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ABOUT THE COVER



Hans Peters, VE3CRU (left), stalks a customer at the Dayton Hamvention. Hans' company, Transverters Unlimited, has helped many amateurs on both sides of the border get on the VHF-UHF bands. (VE3GRO photo)

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

An Open Letter...

The following recently appeared in Long Skip, the journal of the Canadian DX Association (CANAD-X).

CRRL has approached CARF with the proposal that the two organizations work to create a single national organization to represent Canadian amateurs to our government and to the world. Who approached whom isn't important. What is vitally important is that Canadian amateurs unite for the best possible leadership in a time when our right to operate and spectrum allocations are up for grabs.

All Canadian amateurs recognize the need for a strong unified voice at DOC and in other arenas. The chronically understaffed DOC needs consultation and guidance on amateur issues, not confrontation. There shouldn't be a contest to show who can beat DOC the hardest to prove they're the "true" representative of all Canadian amateurs. It doesn't make sense to antagonize people who control our destiny and would probably welcome our help to regulate ourselves. Because there are two competing organizations, Canadian amateurs are throwing away the best opportunity we may ever have to develop and protect our hobby.

Why bring CANAD-X into the finger pointing? Because we're all amateurs and our ability to operate depends on political savvy, organizational strength and funding. Two national organizations aren't giving us what we need—but one new one might. I say *might* because only about one-third of all Canadian amateurs belong to either CRRL or CARF. The other two-thirds assume that international regulations and the other guys will protect our frequencies and their licences. Recent events on 220 MHz in the US, the wind profiler here, and the Jack Ravenscroft interference case show that this concept is naïve. Does it mean that the younger guys had better find a new retirement hobby? Continued erosion of our privileges over time, like acid rain, will eventually catch up with us, and the fishing will be gone.

DXers are the most active amateurs with the largest investments in equipment and commitment to the hobby. The talent in CRRL and CARF is more than adequate for the job. Two headquarters, two monthly magazines and a lot of "my empire is better than yours" is making *all* amateurs in Canada more vulnerable to the loss of spectrum and the to operate from our homes.

Every CANAD-X member should contact his or her nearest CARF or CRRL officer or director, and urge them to get the ball rolling for a new national organization. If you don't belong to either organization, join one. Talk about this on your local repeater

and nets. As the wise man said, "A journey of a thousand miles begins with but a step." CANAD-X will offer whatever help possible to either CRRL or CARF. The only string that is attached is that petty differences be set aside. Ham Radio's survival is more important than whether the headquarters is in London or Kingston or Sable Island. Let's get on with it guys. Time is running out.—George Gorsline, VE3FIU

...AND SOME REFLECTIONS

We printed George's letter (which was a personal opinion and not necessarily an opinion of Long Skip or CANAD-X) because we know his point of view is shared by many amateurs. However, it is rarely as eloquently expressed.

Eloquence notwithstanding, we are happy to report that George has overstated the case. There has never been *confrontation* with DOC, and despite the competitiveness between CRRL and CARF, whenever representatives of the two organizations have worked together on a project—a syllabus, a questions bank, or a proposal for DOC—the representatives have gotten along swimmingly.

That's why we feel so optimistic about the work that is about to begin. The only difference is that this time, the project is bigger—in fact, probably the biggest that CRRL or CARF has ever undertaken.

There is a lot of talent in CRRL and CARF, and we sense a genuine desire to go ahead. Let's just hope that the actual people involved in the discussions can put aside the past and develop the vision, enthusiasm and trust needed to make a single organization a reality.—Harry MacLean, VE3GRO

LIVE BY THE RULES

If you want to see Noel Eaton, VE3CJ, get upset, just mention someone you know who operates out of their band, runs a three kilowatt linear or takes phone patches for countries where Canada has no third-party agreement. That's because Noel led the IARU delegation in Geneva during WARC '79 and he knows how easily the respect we enjoy as amateurs can be jeopardized by a few individuals not living by the rules.

The importance of living by the rules was underscored by delegates to the Tenth General Assembly of IARU Region 2 held in Orlando this September. The resolution was awkwardly worded, no doubt an imprecise translation from a Spanish original (see this month's IARU column), but the message was clear. There's an important WARC on the horizon. Now, more than ever, we must live by the rules and maintain the respect we have with our licensing authorities.—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.

MEMBERSHIP AND INSURANCE

During the CRRL National Convention, hosted by Winnipeg Amateur Radio Club on August 18-20, many interesting topics were discussed. One particular speaker, who over the years continues to volunteer his time and talents for the betterment of Amateur Radio, was CRRL President Tom Atkins, VE3CDM.

In his speech, Tom highlighted a topic we have heard many times from many individuals: Why should I support an organization? I don't check into nets. I don't handle traffic or do phone patches. I seldom work DX. I just do my own thing. Why should I give my money to CRRL or any organization. What do they do for me?

Great, but we bet you're going to be first to scream when you are told you cannot use

a presently allotted amateur frequency—or perhaps *all presently* allotted amateur frequencies. Who then will buy all that fancy gear you've been collecting over the years?

Anyone reading this will probably say, "I know all this. That's why I belong to CRRL." I guess what I'm trying to bring to everyone's attention is that those of us who do know need to get to those who are ignorant of the facts—and stress to them the importance of investing a few dollars in CRRL as insurance for our present and future amateur frequencies. Commercial radio users and manufacturers are lobbying governments for additional frequencies, and with a WARC coming up in 1992, our frequencies may be hard pressed.

For those who are unaware, it is IARU that will be defending our frequencies at that WARC. Also for those who are

unaware, CRRL helps maintain IARU by paying a fee for every amateur in Canada, whether they belong to CRRL or not.

Almost every year, CRRL Headquarters puts on a membership drive, offering goodies like a handbook or callbook at a discount price to encourage membership. In too many cases, individuals join for the goodies but do not renew the following year.

We out there from east to west to the far north are CRRL's greatest resource. If each one of us who is presently a member signed up just *one* new member, CRRL's membership and the insurance on our frequencies would increase 100 percent.

Almost forgot! Here's a cheque for \$25 for the Defence of Amateur Radio Fund to help IARU prepare for the upcoming WARC. I challenge all CRRL members to match or better this small amount. Send it to the Defence of Amateur Radio Fund, Box 56, Arva, ON N0M 1C0 —*Jack Adams, VE4JA, SM Manitoba Section*

ROCKPILE ANTENNA

Why does VE7AWJ's antenna work? Didn't he say he has used this antenna for "over two years"?

Conditions have improved a lot in the last two years... —*Bill Skidmore, VE3AU1*

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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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.

CRRL "QST" QSO Award Parties: Phone: 14.13 and 21.25 MHz, 1400-2200 UTC, November 4 and 5, CW; low end of 20- and 15-metre bands, 1400-2200 UTC, November 11 and 12. All eleven CRRL-sponsored "QST" stations are expected on the air. Contact any eight, any mode, to earn the "Worked 'QST' Award". Send log along with SASE or IRCS to CRRL Awards Manager Garry Hammond, VE3XN, 5 McLaren Ave, Listowel, ON N4W 3K1.

Newmarket, ON: Annual Fleamarket on November 4. No additional details available at press time.

Ottawa, ON: Fall Fleamarket, Canada Room, RA Centre, 2451 Riverside Dr on October 28. Sponsored by Ottawa ARC. Vendors: half table—\$5, full table—\$10, commercial table—\$20. Setup at 7. General public: admission—\$3. Opens at 9. Talk-in on VE2CRA, 146.34/146.94 MHz. For more information, contact Doug Yull, VE3OCU, (613) 230-1741.

Special Prefix: To commemorate the 350th Anniversary of the founding of the first settlement in Ontario, Ste-Marie-Among-the-Hurons, amateurs in Ontario may use the special prefix XL3 from 1989 October 24 until 1989 November 24. ■

BY... 100% QSL!



An photo album from the People's Republic of China

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



In the good old days of DX, it used to be that you had to work a VS6, CR9 (now XX9) or maybe BV2A or BV2B to have a Zone 24 QSO. Nowadays, China (BY) is the most consistently active DXCC country in that corner of the world. But it wasn't always that way...

Bouquets of appreciation must go to Tom Wong, VE7BC (the Big Cookie), Fred Hammond, VE3HC, and Martin Rosenthal, VE3MR, for helping to get China on the air in the very best way. Let me explain. Rather than encouraging a one-time, one-week, one-authorization DXpedition type of activity conducted by a group of hotshot operators, VE7BC, with material support from VE3HC and VE3MR, did the behind-the-scenes encouraging, negotiating and convincing necessary to reactivate BY. A training program was established. This program continues today. Equipment was donated. This kind of assistance continues as well, from several Japanese sources. And since those exciting days in 1983 and 1984 when we first heard the China Radiosport Association (CRSA) calls, BY1PK from Beijing and BY4AA from Shanghai, China watchers tell us that over 25 stations have been set up. Some are official stations sponsored by CRSA, and some are special-event stations. In addition, calls of guest operators are commonly heard.

After the turmoil in Tienanmen Square in June, the last thing I expected was to receive direct mail from the People's Republic of China. However, two envelopes arrived within a month of those events. One contained five BY4RB QSL cards for 10-, 15- and 20-metre QSOs on SSB and CW. The other, more of a package, contained a QSL card, a pennant, a map, postcards, and most interesting—photos of BY7HY.

A photo exchange with a DX station is an enjoyable extension of the time-honoured tradition of sending a QSL card after a QSO. This writer has had excellent results in obtaining direct QSLs from rare stations by enclosing a photo along with the card and a personalized computer-

printed letter. The subject matter of the photo is important. The most obvious choice is you at your radio equipment. A favourite antenna picture if acceptable, but people like people pictures more. So, one of you with your family or pet, or you on a holiday—no radio equipment is needed at all—is always welcome. I recommend that you not send a boring picture of your operating position, no matter how elaborate it might be. *You* should be in the picture to bring it to life. Of course, not everyone will send you a return photo, but quite a few do. It is certainly worth the effort and cost. Let me share some recent photos and information from China.

BY4RB



Huang, is chief operator and trainer at BY4RB, the Zhenjiang Radiosport Association station of the Children's Palace, Box 413, Zhenjiang, Jiangsu, China. BY4RB has been active since June, 1986, and has made over 25,000 QSOs with stations in over 100 countries. This station operates on 3.5–50 MHz and is often heard on 14.020–14.040-MHz CW and 14.185–14.200-MHz SSB. From October to March, look for BY4RB, 2300–3000 UTC on 21.229–21.235- and 28.400–28.450-MHz SSB. Some 80- and 40-metre work is done from April to September at 1100–1500 UTC. Huang and his XYL, who is an English teacher, have two sons. Huang apologizes to the many stations who are waiting for his QSL. I received two letters and the photo six months before receiving his five QSL cards in July of this year.

BY5QA



BY5QA is the club station of the Fuzhou Teaching Tentative Centre, Box 507, Fuzhou, China. It too has been operating since June, 1986. The 16-year-old operator I spoke to was Wu Xiao Yi who was studying in his Senior Two year. He likes to call himself "Carl" and he enjoys operating the TS-430S and a four-element yagi. The most recent QSO I had with BY5QA was with operator Zhuang on 21.265 MHz at 1300 UTC on July 13.

BY4RA



BY4RA is the official Amateur Radio station of CRSA's Fuzhou Branch. Address is Box 730, Fuzhou, China. Active operators include Dai Jia-qi (standing in the photo), Lin Shao-Wen (seated, on the left), and Hong Zhi-Ping (seated, on the right). BY4RA confirms QSOs with my personal favourite QSL: a colourful photo card of a panda bear eating bamboo. The Chinese are to be commended for their QSLs. CRSA stations use unique cards, many with colourful photos, rather than the stock cards on which so many North American amateurs seem to rely.

BY7HY



BY7HY's number one operator is Peng Chi-tao, a 43-year old English teacher at Yueyang College. Peng writes, "It was not until a Japanese city sent us a ham radio set that I was asked by the government to work at the radio in my spare time. I am the only man in the radio BY7HY because few people speak English. Soon I found myself absorbed in the work!" In his package, dated June 14, Peng added, "I was in Beijing for a ham radio meeting and training time. I have a new call sign of my own. It is BY7AA and I am going to use it from August 5, 1989. I am sorry to say that I have had just ten VE contacts since May 20, 1988. Besides ham radio, I am collecting stamps."



One photo that Peng sent is not your usual Amateur Radio tower picture. It's not a Delhi, Trylon or Hy-Gain, but the Yueyang Tower. If you would like to correspond with Peng to set up a sked or to request a QSL, write to him and send him

some stamps at Box 14, Yueyang City, Huan, 414000 PR China. Peng is often QRV on or about 21.150 MHz at 2300-0100 UTC using a TS-940S and a four-element yagi.

BY8AC



BY8AC became operational on February, 1985. It is located in the capital city of Sichuan province. The station belongs to the Chengdu Young People's Palace. In the photo, Yang is on the left, and Sun Jian is on the right. From 1986 to 1988, Sun went to college to study (of all things) Chinese. Late in 1988, the two formed the Chengdu CQ Club and started a learner's class. Sun requests that anyone who can help him with materials for their courses, please contact him at 38 Guzhongsi St, Chengdu, PR China. Perhaps a Canadian club might consider "twinning" with BY8AC. Who will take the initiative? BY4AC prefers 21.015-, 24.020- and 28.027-MHz CW, and 28.510-MHz SSB. The station is easy to work from VE3 at 0000-0200 UTC.

Of the cards I have sent directly to China, my personal return is 100 per cent, and includes BY1PK, BY1QH, BY4AA, BY4RB, BY4WNG, BY5QA, BY5RA, BY5RT, BY7HY, BY8AC, BY9GA and BY0AA. How do I do it? Easy. I suggest sending a minimum of two IRCs or one IRC and a US green stamp. Suit yourself if you wish to go registered mail, I don't think it is necessary. Do supply a gummed return address label and an over-

size airmail return envelope. Cards from China are large, more like the average JA, DL or HB9 card than the smaller VE or W cards.

Many Canadian amateurs have a computer in the shack. Prepare a letter about yourself and your Amateur Radio activities. Set up the letter so all you have to do is personalize the salutation and date it. This is a good way to improve your QSL return rate and get back some fascinating reading. Of course, don't forget to include a good photograph of yourself doing whatever. Send everything along and wait for the postman to bring you some interesting goodies.

Canadian Field Day Results

Top Ten Regardless of Category:

VE3SPC	6A	9634	S Pickering ARC
VE3OW	8A	9482	Windsor ARC
VE1ND	3A	6962	
VE3NAR	14A	6568	Nortown ARC
VE1FO	2A	6506	Halifax ARC
VE1JO	3A	4888	
VE6ND	2A	4822	N Lockhart ARC
VE3WE	9AB	4795	Scarborough ARC
VE2FT	3A	4670	Gilles Pare
VE2CVR	2A	4366	
VE3IC	5A	4290	K/Waterloo ARC

Highest Score in Each Class:

VE7NA	1A	2390	
VE2UMS	1AB	3300	Union Met S F
VE2QST	1B	2000	
VE3OS	1BB	3100	
VE3HK	1C	466	
VE3NUL	1D	996	
VE2ABO	1E	1080	
VE1FO	2A	6506	Halifax ARC
VE3JJ	2AC	2324	
VE1ND	3A	6962	
VE2IG	4A	1282	
VE3IC	5A	4290	K/Waterloo ARC
VE3SPC	6A	9634	S Pickering ARC
VE3OW	8A	9482	
VE3SAU	9A	3250	
VE3WE	9AB	4795	Scarborough ARC
VE3CRC	12A	4240	
VE3NAR	14A	6568	Nortown ARC

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CQ de CG5ZX

A special prefix brings an amateur back on the air.

By Sylvan "Syl" Katz, VE5ZX
203 Ball Cr
Saskatoon, SK S7K 6E1

In the spring I read the DOC letter directed to Saskatchewan amateurs announcing the CG5 prefix. This prefix would become available in August to help VE5 amateurs publicize the Canada Summer Games being held in Saskatoon. The DOC letter triggered nostalgic memories of bygone days when I had used the 3C5 and XJ5 prefixes. You see, I had been off the air since 1980.

For a several months, I had been considering getting back on the air. Now I had the perfect reason to spend my "rainy day" money on personal pleasure. Without hesitation I purchased a second-hand Kenwood TS-930S transceiver. I resurrected an old Hy-Gain 18AVQ vertical stashed in the garage and dusted off my Bencher paddle and MFJ Econokeyer. I mounted the vertical on the roof, drilled a hole in the wall for the coax and cleaned a corner of basement for a desk on which to place the Kenwood. With some trepidation but with excitement, I turned on the 930, gingerly placed the headphones on my ears and tuned to the CW portion of 20 metres. Voila! Dits and dahs! I was back on the air!

I tuned around listening for a loud but slow CW station. "...de Y33XX Y33XX K." My heart raced. DX. But where was Y33, I asked myself. I tuned around a little more. I was besieged with a range of seemingly unusual calls: FE1, KZ5, 4N9, EK0 and the like. During the years I had been off the air, the prefix allocations had changed. I was still used to the W6s all having a California QTH!

After a several evenings and many slow CW contacts, my rusty code improved. With restored confidence, more dreams filled my mind: QSL cards, Field Day, the contest season, satellite operation, moonbounce, packet radio and the like. And within two weeks I was convinced I could not venture into 31 glorious days of CG5ing unless I had an antenna with some gain and front-to-back ratio. Out came the checkbook and up went a two-element three-band band Gem Quad on a tower fed to serve as a 160/80/40-metre vertical.

Meanwhile I did some investigating to find out what provincial activities had been coordinated around the upcoming CG5 prefix. I learned that the once well coordinated Saskatchewan Amateur

Radio community had become a 2-meter QSO party! Later I learned that no one had even bothered to notify *QST*, *CQ* or *73* magazine about the CG5 prefix. Quickly I composed a proposal and directed it to Canada Summer Games organizers, requesting some funds to print CG5 QSL cards for Saskatchewan amateurs. I enclosed QSL cards that been printed for other special events. I also made a quick phone call to Ray Staines, VE3ZJ, at CRRL. He readily agreed to have the CRRL Outgoing QSL Bureau handle all CG5 QSL cards for CRRL members and non-members alike.

About two weeks later I was informed that my proposal to the Canada Summer Games organizers had been rejected. Money had already been allocated for the purchase of QSL cards for our local club. Sorry guys, and thanks Ray!

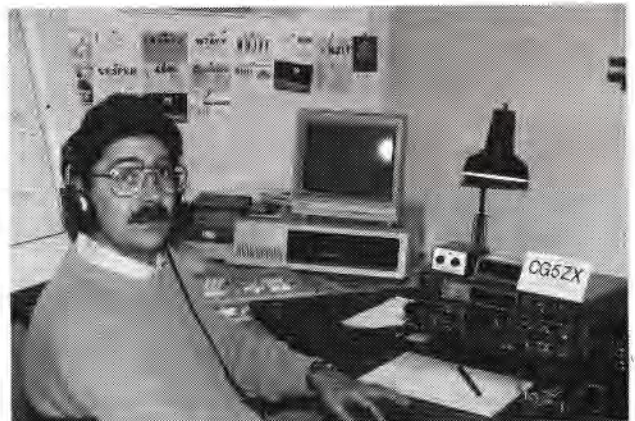
All day Monday, July 31, I was chomping at the bit. Visions of rare DX and pileups danced through my mind. After work, I hurried home, gulped down supper and retired to my shack to make final preparations. The clock ticked away. The keyer was set to 25 wpm. The quad was pointed north and the 930 was tuned up on the low end of 20 metres.

Finally, the clock struck 0000 UTC August 1, 1989. "CQ CQ de CG5ZX CG5ZX AR...." I listened. About a dozen stations answered. Then a voice in the back of my mind asked, "Is the CG5 prefix effective 0000 UTC or 0000 local time?" The DOC letter had not indicated which and their office was closed. I grabbed the landline and called two local amateurs who were usually in the know, I got two different answers. A dilemma! I decided to wait. For five hours I twirled the transceiver dial and paced the floor. Finally, the clock struck midnight. I was back at it. By 3 am local time, I had over 250 QSOs, mostly DX.

It had begun and it sure felt good! This unusual prefix was probably as close I

would ever get to experiencing the high of operating a rare DX station.

The month went by quickly. For the first two weeks, band conditions were superb. At times I could work 15-metre DX on all continents at the same time of day. However, around the middle of the month there was a major geomagnetic storm. Band conditions were so bad I was convinced that I would not have been able to detect my own signal in my neighbour's backyard. My goal of 5000 CG5ZX QSOs fell by the wayside.



J. Sylvan Katz 203 Ball Crescent - Saskatoon, Sask. - Canada, S7K 6E1					
CG5ZX					
Canada Games (1989) Special Prefix opr - syl					
(QSO with Kenwood TS-930S 10/10/20 Quad and 160/80/40 Vertical)					
Station	Date	UTC	Freq	Report	Made

Friday morning, August 31. Last day for the CG5ZX prefix. I was cruising along, adding the last few CW contacts to my total of 3800 QSOs for the month, when I heard "CG5ZX DE CG5VA GM SYL SSB?" Quickly I QSY'd to the phone band and gave Peter a call. "Syl," he said, "have you heard about the CI5 and CZ5 prefixes?"

Well, here I go again. Those special prefixes sure are addictive. I'd better order some more QSL cards! TNX ES GUD DX 73 SK de CG5ZX CI5ZX CZ5ZX VE5ZX—take your pick! ■

Tenth Region 2 Assembly

The Tenth Triennial General Assembly of IARU Region 2, held in Orlando, Florida, on the week of September 4-8 was marked by record attendance. Ninety-seven delegates and observers—in person or by proxy—represented 23 countries. Additional participants brought the total registration to 151.

IARU Vice President Michael Owen, VK3KI, participated and also chaired the Administrative Council meeting following the General Assembly. Also in attendance: a number of representatives from RSGB, DARC, JARL, and IARU Regions 1 and 3.

Who represented Canada? George Spencer, VE3OZW of Jordan, Ontario (who suddenly found himself elected chairman of Committee A, Administration), was Canada's official voting delegate. He was assisted by CRRL Quebec Director Bruce Balla, VE2QO of Montreal, Malcom Hamon, VE3KXH of Newcastle, Ontario; and Clark Campbell, VE3KSQ of London, Ontario. Bruce ended up with a special task: he carried the proxy vote for Jamaica.

There was an extremely full agenda with more than 110 documents for discussion. The most significant document considered related to the International Telecommunication Union's (ITU) recent announcement of a major World Administrative Radio Conference (WARC) to be held in Spain in 1992. This was considered ominous inasmuch as before, there had been 20-year intervals between such conferences (1939, 1959, 1979...), and this WARC was scheduled only 13 years after the last similar conference. Precise agenda of the WARC was not yet known, but Amateur Radio bands in 3-30-MHz, 500 MHz-3 GHz, and 12 GHz and above were considered potentially in jeopardy.

The following resolution was adopted at the closing plenary session:

"RECOGNIZING THAT 1) the 1992 WARC represents a significant threat to the Amateur Service; and 2) the retention of the goodwill of the administrations [of each country] is of great importance; and 3) failure to comply with the regulations governing the Amateur Services could detrimentally affect that goodwill;

RESOLVED THAT all [IARU member-] societies and amateurs in Region 2 are strongly urged that neither they, nor any group of amateurs, or individual amateur that can influence, take any step or do anything that could prejudice the goodwill enjoyed by the Amateur Services from the Administrations, and [that they] in particular, [ensure that] all regulations governing the Amateur Service are

6 QST Canada



The Canadian delegation at the Tenth General Assembly of IARU Region 2: From left to right, top row: Malcom Hamon, VE3KXH, Tom Atkins, VE3CDM; bottom row: Clark Campbell, VE3KSQ, George Spencer, VE3OZW, and Bruce Balla, VE2QO. (Photo courtesy VE2QO)

strictly adhered to. For example, regulations limiting third-party traffic and regulations governing interference [to services] entitled to protection."

A special WARC budget of \$US 150,000 was unanimously approved to finance the defence of the amateur frequencies. Later, the IARU Administrative Council passed a resolution to have IARU member-societies implement a program of activities in preparation for the WARC in 1992.

What other resolutions were passed? From Committee B, Operational Matters, the General Assembly approved a set of HF band plans for Region 2. These band plans recognize the need for separate frequencies for packet and conventional RTTY, and encourage the use of the 10- and 18-metre bands rather than the 20-metre band for packet radio. Also from Committee B, the General Assembly adopted a resolution to standardize addressing packages of QSL cards—something to speed up the QSL process. From Committee C, VHF-UHF Matters, the General Assembly adopted a set of VHF-UHF band plans prepared by Dana Shtun, VE3DSS, Chairman of CRRL's VHF-UHF Advisory Committee. Details of these and other resolutions will be published in future IARU columns.

Delegates elected a new Region 2 Executive Committee to serve for the next three years until the Eleventh General Assembly to be in Curacao, Netherlands Antilles in 1992. It included Alberto Shaio, HK3DEU, President; Fabian Zarrabe, YS1FI, Vice President; Tom Atkins, VE3CDM, Secretary; Steve Dunkerly, VP9IM, Treasurer; and Frank Butler, W4RH, Guillermo Nunez, XE1NJ, Willy Gravenhorst, P2WG, Alfonso Calderon, OA4PQ, and Reinaldo Szama, LU2AH, Directors. The Region 2 Executive Committee made the following appointments: Wilf Gibson, W7JIE, Region 2 Intruder Watch Coordinator; John Troster, W6ISQ, Region 2 Beacon Coordinator; and Fred Laun, K3ZO, Editor of *Region 2 News*.

This important meeting of radio amateurs from all over this hemisphere and from other parts of the world emphasized once again the need to work closely with one another to protect our many privileges. A special vote of thanks to ARRL President Larry Price, W4RA, and the directors and staff of ARRL for the splendid planning, excellent facilities and warm hospitality they provided as hosts of this international gathering which coincided with the 75th Anniversary of ARRL. —George Spencer, VE3OZW ■

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The all-new competition-class TS-950S HF transceiver offers advanced digital processing while remaining very user-oriented. The TS-950S is designed for critical applications in SSB, CW, AM, FM and FSK on all HF Amateur bands, including the WARC bands.

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The 1990 North American Callbook lists the calls, names, and address information for over 500,000 licensed radio amateurs in all countries of North America, from Panama to Canada including Greenland, Bermuda, and the Caribbean islands plus Hawaii and the U.S. possessions.

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New Call Area: PEI Becomes VY2

Canada has a new call sign area. Effective October 30, Prince Edward Island becomes VY2. Starting October 30, all new amateurs in Prince Edward Island will be issued callsigns with the VY2 prefix, and all present amateurs in Prince Edward Island will be offered the option of retaining their present VE1 callsign, or, upon request to a DOC district office, substituting VY2 for the VE1 prefix in their present callsign. DOC issued VY2 in response to a long-standing request by Prince Edward Island amateurs for a distinctive prefix for their province. There will be no changes elsewhere: New Brunswick and Nova Scotia will remain as VE1. Amateur support for a distinctive callsign prefix for New Brunswick was weak, and in Nova Scotia, the idea received almost no support at all.

HURRICANE HUGO

Amateur Radio once again proved its worth as Hurricane Hugo—with winds up to 200 kilometres per hour—slammed into the Leeward Islands and marched across the Caribbean toward Puerto Rico, the Bahamas and the southern United States. Emergency traffic nets were set up on three 20-metre frequencies: IATN, the International Assistance and Traffic Net operated on 14.303 Mhz, the Friendship Caribus Connection on 14.283 MHz, and the Hurricane Watch Net which kept track of the storm's progress on 14.325 MHz. IARN, the International Amateur Radio Network provided front-line communications as amateur stations in affected areas reported their damage and assistance needs. A net on 28.45 MHz provided damage assessments from Puerto Rico. Many Canadian amateurs were involved including CRRL Field Services Manager Jack Strangleman, VE3GV, who spent many hours as net control of the International Assistance and Traffic Net.

NOMINATIONS OPEN FOR CRRL AMATEUR OF THE YEAR

Nominations are now open for CRRL Amateur of the Year. This award is given for specific accomplishments or for long-standing service to Canadian Amateur Radio. Past winners include VE3GOL, VE3GV, VE3HC, VE6ABC and VE7APU. Send nominations and supporting documentation to the CRRL, Box 7009, Station E, London, Ontario N5Y 4J9.

NOTES FROM ALL OVER

□ Early this month, an Arienne IV rocket is scheduled to carry six Amateur Radio satellites into orbit from the European Space Agency facility in Kourou, French



Government of Canada
Department of Communications



Gouvernement du Canada
Ministère des Communications



1969-1989

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6202-1(DOS-PA)

Canadian Radio Relay League
P.O. Box 7009
Station 'E'
London, Ontario
N5Y 4J9

Gentlemen:

Over the past several months, numerous amateur radio operators from Prince Edward Island have written to the Department requesting a change in call sign prefix. Their main theme was to have a distinctive prefix in order to emphasize their provincial individuality.

After considering all input received from amateur organizations such as yours and from individual amateur operators, we are prepared to issue the amateur operators of Prince Edward Island with the prefix VY2. This change will take effect October 30, 1989 and all new amateur radio call signs assigned in Prince Edward Island after that date will have the new prefix. Existing licence holders will have the option of retaining their current VE1 call sign or changing to the new prefix. PEI amateurs should contact their local Departmental District Office for information on how to obtain the new prefix for their current call sign.

In undertaking the study to respond to the Prince Edward Island situation, we also took the opportunity to canvass amateur licensees in New Brunswick and Nova Scotia as to their position on the question of individual prefixes for each province. In the case of New Brunswick amateur operators, no action will be taken at this time as there does not appear to be a consensus one way or the other regarding a change in prefix.

The overwhelming response of the amateurs of Nova Scotia indicates that they would prefer to retain the VE1 prefix and therefore no further action is warranted.

Your interest and assistance in resolving this matter is appreciated and we hope the distinctive new prefix will alleviate the identity concerns of the amateur operators of Prince Edward Island.

Yours truly,

R.W. Jones
Director General
Radio Regulatory Branch



Guiana. Four of the six satellites have been dubbed "microsats" because of their small size: 23 cm (9 inches) per side. The design and launch of these satellites was organized and coordinated by AMSAT, ARRL and TAPR, the Tuscon Amateur Packet Radio Association. In other satellite news, the Japanese launch of their JAS-2 satellite is scheduled for late January of next year, and plans are going ahead for a Phase IV geostationary satel-

lite to be launched later in the 1990s. It will be a big one! A mockup unveiled this summer was 12-sided, 46 cm (30 inches) high and 2.5 metres (8 feet) in diameter. □ Is nothing sacred any more? On January 1, 1990 the US National Bureau of Standards will adjust the standard volt 9.2 parts per million, and the standard ohm 17.5 parts per million. Apparently there have been four different standard volts and ohms in use around the world. ■

KENWOOD

Kenwood Electronics Canada, Inc.
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NEWS RELEASE

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

a. 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.

b. 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

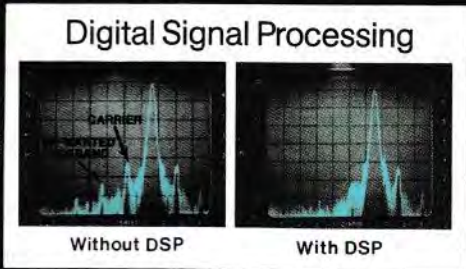
The built-in TCXO provides superior frequency stability for the dual VFOs. The reference frequency is 20 MHz and is accurate to plus or minus 0.5 ppm between -10° C and +50° C.

■ Built-in Keyer

■ Easy-to-Operate Microprocessor-Managed Frequency Control

- Direct band-access key
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- 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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TS-950SD

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- **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.)

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.
- **Multi-Drive Band Pass Filter (BPF) circuitry.** Fifteen band pass filters are available in the front end to enhance performance.
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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.
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- **Built-in electronic keyer circuit.**
- **100 memory channels.** Store independent transmit and receive frequencies, mode, filter data, auto-tuner data and CTCSS frequency.
- **Digital bar meter.**

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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"/>
Banque de questions première	10.00	9.00	113	.75	<input type="checkbox"/>
Banque de questions supérieur	10.00	9.00	117	.75	<input type="checkbox"/>
First Steps in Radio, W1FB	8.00	7.25	470	.75	<input type="checkbox"/>
Premier pas en radio, W1FB (RAQI)	8.00	7.25	F900	.75	<input type="checkbox"/>
Operating an Amateur Radio Station	1.25	1.25	300	1.00	<input type="checkbox"/>

OPERATING

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

OPERATING AIDS

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Log Book (OT)	3.50	3.00	121	.75	<input type="checkbox"/>
Super Log Book (OT)	5.75	5.00	125	.75	<input type="checkbox"/>
Radiogram Forms (OT)	2.00	1.75	170	.75	<input type="checkbox"/>
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Grid Locator for North America (OT)	2.00	1.50	800	.75	<input type="checkbox"/>
DXCC Countries List (OT)	2.00	1.50	812	.75	<input type="checkbox"/>
1989 Net Directory (OT)	2.00	1.50	823	1.50	<input type="checkbox"/>
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Callbook Prefix Map of the World (OT)	8.50	7.75	RA10	*3.50	<input type="checkbox"/>
Callbook Prefix Map of N America (OT)	8.50	7.75	RA11	*3.50	<input type="checkbox"/>
Callbook Great Circle Map of World (OT)	8.50	7.75	RA12	*3.50	<input type="checkbox"/>

VHF-UHF

Basic Guide to VHF-UHF	10.75	9.50	790	.75	<input type="checkbox"/>
RSGB VHF-UHF Manual	32.25	29.00	370	1.00	<input type="checkbox"/>
All About VHF Amateur Radio	14.50	13.00	RP130	1.00	<input type="checkbox"/>
Satellite Anthology	7.00	6.25	700	.75	<input type="checkbox"/>
Satellite Experimenter's Handbook	16.00	14.50	540	.75	<input type="checkbox"/>

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Antenna Compendium #1	15.75	14.25	420	.75	<input type="checkbox"/>
Antenna Notebook, W1FB	11.50	10.25	405	.75	<input type="checkbox"/>
Novice Antenna Notebook, W1FB	10.75	9.50	425	.75	<input type="checkbox"/>
Antenna Impedence Matching	18.00	16.25	450	1.00	<input type="checkbox"/>
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OTHER

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The CRRL Field Organization Forum

SECTION MANAGER ELECTION NOTICE

To all CRRL members in the Maritimes-Newfoundland Section: You are hereby solicited for nominating petitions pursuant to an election for Section Manager. Nominations will be received at CRRL Headquarters until December 08. For full details, see 1989 October *QST Canada* or contact CRRL Headquarters.—*Jack Strangleman, VE3GV, Field Services Manager*

REPORTS FOR AUGUST 1989

Alberta: SM/STM/DEC: Bill Gillespie, VE6ABC; ASM: VE6AMM; SEC/TC: VE6AFO; OO: VE6TY. The Northern Alberta Amateur Radio Club held a special supper on August 30 to celebrate 60 years of Amateur Radio for Roy Usher, VE6EA. At this dinner, 51 local amateurs as well as Ken Oelke, VE6AFO, and his XYL Linda from Calgary were also in attendance. As a special guest, we had David Evans, G3OUF, of RSGB, and David's XYL Rosemary visiting relatives on their way to the IARU Region 2 Conference in Orlando, Florida. A few days later, David and Rosemary spent a few hours with us and a great time was had by all.

British Columbia: SM: Ernie Savage, VE7FB, British Columbia Emergency Net Manager Ferdi, VE7EJU, reports 700 check-ins. Even traffic is up. We welcome VE7EGM reporting his traffic. There are a number that handle traffic and we never hear from them. It would be great if they would send in their traffic reports so we could give them credit for the messages they handle! British Columbia Public Service Net Manager Jim, VE7JN, reports check-ins: high was 169, low was 87 and total was 3958. The past month was noted for poor band conditions on 80 metres. Much relaying was required. VE7s were at the Tacoma Ham Fair in good strength. Some were lucky winners in draws. Thanks to Burnaby, Surrey, Vancouver and Zero Beat ARCs for keeping us informed about their activities.

Manitoba: SM: Jack Adams, VE4JA; ASM: VE4IX; SEC: VE4TM; ATC: VE4ADP; NMs: VE4LB, VE4IX, VE4TE. First, I must take this opportunity to thank Ed, VE4YU, and his Winnipeg Amateur Radio Club committee for the FB job they did arranging and following through on the CRRL National Convention held on the weekend of August 18–20. Job well done, gang! I was really impressed by the speakers at the sessions I was able to attend. Many topics were discussed with questions asked and capably answered. It was great to have Tom, VE3CDM, Harry, VE3GRO, and Ray, VE3ZJ, from CRRL Headquarters, as well as CRRL Directors Dave, VE7EWI, Ken, VE6AFO, and Bruce, VE2QO, all in attendance. Did miss our QSL Manager for Manitoba. Sorry you were unable to attend, Larry. Also thanks to Dan Kerr from DOC for his active role in the convention. I have one particular topic which was raised by our capable CRRL President, Tom Atkins, VE3CDM, which I have submitted as a letter to the editor. Finally it's getting to that time of year when we should be doing something about our antennas—or is it still too early?

Maritimes-Newfoundland: SM: Carl Anderson, VE1UU; ASM: Ned Mulrooney, VO1MN; STM: Mel Lever, VE1VX; BM: Brent Taylor, VE1APG; EC (NB) Brian Upton, VE1ZJ. Ned, VO1MN, reports that last year, Society of Newfoundland Radio Amateurs (SONRA) President John Tessier, VO1FX, initiated monthly dinner meetings at the BATTERY Hotel, St. John's. The idea caught on and SONRA now has 60–80 members in attendance every month. SONRA operates one of the seven International Marconi Day (IMD) stations: VO1IMD, from Cabot Tower, Signal Hill. In this year's IMD event, April 22, VO1IMD worked over 700 stations in a 24-hour

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.

period. Another special-event station operated from Signal Hill, daily from 1730 to 2000 UTC, to commemorate the founding of municipal government in St. John's. Amateurs in PEI also operated special-event stations this summer: VE1CFB from Summerside during the World Junior Softball Championships, June 23–25, and CJ1PEI from Fort Amherst Park during the Boy Scouts Jamboree, July 15–23. I had an interesting two months HF mobiling through Canada. My thanks to the many VEs whom I worked and who relayed for me when conditions along the east-west path were rough.

Ontario: SM: Larry Thivierge, VE3GT; BM: VE3GSA; SEC: VE3GV; STM: VE3CYR; TC: VE3EGO; ATC: VE3ADC. London Seniors' ARC are re-equipping their station and have added an ATV repeater at Parkwood Hospital in south London. The call will be VE3TVL with an input on 439.25 MHz and an output on 1253.25 MHz. The 2-metre frequency for the ATV groups will be 145.67-MHz simplex. New executive of Ottawa ARC is Prez: VE2ZP, Vice: VE3PWJ, Secretary: VE3RMM, Treasurer: VE3NJJ, and Directors: VE3s GSA, KEB and MSQ. The Ontario Phone Net marks its 42nd anniversary this month. IARU has elected Aruba as its 127th member-society. VE3NOK is new editor of the KWARC *Kilowatt*. The Section appointee listing has been updated and appointees not reporting on a regular basis have been cancelled. Peterborough ARC held its second annual demonstration of Amateur Radio at Lansdowne Place Mall with a large number of local amateurs and SWLs participating. The event received local television coverage and club officials deemed it quite a success. Our TC, VE3EGO, has been active installing a 72-foot Tylon tower with a KLM KT34-XA on top. However, during the installation, a piece of metal fell on the head of VE3HBS who was rushed to hospital. Luckily, he was not injured and he was able to be back on the job by the afternoon. Now Syd has a rule that no one works on towers without wearing a hard hat. Prince Edward RC has installed a state-of-the-art repeater in the Quinte area. The repeater, operating on 146.13 /146.73 MHz, is a Micro-Control Systems model 4CR. It includes autopatch, reverse autopatch, a mailbox, a multifax board with a vocabulary of about 600 words for synthesized speech, automatic emergency power transfer, remote maintenance monitoring and more. New amateurs in the Section include VE3IKE, VE3RHG and VE3ROW. OPN NM VE3IN's son in Halifax has been issued the call VE1BUO. Don's old call was VE3BUO. I would like to stress to traffic handlers that when they relay traffic for delivery and the traffic contains ARL numbered texts, they should ensure that the delivering station is able to decode the text. It has been reported that some amateurs delivering messages cannot and do not do this, and of course the message makes no sense.

Quebec: SM: Harold Moreau, VE2BP; STM: VE2EDO; SEC: VE2LYC; BM: VE2ALE. VE2QST will be active in the November QST QSO Party. See details in this month's *QST* or *QST Canada*. L'épluchette de blé d'inde annuelle de VE2BP et VE2WH, pour les amateurs handicapés, a été un succès encore cette année et un merci à tous les amateurs qui ont fourni le transport. Des cours pour la radio amateur sont commencés dans plusieurs clubs. Bonne chance à tous les candidats.

Saskatchewan: Bruce Rattray, VE5RC. It's September 10 as I'm writing and Regina just had a brief snow flurry. I'd better get my antenna projects

done lickity-split! Between rain wind and hailstones, VE5s AGM, EE and FAR put a tripod on my roof for a Butternut vertical, 160–10 metres. I put a 160-metre coax loop around the perimeter of the roof of my house and just one night of listening showed it to be 2–3 dB better than my tower on receive. The VE5AGR repeater in Avonlea now supports packet. Public service volunteers in Regina have been very busy. Many thanks to Clay, VE5AAA, for organizing everything: the Kinsman Walk-a-Thon (VE5s AAA, AHW, CS, ELJ, GHC, JML and WWW) on May 28; the Equestrian Event (VE5s AAA, AGA, AHW, BCU, BW, CON, CS, DC, DSC, EE, ELJ, FAR, GHC, GLF, IC, JML, KZ, RC, TA, UU, WAW and WWW) on June 18; the Y-Not Tri-Triathlon (VE5 AAA, AEO, BW, IC, OJ, TA and UU) on July 1; the Wascana Relays (VE5s AGN, ELJ, EP, GHC, JML and KZ) also on July 1; the Buffalothon (VE5s AAA, AHW, BW, IC, TH and UU) on August 4; the Travellers' Day Parade (VE5s AAA, BW, EE, ELJ, EP, IC, JML, OI, RN and UU) on August 29; the Downtown Dash (VE5s AAA, AGA, AHW, BE, BW, DSC, EE, EP, FAR, GHC and XYL Rosemary, IC, RJR and RN) on September 10; and the Telephone Pioneers Walk-a-Thon (VE5s AAD, CS, IQ and TO). VE5s AAA, AEO, EE and JML also helped out in Saskatoon at the Canada Games/Jeux Canada on August 13–26. A really big thank you to all who made the Saskatchewan Hamfest such a success—especially Bill, VE5EE. 73! ■

MOVING?

Don't forget to notify CRRL Headquarters at least six weeks in advance. If possible, include a mailing label from a recent *QST* or *QST Canada*. ■

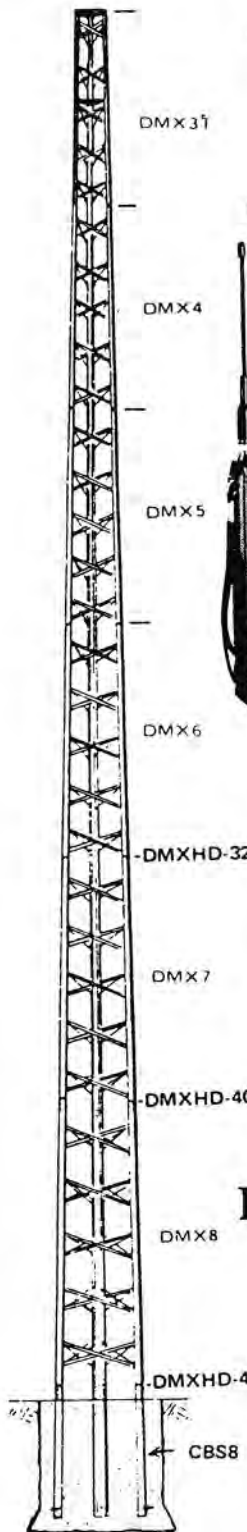
Silent Keys

Conducted By Ray Staines, VE3ZJ

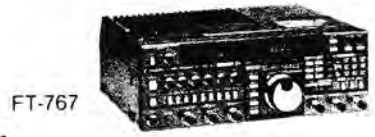
It is with deep regret that we record the passing of these amateurs:

VE2EY, Robert Phillips, Dollard des Ormeaux, PQ
VE3ATJ, Don Reavely, Ottawa, ON
VE3EVH, Russel Anderson, Kitchener, ON
VE3PSP, Charles Camidge, Waterloo, ON
VE7DIW, Lewis M Caldwell, Ganges, BC
VE7DXI, Laurie McCracken, Nanaimo, BC
VE7TZ, Jack Attwood, Delta, BC

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*. ■



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- AL-1500 with 8877 tube - full legal output with 65 watts drive.

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SPECIFICATIONS AND PRICES
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Two Antennas for Two

A DELUXE RIBBON ANTENNA

A J-antenna is a half-wave radiator, fed and matched by a stub one quarter wavelength long. The feeder transmission line is tapped onto the stub at an appropriate point to match its impedance. If coaxial cable is used to feed the antenna, a balanced to unbalanced ("balun") transformer should be used to minimize the current flow on the outside of the cable shield which contributes to the radiated field.

A flexible 2-metre J-antenna can be made out of 300-ohm twinlead. The length of the radiator is about 0.95 times a free-space half wavelength, and the quarter-wave stub is about 0.83 times a free-space quarter wavelength (which corresponds to the velocity factor for Belden Type 8230 twinlead). The tap point can be experimentally determined to be 0.0136 times the wavelength.

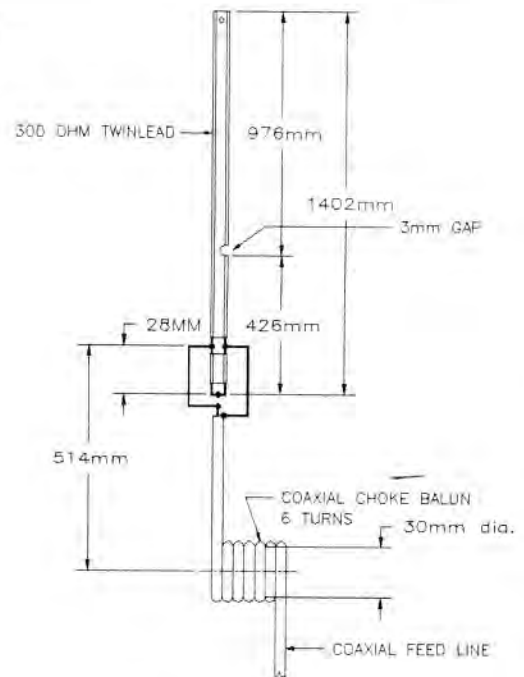
In the original design, no balun was used and current flow on the outside of the coaxial cable affected the radiation properties and impedance of the antenna. The effect was most noticeable on receive. A variation in received signal strength could be observed as one ran a hand along the cable while receiving a distant signal.

The design presented here uses a choke balun. This is formed by coiling up a few turns of feed line which, in effect, inserts an RF choke in the outer conductor (shield) of the coaxial feed line. In the frequency range of 144-150 MHz, six turns of feed line coiled into a one-inch diameter coil provides an inductor with enough series reactance to minimize feed-line radiation. The optimum location for this choke is one-quarter wavelength from the tap point on the matching stub, since with this arrangement, current in the part of the feed line above the choke balun contributes constructively to the radiation pattern. The addition of the coaxial choke coil balun not only isolates the antenna from the feeder and broadens the bandwidth; it increases the gain.

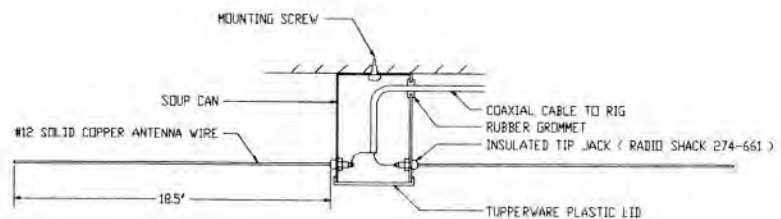
The ribbon J-antenna makes a very effective "roll-it-up and put-it-in-your-pocket" antenna for use with a handheld radio. It can be used as a backup antenna if a standard whip or "rubber duck" antenna is broken or mislaid. In fact, it can provide improved performance over a half-wave whip if it is elevated above ground level. It can be hung from a tree branch, a long fishing rod or a pole.

In any case, since the antenna is not self-supporting, it should be suspended from a non-metallic mast or rod, and it should not lie against the supporting device even if the device is non-conducting. —John Belrose, VE2CV, ARRL TA

Top: The Deluxe 2-Metre Ribbon Antenna. Below: The Chicken Noodle Antenna. (Autocad drawings by VE3ERP)



2 METER J-ANTENNA



THE CHICKEN NOODLE ANTENNA

Here is a 2-metre dipole antenna that is about as cheap and simple as you can get since it is built into a chicken noodle soup can. You can also use cream of mushroom soup if you don't mind a mushy signal, or even chunky beef if you can tolerate lumps in your transmissions.

I live in an apartment and have the usual restrictions on outdoor antennas. I had been using a Larsen 5/8 wavelength vertical with four radials, but I was curious about whether a dipole might work as well or better.

Since I don't have workshop facilities at my place, it had to be as simple as sin and not require any machine work. After some thought, I came up with the idea shown in the diagram. The diagram

should be self-explanatory to any amateur who is familiar with building using gleanings from the Old Junk Box.

The soup can may be fastened to the wall or railing, or for real exotic operation, it could be fastened to the ceiling of your apartment balcony (if there is another balcony above you). If you don't graunch the mounting screw too tightly, you will have a rotating beam. Not too many elements, of course, but a beam nevertheless.

I am pleased to report that my dipole appears to work better than my 5/8-wave vertical. A repeater which I previously had difficulty accessing now reports a full quieting signal. I have dismantled the vertical and have been using the dipole ever since. Try this antenna. You'll like it. —Emerson Stewart, VE7FWB

Our Six-Metre Band Plan

We continue our discussion of the band planning process with the six metre band. This band sits in a part of the spectrum that exhibits characteristics of both the HF (F-layer DX) and VHF bands (tropo, aurora, and meteor scatter). Six metres is a great band for groundwave work, with a low dB/km path loss, and is also ideal for long haul packet and FM, as well as SSB and CW. The band is ours exclusively, and is really in need of more activity, particularly above 51 MHz. With cable TV and today's modern clean rigs, TVI and RFI are no problem with power levels of 100 watts output—enough to work the world. So join in the fun: get in on six!

PERSIEDS METEOR SHOWER

Yes, the old faithful Persieds didn't let hamdom down this year. The shower was well distributed and many Canadians were active on meteor scatter, many making their first attempts using this mode. Meteor scatter has been in use by the ham fraternity for 30 years now. Over the years, many of us including VE3ASO, VE2YU, VE3EMS, VE3DIR, VE3BQN, VE3FKX, VE7BQH and VE3DSS have worked dozens of states via this mode, and I am always surprised that so many Canadian hams have not tried it. True, it takes persistence, and at times, it may not yield success, but that's what Amateur Radio is all about! Martin, VE3OAT (FN25), called in looking for information on who to work on 144 MHz via meteors. Kevin, VE3KDH, worked three new states on 144 MHz, all about 1000 miles from his QTH. From the Lakehead (Thunder Bay), Ed, VE3KRP (not Cincinnati) worked the following: WA3HMK, WD4MBE, AA9D, and W0RRY. Come on Canada! Try meteor scatter on 50, 144 or 220 MHz. It's fascinating!

AUGUST CONTEST REPORT

Stu VE3MWM (FN03) called in to report that activity was rather thin on the bands this time around. However he noted that VE3EMS was active from French River in Northern Ontario (FN06), and the Vic, VE3LNX, and "Rovin" Bob, VE3ADJ, put a number of grids on the air including FN14 and EN94.

Bob, VE3BFM, made a big splash in the contest, considering that he had little time to get his antennas up on to the tower. His setup includes a shortened 432-MHz yagi, plus antennas for 144, 220, 902 and 1296 MHz. Bob promises to be QRV on 2304 MHz soon.

Clarke, VE3WCB, Stu, VE3MWM, and Steve, VE3SMA, went a-rovin' during the August 19-20 Microwave Contest, and met with some interesting DX. Re the September VHF Contest, we'll have more in our next column. Conditions were spotty but there were a lot of Canadians active on 50-1296 MHz!

50 MHz

Mike, VE3FGU (FN04), sent in a fine report of his activities this summer. Mike's 50-MHz country total continues to climb, and he has caught some real DX goodies. I believe he will be doing even greater things by the time this column hits your mail boxes! Mike runs five elements on six with a Johnson 6N2 amplifier running one kW. Look out for F2 fever, every-

Canadian Radio Relay League Band Plan: 50-54 MHz

STATUS: AMATEUR PRIMARY

MHz	UTILIZATION
50.0 - 50.05	CW / BEACONS / MOONBOUNCE
50.05 - 50.1	CW / BEACONS
50.1	CW CALLING FREQUENCY
50.1 - 50.6	SSB and AM MODES (BANDWIDTH <= 2.3 KHz)
50.105 - 50.115	DX WINDOW (LISTEN FOR DX HERE)(4)
50.110	DX WINDOW CALLING FREQUENCY (4)
50.125	NATIONAL SSB CALLING FREQUENCY
50.4	AM CALLING FREQUENCY
50.6 - 51.0	EXPERIMENTAL MODES (1)
50.7	RTTY, AMTOR CALLING FREQUENCY
50.8 - 50.98	RADIO CONTROL OF MODELS: 10 CHANNELS ON A 20-KHz RASTER
51.0 - 51.1	PACIFIC (ZL) DX WINDOW (SSB/CW ONLY) (3)
51.1 - 52.0	FM VOICE SIMPLEX, AND PACKET (1)
51.7	NATIONAL SIMPLEX PACKET CALLING FREQUENCY
52.0 - 52.05	PACIFIC (VK) DX WINDOW (SSB/CW ONLY) (3)
52.525	NATIONAL FM CALLING FREQUENCY
52.0 - 53.0	FM VOICE REPEATER INPUTS (2)
53.0 - 54.0	FM VOICE REPEATER OUTPUTS

Footnotes:

- (1) In North America the following frequencies are "suggested" for Packet digipeater and packet scatter-operation:

50.62/51.62	50.68/51.68	50.76/51.76	50.64/51.64
50.72/51.72	50.78/51.78	50.66/51.66	50.74/51.74

 For co-located voice and packet repeaters, use high (input) and low (output) to provide maximum mutual frequency isolation.
- (2) See table of repeater pairs in *ARRL Repeater Directory*.
- (3) Amateurs are requested to avoid using FM or other wideband modes on these frequencies to minimize interference to Australian and New Zealand amateurs working IARU Region 2 SSB or CW.
- (4) North American amateurs are requested not to call "CQ DX" on 50.110 MHz.

Note that we are urging Canadian amateurs to avoid calling CQ on 50.110 MHz, to prevent QRM to weak DX signals. This is extremely important now, with the band opening to the Middle East and South Pacific. All we have to do is convince our US friends to do the same, and perhaps even help create a QRP DX window for Canadians to work DX without US QRM. Or perhaps we could operate SSB at less than 25 watts from 50.085-50.1 MHz to get out of the racket. What do you think? ■

one! Mike wants everyone to know that he and VE3AAY, VE3SST, VE3WHY and VE3BQN are all very active from FN04, and Bruce, VE3AAY (FN04), wants everyone to know that he'll be gunning for rare DX stations this season, and will undoubtedly push his country totals way up on our VHF "Top Band".

Incidentally, during that intense sporadic E (Es) session mentioned in my previous column, Mike heard *Caribbean* FM broadcasts on 88.9 MHz while motorcycle mobile between Keswick and Newmarket, Ontario! I agree with him when he said "...too bad the MUF didn't get to 144 MHz." Well, maybe it did but nobody was home at the other end. Don't forget that the Es season reappears in December. That plus the biggest solar peak in 250 years should open 50 MHz clear around the world. Don't leave home without a 6-metre rig!

Peter, VE3EMS, operated for a week in FN06 on 50 and 144 MHz. During his foray he made about 50 QSOs on six ranging from New Mexico to Ontario. Thanks to Peter's efforts, a new Canadian grid was activated. Let's have more of this kind of portable operating, everyone.

Solar flare activity picked up around

August 14, with the flux at 263, an index of 30, and K of 3. Interesting propagation was noted to the Caribbean with the KP2A beacon (US Virgin Islands) being heard in eastern Ontario. That evening, a weak aurora was noted to the northeast until 0018 UTC, August 15. That's when things burst open in grand style on transauroral Es! Among the stations worked to the northwest from VE3DSS (FN03) were VE3KNI in Fort Frances (EN38), VE5UF in Saskatoon (DO61), VE6BCC in Edmonton (DO33), VE4CW, VE4AGT, VE4ABE in and around Winnipeg (EN19), VE5LY in Regina (DO70) and VE4SD in Riverton (EO11). Meanwhile VHFers in the west were working west into British Columbia, east to VE1BPY (Prince Edward Island) and south to K1HTV (FM18).

Doug, VE5UF, upped his grid square count to 311 squares worked since he got back on 50 MHz in May, 1988! Doug comments that the old saying still goes: "The first 300 are the easiest. Then it gets tough..." We will see what he will have to say after he works his 1000th JA on six this cycle. Incidentally, Doug also worked VE2MLS (FN08), VE3BGA (FN15), VE3KRP (EN58), VE7XF (CN89),

VE1BPY (FN86), W7IDX (DN06), and W3HQT/1 (FN54).

Aurora again made its appearance on August 28 in a transequatorial (TE) opening into Argentina and Uruguay. Bob, VE3PCW (EN82), managed QSOs into Argentina that night. The following night brought more TE, possibly coupled with sporadic-E (Es) with VE3ASO (FN25), VE2DFO (FN25) and VE3KKL working the following LU8YYO, LU3EX, LU1DMA, LU2EIO, CX1DDO and TI2HL.

Further evidence of an extended Es season: On August 30, the band was open into the midwest. VE3DSS managed to snag K0TLM, W0VD and N0IGZ. Don't forget the December Es season. It could bring F2 DX from the South Pacific within easy reach of many northern stations.

144 MHz

We continue to see an increase of SSB activity. I hope this trend will continue and lead to more serious interest in VHF propagation, and investigation of various geophysical phenomena for those curious enough to reach out. Welcome to Kevin, VE3KDH, of Oakville, Ontario. He is a relative newcomer to the band via the Digital Certificate, and is active with a Cushcraft Boomer and 150 watts. Kevin has developed a keen interest in SSB communications, and adds to it an excellent knowledge of computer techniques.

During the Persiads meteor shower, Peter, VE3EMS (FN02), worked a number of stations: WA4VWR (EM55), WA1OUB (on backscatter) and WD4AHZ (EL87) on August 11, K0DAS (EN42) and WA5NFC (EM45) on August 12, and N4VC (EM66) and K5SW in Oklahoma on August 13. Unfortunately many amateurs ignored the sequencing rules for meteor scatter. This, compounded with the crowding on 144.2 MHz, led to mass confusion during load bursts, or "blue wizzers"!

So here we get on our soap box again! Let's all forget this 144.2 MHz plus or minus 100 Hz on our fancy radios. 144.2 MHz was originally set aside as a "DX calling frequency" in the days when activity was low. Let's spread out like we did in the late 1960's and early 1970's: CW on 144.1, SSB meteor scatter on 144.15, general SSB DX on 144.2 (DX QSY down on contact), and SSB ragchewing on 144.24 MHz. What say, particularly for contest operation? I think it might help prevent a lot of confusion and needless QRM.

All this new activity is turning up some exotic propagation from central Canada. During the aurora of August 15, Jim, VE4AQ in Winnipeg (EN19), worked some incredible long haul DX on transauroral E—a mode of propagation that rarely appears on 144 MHz, let alone with such intensity and duration! Between 0700 and 0800 UTC, he worked into Idaho, Oregon, and Washington with signals a clear T9 running 60 over S9! Stations included a 1300-mile plus contact to the west coast with WB7UZO (CN78), NF7X and W7FI (CN87), WB7PPK (CN95), W7FHI (CN96), WA7VHW (DN07), N7EIJ and KA7BZJ (DN17) and N7ANL (DN18). Why do we call this "weak-signal work"? With signals like theirs, you need a bullet-proof front end!

Speaking of DX, welcome to Gus, VE3MAL in Redbridge (FNO6), to the growing SSB fraternity! He is QRV with 25 watts and 10 elements, has made auroral contacts into FN31 and FN41, and has heard stations in 14 grid squares including in Florida. Gus would like me to write more on "how to get started", and I certainly will in subsequent columns. Incidentally, Gus was heard during the August 29 aurora happily working the pile-

ups. Ah, it's nice to be in a rare grid square! VE3DSS had some fun during the same buzz session working K9MRI (EN70) and K2SMN (FN20) with just eight watts and a 14-element yagi. It's an interesting challenge running QRP and it amazes me what can be worked, especially after running a kilowatt for so many years, hi.

Ted, VE3BQN, is now the proud owner of the "biggest" 144-MHz moonbounce array in Ontario. The monster antenna consists of 8 Cushcraft 32-19's. That makes 152 elements pointing your way! Look for Ted's big signal terrestrially as well as via the lunar path.

Strong auroral signals were in evidence August 28, with K9MRI pinning my S-meter. We managed a QSO with my QRP station, 10 watts to 14 elements, with signals peaking almost due west. This only goes to show that you don't need high power to work DX, but you do need the best antenna you can build or buy to make the grade.

220 MHz

Ted VE3BQN (FN04) is now active on 220 MHz (135 cm), adding to the rapidly growing contingent of Canadian SSB and FM operators on this band. Peter, VE3EMS, fired up on 220 during the aurora of August 29 and managed to work among others WA1HYN (FN41) in Rhode Island, W3HMA (FN54) in Maine. Peter noted that signals were often very strong.

The September VHF contest found the good old 135-cm band packed with activity from VE3DSS. Many Canadian amateurs have commented that the band is empty. These armchair experts are wrong! Not only is this band being utilized, but it is totally free of intermod, most noise, and of course, armchair experts! I do hope that every amateur who calls himself/herself a patriotic Canadian will get on the air on 220. Otherwise, our doom and gloomers will play directly into the hands of those who want our spectrum. Remember, in Canada, there is no pressing need to reallocate this band, and nothing that could not readily be allocated to the vacant 216–220-MHz band.

432 MHz

According to Barry, VE4MA, DOC in Winnipeg continues to monitor our activity on 430–450 MHz (70 cm). In mid-August, we found out what was going on. It seems that the US military is experimenting with radar systems just across the border, sending their radar beams northward. They evidently picked up amateur signals and subsequently lodged a complaint with DOC in Winnipeg, resulting in DOC asking for everyone active on the band to submit data including location, ERP and polarity. I am not sure to what degree we are bothering the USAF, or of their system configuration,



If you've worked Manitoba on VHF-UHF, you've probably worked Barry Malowanchuk, VE4MA. Here's Barry operating VB4WARC at the Winnipeg CRRL National Convention.

but we do know that the bandwidth of their system is 420–434 MHz with signals that sound suspiciously like those that clobbered us here in Toronto a few months ago. I trust that we will not cause problems for the Americans, and that our DOC will continue to consult and coordinate with us. We are SECONDARY on 430–450 MHz, but we must not allow restrictions of our 432 MHz or 435-MHz SSB/CW terrestrial, moonbounce or satellite operations, if we can at all help it.

Despite all this, during the contest, Barry still managed to QSO Hans, VE3CRU, via the lunar path. Incidentally VE4MA and VE4MR sked nightly on 432 and 1296 MHz. There's lots of activity in central Canada.

902 MHz

The ARRL board has adopted an interim 902-MHz band plan that is incompatible with CRRL's band plan in almost every way! It messes up our ATV subband, puts megabit data next to SSB, moves FM, and leaves no room for experimentation! I wonder what the US "big guns" think of that!

1296 MHz AND UP

The summer topo season made a splash in the Winnipeg area on the mornings of July 14–16. Barry, VE4MA, reported strong signals from the Minneapolis gang on 1296.1 MHz. Barry also worked a new grid in Wisconsin, nudging his 1296-MHz grid totals to 49. Barry also reports that Ross, VE5LY, is active on 1296. He and Ross are trying to bridge the 350-mile path between Regina and Winnipeg.

On 2304 MHz, Barry VE4MA reported working K0ALL on the morning of July 14 over a 225-mile path. Signals were 579/559. And on 10 GHz, the Ottawa "Tellurometer Tribe" were making big plans for the September contest. Stu, VE3MWM, latched on to three tellurometers for the microwave contests on August 19–20 and September 16–17. He advised that these units tune 10.15–10.45 MHz and use a 33-MHz IF. With some careful tuning they should be able to communicate with Gunnplexer stations using 30-MHz IFs. Stu also mentioned that from a gravel quarry near Rattle Snake Point, Milton, Ontario, he has a good shot to the south, southeast, southwest and northwest. He, Steve, VE3SMA, and Peter, VE3EMS, may be cooking up something of interest in the rover category.

Finally, on 24 GHz, Mike, VE2DUB, called to report success with his new Gunnplexer system. Initial contacts were made over a few hundred feet. However, after calibration and testing, Mike is confident that he and associates will be able to work long hauls on our 1.25 cm band!

REPEATER NEWS

The Toronto FM Communications Society, VE3RPT, is in the throes of installing new autopatch equipment, thanks to the efforts of Van, VE3ARV, and Paul VE3PQ. If your group is interested in linking into the VE3RPT Super Network, please drop TFMCS a note. Their new 223-MHz repeater is now fully functional, thanks to the efforts of Sinclair Radio Labs' VE3WY and VE3JPX. VE3DSS and VE3JPX installed a new antenna and duplexer at the site on September 3 and the system is now working perfectly. Boy, what a view of the Toronto skyline from the top of the tower! There are a lot of inexpensive 220-MHz radios around now, so this is the time to make the move to 135 cm and help relieve the congestion, QRM and intermod problems on 144 MHz. CU on my favourite band, and on my favourite repeater, 223.26 MHz in, 224.86 MHz out! ■

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



TH-25AT, TH-45AT

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1278

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ARES Survey

Have you ever wondered how your ARES group compares with others across Canada? As mentioned in an earlier column, I sent a two-page questionnaire to all Canadian ECs. The idea was to obtain some in-depth knowledge of the organization and operating practices of ARES groups across the country. Forty-five ECs were listed in the ARES records, all of them from Ontario west to British Columbia. Of these, thirty returned completed questionnaires. Here are some of the results. See how your group compares. Can you sit back with a warm feeling of satisfaction or are there some things your group should consider adding?

Membership

The first question was to determine the number of members in each group. The smallest group had five members, and the largest, the Scarborough, West Hill, Pickering and Ajax group under EC Peter, VE3JPP, had 150 members. Other large groups were VE7JAN's Vancouver group with 113, VE3JJA's Northwest Ontario group and VE3HNN's Niagara Region group with 85 each, and VE6AFO's Calgary group with 70.

Newsletter

Another question dealt with the existence of an ARES newsletter. Only one said "yes" and two others reported that they cover ARES matters in their local club newsletter. The rest do not communicate regularly with their members in writing. One newsletter specifically written for an ARES group is the *Metro Toronto ARES Update* edited, printed and mailed by Gord, VE3HSF. This is an excellent effort. In addition to news, it contains information on emergency equipment, liaison with client agencies, operating tips and so forth.

ARES Nets

When it comes to communication with members by radio, the situation, not surprisingly, is much better. Some two-thirds of those who reported have a periodic net for their members, with average check-ins of anywhere from seven to forty. Most nets are conducted on a local 2-metre repeater with the balance on 75-metre SSB. Three groups meet on both 2 and 75 metres.

Experience in Emergencies

Of considerable interest, of course, is the experience of groups in providing communications in a real emergency. No less than half of those who responded had participated in real emergencies. These

ranged all the way from helping to find a lost senior to the major effort associated with the Mississauga train derailment.

Disaster Exercises

Still another question dealt with exercises involving simulated disasters. About sixty percent of the respondents conduct periodic emergency exercises to give their members experience in handling communications under conditions as close as possible to the real thing. About half of those who do this act in collaboration with other emergency response agencies;

Red Cross, police and ambulance services. Skip, VE3BBS, sent along a description of last year's successful telephone tree for the Thunder Bay area, in connection with a simulated emergency conducted by local EMO people. There is much to be learned from any exercise, and this test was no exception. Here, in Skip's words, are some of the things his group learned:

"I did the telephoning from my office and 27 minutes later I contacted the EMO and advised them that a total of 23 operators had been contacted and were avail-

Field Organization Reports August 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 812.

Reporting	ARES Members
VE3GV (VE3s EFX, GMU, GNW, ITT, JJA, LKI, LPM, LYW, KBU, MB, SV, TNL)	570
VE6AFO	242

CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Divd	Total
VE1ALU	1	19	19	1	40
VE1DLC	3	17	8	8	36
VE1BTV	0	9	9	0	18
VE2BP	1	16	11	17	45
VE2WH	2	12	11	14	39
VE2JN	1	7	5	2	15
VE2EC	3	2	1	3	9
VE2ALE	0	3	3	0	6
VE3CNE	118	108	0	0	226
VE3ORN	8	88	78	17	191
VE3ISD	9	57	85	6	157
VE3CYR	1	84	38	4	127
VE3GSQ	1	80	44	0	125
VE3GT	0	39	52	5	96
VE3IN	2	48	9	8	67
VE3GNW	0	25	39	1	65
VE3BCZ	2	27	23	4	56
VE3EAM	7	16	7	15	45
VE3SB	1	18	22	1	42
VE3DVE	0	14	15	0	29
VE3KCZ	0	14	12	3	29
VE3NVJ	0	6	7	2	15
VE3BDM	0	1	13	0	14
VE3BAJ	0	2	7	0	9
VE4JA	10	40	50	15	115
VE4JR	0	20	22	0	42
VE4LB	0	10	20	4	34
VE4TE	0	31	0	0	31
VE4STU	5	15	4	5	29
VE6CPP	-	-	-	-	23
VE6GUS	-	-	-	-	19
VE6ABC	-	-	-	-	5
VE7EJU	1	71	67	1	140
VE7ANG	3	46	50	40	139
VE7BCL	2	49	11	41	103
VE7XA	1	16	26	6	49
VE7FB	0	19	17	3	39
VE7FME	4	7	14	2	27
VE7FRZ	3	10	12	1	26
VE7BCF	5	6	5	1	17
VE7CCJ	4	6	2	1	13
VE7BZI	1	1	1	1	4
VE7EGM	0	0	4	0	4

National Traffic System

Net (Mgr)	Sess	QNI	QTC
APN (VE1VX)	19	44	28
KTN (VE3AJN)	13	72	8
OLN (VE3POJ)	30	507	38
OPN (VE3IN)	31	529	158
OQN-1 (VE3GSO)	28	40	13
OQN-D (VE3ORN)	23	65	14
OQN-E (VE3CYR)	30	137	131
OQN-L (VE3GSO)	20	42	14
MEPN (VE4LB)	29	732	62
MWX (VE4TE)	31	415	23

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: VE3ORN (161), VE4JA (121), VE4LB (110), VE4STU (93), VE3CYR (69)

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)	4	86	1
ARES ONTARIO (VE3GV)	1	6	0
CRRL ONTARS (VE3FQV)	31	9868	0
TRANS-PROVINCIAL (VE3EJU)	31	7316	0
MJARC (VE5MML)	31	328	0
ARG (VE5EE)	30	530	0
SWX (VE5EX)	31	647	0
SPN (VE5AE)	22	644	5
BCEN (VE7EJU)	31	700	132

able. The exercise got me thinking and raised some questions we should ask ourselves. Had the telephone tree been activated without warning, did I have a copy at my workplace? Would my employer have been upset that I had done the calling during business hours? Would my employer have given me time off had it been a real emergency? Did I have a copy of the emergency plan readily available? Did I have the equipment to check into our emergency repeater during the business day had the net been activated?"

Emergency Plans

Forty-five percent of the groups have an emergency communications plan and another 25 percent are covered to some degree in their municipal emergency plans. Gord, VE3HSF, has even issued an *ARES Operating Manual* which, among other things, details the communications services that the Metro Toronto ARES can provide. Of interest, here's what the *Manual* has this to say about data traffic:

"Data traffic allows the user agency the ability to pass messages over a digital radio network connecting several locations in and around Metro Toronto. These messages are entered into a keyboard and transmitted to another location. Typically, these messages contain lists of items or details of such complexity and length that using voice traffic service is impractical."

In addition to providing guidance for ARES members, this manual also provides to various user agencies a clear and powerful picture of how they can be expected to be served in an emergency.

Local Working Arrangements

To get a picture of the status of planning and cooperation with local emergency response agencies, another question dealt with any working arrangement or agreements in place with these agencies. Practically every group has agreements or arrangements. Agencies include the Red Cross, municipal emergency control groups, police, fire, ambulance, hospitals and major industries. Ken, VE6AFO, Ron, VE6FV, and Garry, VE6CIA, all noted their collaboration with the Alberta Public Safety Services organization. Al, VE5AQ, mentioned his arrangement with the Moose Jaw air force base.

Emergency Facilities

Around 75 percent of responding groups have some emergency equipment. Many have portable gasoline-driven AC generators and many have installed fixed antennas at their municipal emergency control centres, Red Cross headquarters, etc. Quite a few have dedicated HF and VHF transceivers. Metro Toronto members have several portable emergency packet stations for handling high-volume emergency traffic, and Mike, VE3XD, reported that his Peace-area emergency-

group even has a long-range portable repeater.

There are two emergency communications vehicles. Janet, VE3FUN, reports that the 22-foot Chatham trailer has three separate stations operating on HF and VHF, complete with emergency power and antennas. Garry, VE6CIA's group, owns part of the Red Deer emergency communications vehicle. This elaborate and excellent setup was described in some detail in our column last March. Several groups have access to complete emergency stations with emergency power capability. For instance, Vic, VE3KBU, reports that VE3SSN, the station at Science North in Sudbury, is available to ARES in an emergency. In addition to HF SSB, the station has packet, RTTY and AMTOR capability.

Funding

Finally, we come to the question of funding of ARES activities. Most respondents reported that their minimal annual expenditures were easily met by contribution by ARES members or by local Amateur Radio clubs. A few groups sought and received financial assistance from their municipality or the federal New Horizons

program. Here in Kingston, we have received several generous grants from our fleamarket committee, while in Chatham, Janet, VE3FUN, reports that most of their needs are filled by bingos conducted by their club!

This, then, is the picture as reported by two-thirds of the ARES groups across Canada. These groups are to be congratulated on the many steps they have taken to deal with disaster when it strikes. Do these survey results suggest any action your group should take to improve its capability? —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. Bob Boyd, VE3SV, will pull this together for future columns with the objective of increasing our ability to serve, should disaster strike. ■

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Defence of Amateur Radio Fund Update

The following have recently made contributions to the Defence of Amateur Radio Fund:

James Munsey, VE6BKW – \$10
Charles Miller, VE3GO – \$25
Frank Gue, VE3DPC – \$15
Roman Hrwyniak, VE6BRQ – \$30
Alfred Armstrong, VE3DME – \$20
Claude Vermander, VE3FZV – \$20
William Hardie, VE3EFX – \$50
Russ Bulger, VE7CJB – \$10
Hal Dickenson, VO1MG – \$20
Pat Casey, VE7CCA – \$10
Jack Adams, VE4JA – \$25
Marvin Peterson, VE6LA – \$20
Les Harvey, VE3LMH – \$10
Ralph Cameron, VE3BBM – \$25
Colin Dumbille, VE7FZQ – \$500
William Loucks, VE3AR – \$50
Noel Eaton, VE3CJ – \$250
Bruce Balla, VE2QO – \$100
William Barnes, VE3CKP – \$10
Brian West – \$25
Anonymous Donors – \$20

Please help IARU defend our amateur frequencies at WARC '92 by sending your donation to the Defence of Amateur Radio Fund, Box 56, Arva, ON N0M 1C0. All contributions will be acknowledged. ■

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Consider the benefits of joining CRRL: **QST Canada** and **QST** (either or both) monthly journals, **free CRRL Outgoing QSL Bureau**, and **discounts** on CRRL, ARRL and RSGB books and materials. Your membership supports many important services to Canadian Amateur Radio: **representation to DOC** and other government agencies, **representation to IARU**; Field Organization (NTS, ARES, OBS) for public service, the incoming QSL bureaus and much much more. Consider the **benefits** for you and Canadian Amateur Radio and **join CRRL today!**

Pensez aux avantages d'être membre de la Ligue Canadienne de la Radio Amateur (CRRL) : abonnement aux publications mensuelles **QST Canada** et/ou **QST**, **service gratuit de QSL vers l'étranger** et **réductions** sur les livres et produits de CRRL, ARRL et RSGB. Grâce à votre cotisation, nous pourrons continuer à servir les radioamateurs canadiens **en les représentant auprès du ministère des Communications** et d'autres organismes gouvernementaux, ainsi que sur la **scène internationale**, et en mettant sur pied des réseaux servant l'intérêt commun, pour ne nommer que ceux-là. **Devenez membre de la Ligue.** La radio amateur canadienne et vous en sortirez **gagnants!**

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