some time. Hope to hear Craig on a regular basis when things settle down and he gets a VE4 call. Maybe Craig will get some interest going. We never hear from Lloyd or Wallace, hi! Push those guys to move the Swan River repeater to a better location, Craig—maybe even to your own QTH as the elevation is good there! Thanks to the WRS group for getting the Neepawa repeater up and running. Now to get the antenna working properly. Hopefully, since my last plea for membership in Winnipeg Repeater Society (WRS), there is more money to install and maintain repeater links in Manitoba. Dauphin ARC, reports that it is willing to finance a hub at Baldy Mountain to enable linking into Saskatchewan and Winnipeg. Rick, VE5RF, and Glen, VE5AGJ, have set up a link between Itona and Yorkton and have the capability of tying into a hub at Baldy. It is still quite difficult to get packet traffic into Winnipeg with no one acting as a VHF to HF gateway. Please, Winnipeg, try a station on 14,105 or 10,135 MHz during the early evening hours. Last but not least: Why do we have a Simulated Emergency Tests? Did anyone try to assist emergency nets during the recent California earthquakes? Enough said...

**Maritimes-Newfoundland:** SM: Carl Anderson, VE1UU; ASM: Ned Mulrooney, VO1MN; STM: Mel Lever, VE1VX; BM: Brent Taylor, VE1APG; EC (NB) Brian Upton, VE1ZJ. Section Traffic Manager Mel, VE1VX, is looking for amateurs in the Saint John and Moncton (NB) areas, the Yarmouth-Shelburne, (NS) areas, and Newfoundland to join the APN traffic net. APN meets daily at 2000 AST/ADT on 3.654 MHz (see this space in March *QST Canada*). Mel also encourages amateurs who see National Traffic System (NTS) messages listed on PBBBS to deliver the messages and kill them on the PBBBS. Congratulations to three VE1 radio clubs that placed among the top ten Canadian entrants in 1989 ARRL Field Day: Fredericton ARC (VE1ND, Class 3A, 6962 points), Halifax ARC (VE1FO, Class 2A, 6506 points), and CFB Gagetown ARC (VE1JO, Class 3A, 4888 points). Fredericton and Halifax ARCs led their respective classes among Canadian stations. Other VE1 entries were Antigonish (NS) ARC (VE1EMA, Class 2A, 1348 points), and Greenwood ARC (Class 2A, 1210 points). On November 4,

some 50 amateurs from PEI, NB and NS attended the Packet Radio Symposium held in Truro, Nova Scotia, and sponsored by CARF and Nova Scotia Amateur Radio Association. Geoff Smith, VE1GRS, was convener. Speakers included Murray Gordon, VE1TE, Ron MacKay, VE1AIC, Mike Fitzgerald, VE1AJM, and Burt Amero, VE1AMA. Subjects ranged from basics of VHF packet networks and PBBS operation to packet operating tips and the future of packet networks in the Maritimes. Thanks to the organizers of this event. AMTOR operators in the Maritimes and Newfoundland are invited to check into an informal AMTOR roundtable Monday nights at 2100 AST (0100 UTC) on 3.6212-MHz FEC mode. Purpose of the round table is to encourage AMTOR operation and help newcomers. See the excellent introductory article on AMTOR in 1989 November *QST*. Andy McLellan, VE1ASJ, has stepped down as CRRL Atlantic Director. I have accepted an appointment to finish out Andy's term to the end of 1990. I thank Andy for his work, on behalf of all amateurs in the Atlantic Region. If you have ideas, concerns or opinions you would like me to place before the CRRL Board, please write or phone me, Carl Anderson, VE1UU.

**Ontario:** SM: Larry Thivierge, VE3GT; BM: VE3GSA; SEC: VE3GV; STM: VE3CYR; TC: VE3EGO. Representatives from seven Amateur Radio groups covering Elgin, Huron, Oxford and Middlesex counties recently met in London and decided that CANWARN was a worthwhile project. Each group will be appointing a CANWARN coordinator and an alternate to work as a planning team to develop the system so it can be implemented on April 1. CANWARN, as many of you may know, is a new early severe weather warning system of Environment Canada in which Amateur Radio plays a role. Windsor, Essex, Kent and Sarnia ARCs helped to inaugurate the program in their counties about one year ago. Algoma ARC, under the direction of EC VE3TNL, conducted a successful SET. VE3s BPS, CWE, JIP, OTL, PHM, RET and TNL were involved. Repeater VE3TBU (147.27+ MHz) is back on the air as VE3RUM at a new location. The Dryden repeater (147.24+ MHz) is on a new 100-foot tower and is expected to be able to reach Kenora and Sioux Lookout. VE3EBL is busy getting Lakehead University station VE3LUE back on the air. VE3ANU is Kitchener-Waterloo ARC Amateur of the Year. The value of packet radio was underscored during the recent California earthquake. Traffic in excess of 10,000 messages were handled via packet. One of the lessons learned is that every amateur who uses a packet BBS should become familiar with packet NTS procedures. In an emergency, you have to get everyone with a TNC involved in handling traffic. VE3HC has received QCWA's highest award: The Distinguished Service Plaque. Look for W1AW experimental bulletin transmissions (CW and RTTY) on 10.14 and 18.10 MHz. VE3EGO is busy completing a 4-1000 linear. VE3NCD and VE3OZT are working DX through the OSCAR 13 satellite, while VE3s AGE, CFO and WWG are showing keen interest. VE3LVH is the son of VE3ACD, the eighth member of Mel's immediate family to attain a ticket. That sounds like enough to form a club! Algoma ARC will provide communications for the Labatt's Brier being held in the Soo in March. They will need 30-50 operators. It should be a great opportunity to showcase Amateur Radio. New amateurs include VE3TMD and VE3WJR. VE3PPE now has his Advanced.

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## Happy New Year, VHFers!

A Happy and Prosperous New Year to all VHFers! Over the last few months I have been presenting handplans developed by CRRL for our bands above 50 MHz.

What happens if things get too crowded, as they have on 144 MHz in some parts of Canada? Do groups with the most members push out those with fewer members? The answer, of course, is no. Instead, this kind of pressure has always led us to develop new technologies and better utilize our spectrum. This process can lead to obsolete equipment but it is a necessary driving force in our continued existence. A long-ago example of this was the shift from AM to SSB on our HF bands. Many amateurs fought tooth and nail to prevent the spread of SSB on HF. We must never allow this kind of reaction to set in at VHF. Canadian Amateurs must be progressive and open about innovation, not backward, conservative or technically illiterate.

At VHF, we have a second solution. If one band becomes too crowded, then it is time to move to another of our VHF-UHF bands and better utilize one of them! I can point to the many VHF SSB/CW operators who are now QRV on 50, 144, 220, 432, 903, 1296, 2304, 3456 MHz and 10 GHz. They are examples for us to emulate. The "pioneering spirit" that has pushed us to higher and higher frequencies since the birth of Amateur Radio should not be forgotten. That spirit should be passed on to all people studying for their tickets. This will help guarantee our continued survival as a service, in the face of those who view the service as just a bunch of appliance operators with hand-holds.

This month I present the CRRL 33-cm bandplan for your reference. Please note that at present we must coordinate our activities with DOC to avoid interfering with the FIXED service, the primary service (albeit non-standard in a lot of cases) assigned to this band.

You will notice that we have a full 26 MHz of spectrum at our disposal, room for two ATV channels, experimental spread spectrum systems, FM, megabit data channels, SSB and CW as well as low-speed packet and linear translators. Equipment is available in the form of TV gear from outfits like PC Electronics in California. Transverters to convert your two-metre SSB/CW/FM/packet signal to 902 MHz are available from Transverters Unlimited in Canada, and the VHF Shop and others in the US. FM rigs with GaAs-FET front ends, repeaters, high-speed packet systems, receive converters and transverters are also available from

### Canadian Radio Relay League Band Plan: 902-928 MHz

STATUS: AMATEUR SECONDARY

MHz	UTILIZATION
902.0-902.5	SSB, CW, PACKET (≤ 2400 baud, 25-kHz CHANNELLING) (1)
902.5-902.8	TTY, PACKET (≤ 2400 baud, ≤ 2.5-kHz BW)
902.8-902.9	PACKET (≤ 2.5-kHz BW), TTY, CW, EME
902.9-903.1	CW, EME
903.100	NATIONAL CW/SSB DX CALLING FREQUENCY (1)
903.1-903.2	CW, SSB, EME
903.200	NATIONAL SSB LOCAL CALLING FREQUENCY (1)
903.2-903.3	SSB, SSTV, FAX, PACKET (≤ 2.5-kHz BW), AM, AMTOR
903.3-903.32	PROPAGATION BEACON NETWORK
903.32-903.4	GENERAL PROPAGATION BEACONS
903.4-903.5	SSB, SSTV, ACSSB, FAX, PACKET (≤ 2.5-kHz BW), AM, AMTOR, EXPERIMENTAL (≤ 2.5-kHz BW)
903.5-903.7	CROSSBAND LINEAR TRANSLATOR INPUTS
903.7-903.9	CROSSBAND LINEAR TRANSLATOR OUTPUTS
903.9-904.0	EXPERIMENTAL BEACONS
904.0-904.3	CONTROL AND AUXILIARY LINKS
904.3-904.5	FM SIMPLEX (25-kHz CHANNELLING)
904.500	NATIONAL FM CALLING FREQUENCY
904.5-905.0	FM SIMPLEX (25-kHz CHANNELLING)
905.0-907.0	HIGH-RATE DATA (≥ 4800 baud, DUPLEX)
907.0-910.0	FM REPEATER INPUTS (25 kHz-CHANNELLING)
910.0-916.0	FAST-SCAN TV (SIMPLEX OR REPEATER OUTPUT, PAIRED WITH 922.0-928.0 AND 439.0-444.0 MHz)
916.0-916.5	PACKET (≤ 2400 baud, 25 kHz-CHANNELLING)
916.5-919.0	HIGH-RATE DATA (≥ 4800 baud, DUPLEX)
919.0-922.0	FM REPEATER OUTPUTS (25-kHz CHANNELLING)
922.0-928.0	FAST-SCAN TV (SIMPLEX OR REPEATER INPUTS), SPREAD SPECTRUM, EXPERIMENTAL MODES

(1) Note that in western Canada where FIXED SERVICE operations exist around 903 MHz, SSB and CW operations may have to use 902.0-902.5 MHz. Coordination with DOC and the FIXED SERVICE user is the responsibility of the radio amateur.

Hamtronics in Hilton, NY. You can't use the excuse that there's no equipment!

Clubs like the Rochester (NY) VHF group are producing transverters as a club project. Perhaps some enterprising Canadian clubs will get a similar project going to produce other gear for this band. Our access to the band is now assured. All we have to do is populate it. Come on up and join the pioneers who are on 33 cm. There is lots of room and the propagation is FB!

### VHF GET-TOGETHER A SUCCESS

The 39th annual "Do" was held at the QTH of VE3DSS in late September. The group was treated to a fine presentation by Richard Miller, VE3CIE, who explained the mysteries of solar flares and aurora. Richard came prepared with overheads, slides, numerous models and a broad range of knowledge which he willingly shared. In addition, we received contest logs from across the country. Despite the poor propagation conditions on contest weekend, enthusiasm ran high and amateurs made the most of it. VE6NOV, the Novatel Club station in Calgary operated by Larry VE6KC, Russ VE6KZ, and Les VE6CA operated from Plateau Mountain and Larry writes, "We arrived at our site about noon in light snow and a temperature of about 0°C. We set up and began our contest while the temperature

dropped and the wind increased. As night fell it, began to snow heavily. We found our 2500-watt generator completely encrusted in ice at around 11 pm. It was necessary to bring it into the van to thaw it out. This QRT'd us for the night so we all turned in. We awoke to a bright, sunny and bitterly cold (-20°C) morning with up to a foot of snow around us. This was the first time I had seen the view from this 8200-foot elevation and it was quite spectacular. We quickly got the generator running and were back on the bands.... It was an experience to be sure, and we will probably do it again next year!" Well I sure hope so, Larry, and let's hope it's warmer and the bands open far and wide.

Hope to see all of you in the January VHF Sweepstakes, and as many of you as possible at VE3FAC's for our "40th year of celebrating VHF-UHF contesting in Canada!"

### OPERATING NEWS

**50 MHz:** The six meter season got a boost during the weekend of October 14-15. With the solar activity at 225/0/0, the MUF rapidly headed for 50 MHz. With the quiet sun that weekend, contacts were made into the UK by VE1YX on the east coast, and into Japan and the South Pacific from British Columbia and Saskatchewan. Doug, VE5UF, called to report working 26 JAs on the 14th with signals weak but consistent. Most of his contacts were on CW with a couple on SSB. He worked two

more Japanese stations on October 15, though signals were very weak.

Listening on the "six-metre coordination frequency", 28.885 MHz, revealed a frenzy of activity in areas close to the geomagnetic equator. Dennis, VE3ASO, reported reception of very strong TV carriers from New Zealand on 46.17 MHz, but the MUF stayed below 50 MHz in Ontario.

Solar flare activity kept six quiet, except on aurora of course, until everything died down on Sunday, October 22. Despite WWV numbers of 206/77/5, VE1YX was working into South Africa and VE3DSS worked HC5K who was calling CQ with signals well over S9. Also heard during the opening were QRP station HC2GE running two watts (signal was S9), HC1BI, and the DL3ZM/YV5 beacon on 50.045 MHz. Things improved on October 23. With WWV numbers at 211/22/2, the band showed early signs of activity at 1200 UTC. By 1430 UTC we were hearing the FY7THF beacon on 50.038 MHz well over S9, and then got the surprise of the season with LU4DBK, south of Buenos Aires calling CQ at 50.110 MHz. After he finished working Gord, VE3KKL, I called and we QSO'd. I'd been waiting for the LUs since 1982, which was the last time I was around when they were, hi.

Following that QSO, signals from Columbia and Ecuador were very strong for over an hour. I worked LU8EEM and HC2GE, but needed the kw to break the QRM (reminds me of 20 metres) as everyone seemed to ignore the pleas for a DX window between 50.105 and 50.115 MHz. An HK (Columbia) repeater output at 50.122 was very loud and created QRM for us here in FN03. However it was nice to hear it again. I hope they QSY as they did in 1979. Unfortunately more solar activity put a damper on all the activity and the band was relatively quiet on October 24 with the WWV numbers at 213/17/4 and major flares. The following day brought an open band again and Peter, VE3EMS, worked DL3ZM/YV5, HC2GE and OA8ABT for three new countries.

On Friday, October 27, the band opened again, this time into TI. Peter was hearing Gus, HC2K, operating from San Cristobal Island (Galapagos) using the call HC8K. The weekend was very quiet on six until late in the day on October 29 when HC8K was again heard, running S5 to over S9 as he called CQ on 50.110 MHz at 1950 UTC. Among the stations to contact Gus that day were VE3FGU, VE3AAY, VE3DSS and VE3ASO. I guess we all made Gus feel that his long CQs were not in vain. In addition, VE3FGU snagged CE4EBC during this brief north-south opening. All this with the solar flux sitting at around 170.

Doug, VE5UF, reported working VO1QF on "the Rock" and HH7PV in the Caribbean on November 6, bringing his grid square total to 327.

Welcome to Andy, VE3EKF, who is QRV on 50 MHz with an IC-551. Look for him in the pile ups from FN04 in Barrie. Also please welcome Ken, VE3FIT, of West Hill as six-metre activity grows.

Incidentally, if you use six metres you should consider joining SMIRK, the Six Metre International Radio Klub, c/o K5ZMS, 7158 Stone Fence, San Antonio, Texas 78227 USA.

144 MHz: I received an interesting letter from Mark, VE8IAM of Fort Providence, NWT. He writes that "On August 14 at 2140 MDT I was mobile about 20 miles south of my home when I heard a call on 146.52 MHz. It was WA0LXB in Minot, North Dakota. He was 5x5. I called him, and we carried on quite an excited QSO!" Mark went on to work KA0HPE/VE5 in Iron Gate, Saskatchewan,

and heard an N0 station as well. I think in Mark we have found a convert to VHF DX, and I hope he continues to explore the mysteries of propagation available to us in Canada. According to my log we had an intense auroral opening on the 14th and 15th. Mark probably experienced the joys of working DX via auroral Sporadic E. VHF signals can and certainly do go beyond line of sight! I am convinced we have the potential to unwrap some pretty spectacular DX propagation modes found only in Canada. Why not try it?

October 19 brought news of a major solar flare that produced energy from 1130 UTC to 2100 UTC. This led to a strong solar storm, causing the K index to climb to 7 on the 20th. Good auroral signals were worked by VE3DSS and many other Ontario and Quebec stations including VE2DUB (FN35) and VE2NI (FN35). Stations worked included W1AIM (FN34), N1BUG (FN55), K3ZO (FM18), and W9SR (EN70 in Indiana).

If you live in the west join the crowd on 144-MHz SSB—like Verne, VE4ABE, did. Welcome aboard!

220 MHz: During the contest, activity remained good on our 135-cm band. Contacts made by VE3DSS included KD5RO (FN13), K2GK (FN12), NM8X (EN83), VE3EMS (FN02), WA2FGK (FN21), W2SZ/1 (FN32) and W1XX/3 (FN00). It's a shame we don't hear more Canadians on 135 cm as propagation is as good as on 144 MHz and the noise floor is a lot lower!

432 MHz: Hans, VE3CRU (FN03), reports that he needs only four more states for his Worked All States (WAS) award. Let's hope his efforts are rewarded shortly. Hans will become one of a handful of Canadians to obtain this award on 432 MHz. But he had better hurry as Ted, VE3BQN (FN04), is hot on his trail. Ted advises that he is putting up an array of six 24-element K1FO yagis on his tower and will now be on two bands looking for moonbounce contacts. Winnipeg 432-MHz notes appear in the 1296-MHz section below.

902 MHz: Good news for Canadian amateurs! In October, the Radio Advisory Board of Canada (RABC) recommended that DOC limit operation of wireless office products to 30–50 MHz, 860–890 MHz, and 942–952 MHz. This follows CRRL's proposals via RABC and direct to DOC to use 942–952 MHz rather than 902–928 MHz for these devices, though it would appear that experimentation in the 33-cm band will continue until 1992. CRRL took the position that amateur operation and wireless office products were incompatible and could not share a band. CRRL's presence at the RABC meetings seems to have had some effect. VE3DSS represented you all at the last RABC committee meeting, and I can assure you that the issues discussed were complex and contentious. The pressure on this part of the spectrum is enormous. I sincerely hope there are others out there who are also concerned about our spectrum, and who may be willing to volunteer to assist in our ongoing lobbying activities.

Barry, VE4MA in Winnipeg, writes that he finally has permission to operate on the 33-cm band. DOC is allowing him to operate 902–903.3-MHz SSB and CW provided he coordinates with existing FIXED service users. Barry has indeed done this and will be active on 902.1 MHz. This frequency minimizes the potential for interference. No problem for a sharp professional engineer like Barry! We should be hearing him calling CQ DX shortly.

1296 MHz: Contest activity provided surprises on our 23-cm band at VE3DSS. Contacts were made with W1XX/3 (FN00), W2PGC (FN02) and VE3BFM (FN04), with

just two watts and normal to subnormal propagation conditions. Not like the September 1988 contest at all.

Barry, VE4MA, writes that he and VE4MR are skedding three nights a week on 432 and 1296 MHz over a 200-km path. Barry mentions that he caught a super tropo opening to NOKSC/WA0TKJ (EM18) with signals running 5x5. Despite this 800-mile 1296-MHz contact, it was not a new grid for him! VE4MR and VE4AQ continue to assist Barry in piling up new grid squares with DXpeditions to DN99, EO00, DO90, EO10 and EO11 bringing his grid-square total to 53. Jim, VE4AQ, writes that he and Bert, VE4AP, went to VE4SD's QTH in Riverton (EO11) and worked Barry over the 80-mile path on 1296 and 432 MHz. On October 1, Jim set up in EO10 about 60 miles north of Winnipeg and worked VE4MA on 1296 MHz, and VE4MR in EN09 (200 miles) and VE4KQ on 432 MHz. Jim says it's getting harder to find grids with roads to reach them! VE4AQ is constructing a KK7B 1296-MHz transverter (published in the *Proceedings of the Central States VHF Conference*) and will soon be on with 25 watts and a 45-element loop yagi!

2304 MHz: I recently had a look at Hans VE3CRU's new "no-tune" 2304-MHz transverter which he built from a kit supplied by Down East Microwave (c/o Bill Olsen W3HQT, Box 2310, RR1, Troy, Maine, 04978, Tel (207) 947-3741). The design certainly shows how easy it is to build a transverter for the higher bands. It fits onto two circuit boards and is simple to build and tune. Look for VE3CRU shortly on 13 cm. At the Newmarket Fleamarket, VE3ONT, had a display which included Tony, VE3DIR's 2304-MHz station. Very impressive indeed, and an example for others to emulate.

3456 MHz: Barry, VE4MA, continues to push into the upper microwave bands and reports that he has achieved 6.5 watts output from a 7289 cavity amplifier. He reckons he can get more by upping the drive and is building an intermediate stage using a 10-watt power FET. He also notes that a TVRO LNA can easily be retuned down to 3456 MHz. This may also be an easy way to get started in 3400-MHz FM television. Any interest out there?

10 GHz: The 10-GHz Cumulative Contest sponsored by ARRL provided some real treats for those who were active. At least two groups were on the air: Mike, VE2DUB, and his crew in Quebec (FN35), and Steve, VE3SMA and his crew in Ontario (EN93). Steve's and his crew's best DX was Thorold to Caledon Hills, 60 miles on 10-GHz FM. However I believe Mike and his crew beat this by a large margin.

## REPEATER NEWS

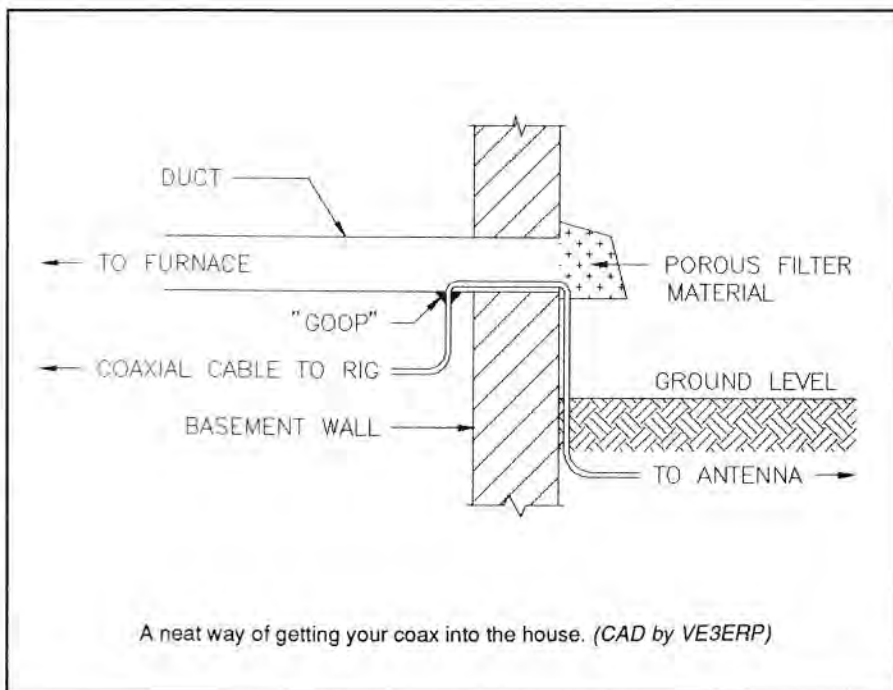
The Toronto FM Communications Society (TFMCS, or TFM for short) held its picnic at the end of September at the VE3RPT repeater site. All those responsible for organizing the event are to be congratulated. I know everyone had a great time. Representatives of DOC were on hand to discuss "interference" to concerned FM users. Too bad we have to live with Touchtone Tommys on our repeater frequencies. TFM is forwarding data on interference suspects to DOC on a regular basis. Look for more direct action by TFM shortly. Hopefully, now that the new Radiocommunications Act is in place, DOC will be a bit more willing to put these clowns out of business. Incidentally TFM had a great computer-based presentation running at the Newmarket Fleamarket. Look for the various TFMCS repeaters on 10, 6 and 2 metres, and on 135 and 70 centimetres. "Nuff said. ■

## Bringing in the Coax

Here is a way of getting your coaxial cable or ground lead into your basement quickly and easily.

Most houses have a duct of some kind that passes through a basement wall, a fresh air intake for a furnace, or an exhaust vent for a clothes dryer. Drill a hole in the duct. Install a rubber grommet. Run your cable through the grommet, into the duct, and on to the weather shroud outside. (Spread a little goop around the coax where it passes through the grommet to prevent drafts.) If the duct is for bringing in air, fill the shroud with a piece of furnace filter. This allows the air to enter, but keeps birds and insects out. Don't put anything in a dryer exhaust. It will soon plug up with lint.

If the duct is an exhaust, the shroud probably has a flap that opens only when the duct is in use. You can nip a corner off this flap to allow it to clear the coaxial cable, or you can make another hole in the side of the shroud. (Don't forget the grommet and goop!) —G Barnsley, VE5GY ■



## IARU

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## ITU Conference Adopts Schedule for WARC-92

WARC-92 was announced in *QST Canada* several months ago. However, IARU has asked that all member-societies publish this exact text.

The ITU Plenipotentiary Conference has adopted a schedule for future conferences, at least one of which is of direct interest to Amateur Radio: a World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum. It is scheduled for the first quarter of 1992 in Spain, and is tentatively slated to last four weeks and two days. (By contrast, WARC-79 lasted for ten weeks.)

The precise agenda of the 1992 Conference will not be known until it is established by the ITU Administrative Council. A clue to its likely extent is that the Administrative Council is to take into account "the Resolutions and Recommendations of WARC HF-BC-87, WARC MOB-87, and WARC ORB-88 relating to frequency allocations; in addition, this Conference may consider defining certain new space services and consider allocations to these services in the frequency bands above 20 GHz."

The WARC HF-BC-87 recommendations and WARC-MOB-87 resolutions were discussed in August 1987 and January 1988 *QST* editorials. The relevant portions refer to the desirability of a conference to consider "...the possibility of extending the HF frequency spectrum allocated exclusively to the broadcasting service" and "...revising the Table of Frequency Allocations around 1-3 GHz to better accommodate the mobile-satellite and the mobile services." As for WARC ORB-88, it resolved that the introduction of High Definition Television (HDTV) should be made by a frequency allocation on a worldwide basis, and that a future conference should consider the frequency range of 12.7-23 GHz for the choice of an appropriate band; and further, that a future conference, to be held no later than 1992, should select a band or bands in the range of 500 MHz-3GHz with a view to a possible allocation for a Sound Satellite Broadcasting Service (SBSS).

The frequency ranges possibly subject to reallocations are: 3-30 MHz, 500 MHz-3 GHz, and above 12.7 GHz.

However, the ITU Administrative Council may limit these ranges further

when it adopts the agenda at a meeting in November or at a subsequent meeting scheduled for next spring.

Another future conference on the schedule adopted by the Plenipotentiary Conference is a World Administrative Radio Conference for Dealing with Matter Connected with the Broadcasting Service in the HF Band, called for Geneva in the first quarter of 1993 and tentatively to last four weeks. This may hold some interest to Amateur Radio because of the differences in allocations between regions at 3.95-4.0 MHz and 7.1-7.3 MHz.

### DEFENCE OF AMATEUR RADIO FUND UPDATE

Canada's Defence of Amateur Radio Fund will help IARU defend our amateur frequencies at WARC-92. Since our last listing two months ago, some thirty individuals and Amateur Radio clubs added over \$2000 to this fund. (We'll publish the names next month.) Your donation will help keep Amateur Radio strong. Please send your cheque to the Defence of Amateur Radio Fund, Box 56, Arva, ON N0M 1C0. ■

## KENWOOD



TS-940, TS-680S, TS-440, TS-140



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TR-751A

TH-205AT, TH-215A  
TH-415A, TH-75A



TH-25AT, TH-45AT



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TOTAL PRICE—\$3900, CASH PRICE—\$3650

36-MONTH LEASE—\$142.58 PER MONTH

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42-MONTH LEASE—\$137.54 PER MONTH

2. TRYLON 48' TOWER, 12' MAST AND MAST BEARING, HYGAIN HAM IV ROTOR PLUS 100' 8-WIRE CABLE, HYGAIN EXPLORER-14 10, 15, 20-METRE ANTENNA, BN-86 BALUN, SIX PL259 CONNECTORS, 200' RG 213u ANTENNA WIRE...

(A) WITH ICOM IC-761 TRANSCEIVER AND ICOM IC-275H ALL-MODE

TOTAL PRICE—\$8778, CASH PRICE—\$8550

36-MONTH LEASE—\$311.71 PER MONTH

42-MONTH LEASE—\$278.00 PER MONTH

(B) WITH ICOM IC-751A, PS-30 POWER SUPPLY AND ICOM IC-275H

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**AEA** PK-232, PK-87



1278

**MFR** 1270B, 1274, 1278

## California Earthquake

While the emergency nets were still busy with traffic from Hurricane Hugo, a second major disaster struck our neighbours to the south. The US west coast—from Santa Barbara in the south to Sacramento in the north, including the San Francisco-Oakland area—was struck by an earthquake, intensity 7.1 on the Richter scale. At the time of writing, fatalities were in excess of sixty and property damage was estimated to be as high as six billion dollars. Who can forget the terrifying views on television, of the catastrophic fire under the collapsed upper deck of the Nimitz Freeway in Oakland?

Only minutes after the fifteen-second quake, the telephone system throughout the area became inoperative, partly due to earthquake damage, but mostly due to overload from the many thousands of calls into and out of the disaster zone. Within minutes, a number of Amateur Radio stations that had survived the tremor were on the air with damage and casualty reports, as well as messages of reassurance from survivors. For the next week or more, literally thousands of welfare inquiries were fed into the area by IARN and ARES stations all over the continent. The majority of these messages simply read "ARL 19 addressee", thus making effective use of ARRL numbered radiograms. (In case you don't have your list at hand, ARL 19 means "Request health and welfare report on ....") Some operators passed as many as 25 welfare messages into the area at a time on behalf of their local Red Cross organizations.

While, at time of writing, it was still too early to prepare a comprehensive report, on Amateur Radio's response to the California earthquake, it is safe to say that once again, a major contribution was made by ARES.

The rupture was the seventh substantial earthquake since the 1906 San Francisco quake that killed 700 people. Disastrous though it was, it was not "the big one" that had been expected for years. The San Andreas Fault, which is one of the greatest fractures in the earth's crust, passes within eight miles of the centre of San Francisco. For years, pressure has been building up along the fault. Whole areas of California have slowly been moving as a result of the strain. While the quake relieved some pressure along part of the fault, there remains a region some 20 km north that did not rupture, and consequently presents a high risk for the future.

In Canada, the attention of seismologists has been focused on the Juan de Fuca fault which runs beneath the Pacific

Ocean from the centre of Vancouver Island to Oregon. Movement along the fault line could create a massive earthquake on Canada's west coast, including the greater Vancouver area.

As noted in another column, Canadian authorities on our west coast have been paying increased attention to the possibility of a major quake. There are indications that the San Francisco disaster has stimulated even greater interest. We wish Ernie Savage, VE7FB, SM and SEC for British Columbia, well in his continuing

efforts to heighten interest in ARES in his province.

### VE3GOC ET AL

In recognition of the role of Amateur Radio in disaster communications, Emergency Preparedness Canada (EPC) has created VE3GOC, and assisted with the funding of VE1GOC and VE6GOC.

VE3GOC is located in the federal government's emergency headquarters (known as "the bunker") at Carp, not far from Ottawa. The intended purpose is to

## Field Organization Reports October 1989

### 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 865.

Reporting	ARES Members
VE3GV (VE3s EFX, FOB, GMU, GNW, ITL, ITT, JJA, KXB, LKI, LPM, LYW, KBU, MB, TNL)	570
VE6AFO	245
VE7FB	50

### CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Divd	Total
VE1ADJ	0	19	16	0	35
VE1ALU	2	14	16	0	32
VE1DLC	0	9	8	1	18
VE1BTV	0	4	5	0	9
VE1BKM	0	3	2	1	6
VE1IH	3	0	3	0	6
VE2BP	2	14	14	16	46
VE2WH	2	17	11	11	41
VE2EC	6	10	14	8	38
VE2ALE	0	0	2	0	2
VE3GSQ	0	116	67	2	185
VE3CYR	0	83	40	1	124
VE3ISD	3	43	67	4	117
VE3GNW	0	45	60	1	106
VE3ORN	1	45	43	6	95
VE3SB	2	34	36	5	77
VE3BCZ	5	21	26	4	56
VE3K CZ	0	27	22	6	55
VE3GT	0	15	38	0	53
VE3IN	0	39	5	7	51
VE3NVJ	5	19	20	7	51
VE3EAM	7	7	15	14	43
VE3BDM	0	4	25	0	29
VE3AJN	0	5	16	0	21
VE3EUI	1	4	3	3	11
VE3DVE	0	4	4	0	8
VE3BAJ	0	2	5	0	7
VE3FGU	0	2	4	0	6
VE4JA	13	27	22	18	80
VE4JR	0	23	20	3	46
VE4STU	1	10	10	6	27
VE4KE	0	5	20	1	26
VE4TE	0	20	6	0	26
VE6CPP	-	-	-	-	23
VE6GUS	-	-	-	-	17
VE6EO	-	-	-	-	4
VE7EJ	5	85	51	1	142
VE7OM	7	21	9	20	57
VE7XA	0	17	32	8	57
VE7ANG	2	19	21	0	42
VE7BZI	4	4	6	6	20
VE7CBL	1	8	2	6	17
VE7FB	2	5	2	3	12
VE7BCF	5	0	5	0	10
VE7CCJ	0	3	5	0	8

### National Traffic System

Net (Mgr)	Sess	QNI	QTC
APN (VE1BKM)	28	112	99
KTN (VE3AJN)	13	119	112
OLN (VE3POJ)	30	562	62
OPN (VE3IN)	30	621	110
OQN-1 (VE3GSQ)	29	37	9
OQN-D (VE3ORN)	28	71	13
OQN-E (VE3CYR)	28	140	125
OQN-L (VE3GSQ)	14	38	15
MTN (VE4IX)	16	200	35
MEPN (VE4LB)	29	904	19
MWX (VE4TE)	31	484	20
APSN (VE6AKY)	31	1436	18
ATN (VE6CPP)	31	241	56
BCEN (VE7EJU)	31	735	182

### Brass Pounders' League

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

BPL: None this month

### Public Service Honour Roll

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 (149), VE3GNW (102), VE4LB (100), VE3ORN (95), VE3BDM (90), VE4STU (82), VE3CYR (69), VE7EJU (46)

### Service and Specialized Nets

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

Net (Mgr)	Sess	QNI	QTC
ARES CANADA (VE3GV)	5	101	0
ARES ONTARIO (VE3GV)	1	5	0
CRRL ONTARS (VE3FOV)	31	8572	0
TRANS-PROVINCIAL (VE3EUI)	28	6146	0
MJARC (VE5MML)	27	266	0
SWX (VE5EX)	31	778	0
SPN (VE5AE)	22	1032	15



Alberta SM Bill Gillespie operates VE6GOC in Edmonton. What does GOC stand for? Government of Canada—what else! (Photo courtesy VE6ABC)

supply and coordinate HF emergency communications when commercial facilities are unavailable or impaired to the extent that they cannot rapidly exchange vital information of interest to federal government agencies. The station's chief operator, Nick Evanoff, VE3BED, is an employee of EPC. The station is operated by various members of the public service in Ottawa who are licensed amateurs.

Equipment includes Yaesu and Racal HF transceivers, each with linear amplifier, and an Icom 2-metre transceiver. Antennas include a TH6DXX beam, an all-band vertical and an inverted-V. So far, the station has been used for emergency communications related to the Mexican earthquake, the Edmonton tornado and the DC-8 air crash at Gander.

VE6GOC has been established at Edmonton, at the headquarters of Alberta

Public Safety Services (APSS) with joint funding by APSS and EPC. Bill Gillespie, VE6ABC, who is coordinator for Alberta ARES, played a leading role in setting up this station and getting it on the air. Equipment includes a Racal HF station, complete with 65-foot tower and three-element beam and dipole antennas, and a 2-metre transceiver with a Ringo Ranger antenna. The HF station is capable of RTTY operation. When the station operates in support of APSS, it uses the call VE6ACD.

VE1GOC is just being set up near Fredericton, New Brunswick. I will provide a description in another column.

Thanks to VE6ABC and VE6BLY for the information on VE6GOC, and to D W Peters of EPC for the information of VE3GOC. With the commissioning of these stations, our ability to have commu-

nications in time of emergency is significantly increased. —Bob Boyd, VE3SV

ARES is a branch of the CRRL Field Organization, although you do not have to be a CRRL member to take part. It is hoped that this column, which also appears in The Canadian Amateur, will serve as an ongoing source of news and information about ARES activities across Canada. ARES members, particularly ECs, are invited to send information on what they are doing and developments they would like to share. We will pull this together for future columns with the objective of increasing our ability to serve, should disaster strike. ■

Section News—continued from page 13

**Quebec:** SM: Harold Moreau, VE2BP; STM: VE2EDO; SEC: VE2LYC; BM: VE2ALE. Congratulations to the following clubs for their high scores in this year's Field Day: VE2s UMS, QST, JJ and IG. Daniel, VE2VHF, est le nouveau président du club Ste-Hyacinthe (VE2CAM). Adéoda, VE2ABQ, doit être félicité, pour sa performance lors du Field Day 1989, avec 1080 points dans la classe 1E (ORP). Avec regret, je dois vous annoncer le décès de VE2EVU.

**Saskatchewan:** SM: Bruce Rattray, VE5RC. I begin this month's report on a sad note: Herbert Jacobs, VE5HF, has become a Silent Key. The Saskatchewan Amateur Traffic Net is running Monday through Friday at 0130 UTC on 3.695 MHz, under the experienced guidance of Lorne, VE5AGM. Lorne reports a steady number of check-ins, but he welcomes more, so let's all dust off our keys and check in. Saskatchewan was once again well represented in the CQ WW SSB Contest by the VE5GF crew of VE5s AEO, AGA, BCT, ELJ, IC and JHC. Despite terrible conditions compared to last year (solar flares and polar-cap absorption which pretty well shut down 160 and 80 metres), Gordon reports a solid 2702 contacts. The Regina Amateur Radio Association (RARA) began moving to its new permanent location at the new Science Centre on November 10. The VE5NN antennas were taken down and are awaiting reinstallation on the Science Centre roof. The antenna dismantling party consisted of VE5s EE (who climbed the tower), ELJ, OI and RC. The RARA Amateur Radio course is running for another year with an equipment construction class. Best wishes for the New Year and the new decade from the Saskatchewan Amateur Radio community. 73 ■

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