

# QST CANADA

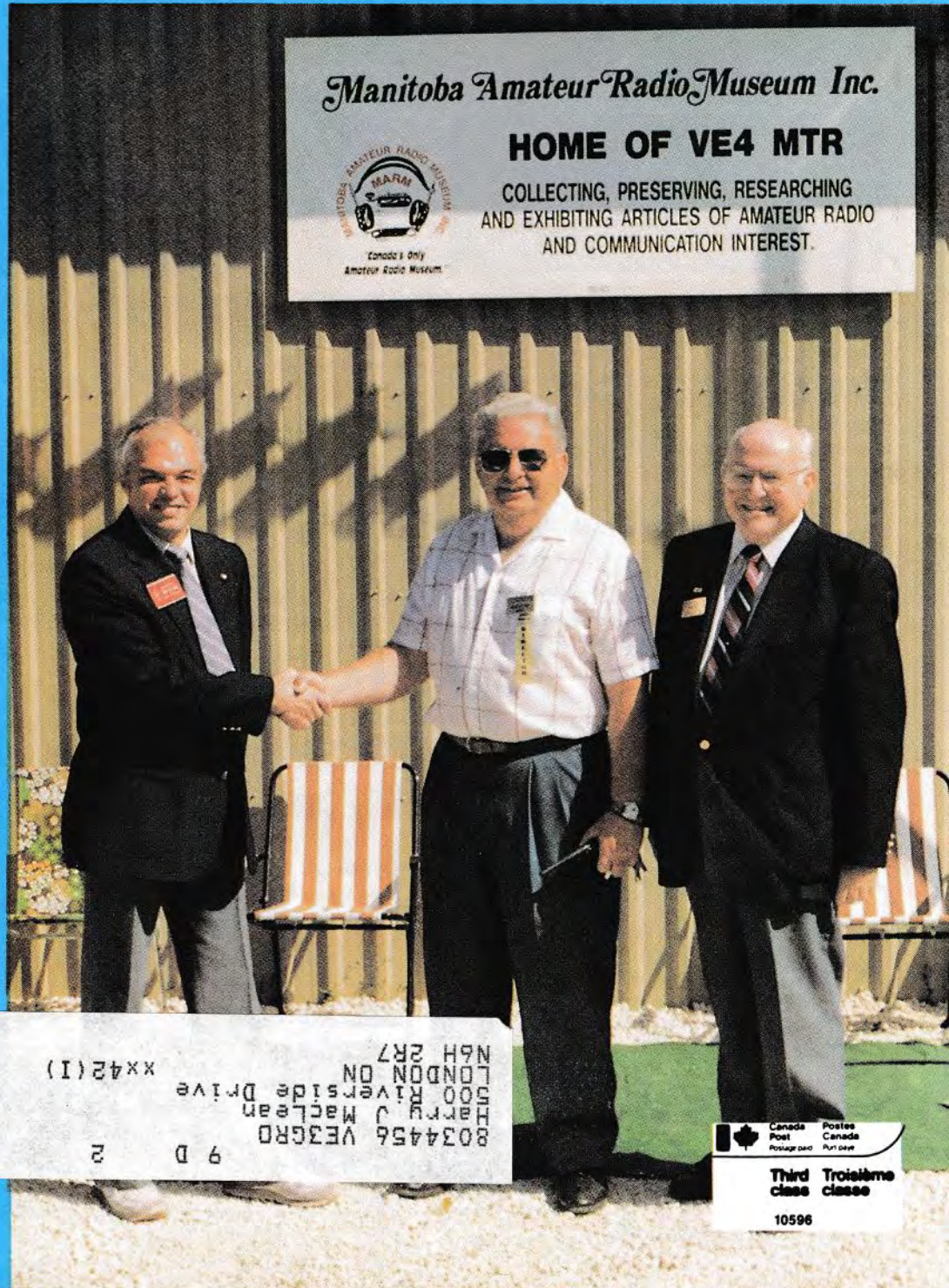
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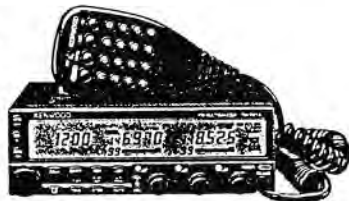
For professionals in any field, there's no substitute for the genuine article. And when it comes to handheld communications, there's no beating Kenwood's TH-78A (144MHz/440MHz)—the smallest dual-band transceiver in the world. Packed with leading-edge technology, the TH-78A combines simplicity of operation with a multiplicity of features: built-in DTSS and paging functions, alphanumeric memory and message paging, dual-frequency receive (including VHF + VHF & UHF + UHF), plus double-band scan. And its distinctive ergonomic design incorporates a sliding keypad cover.

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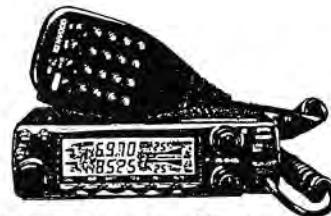
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Kenwood TM-741A  
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Kenwood TM-241A

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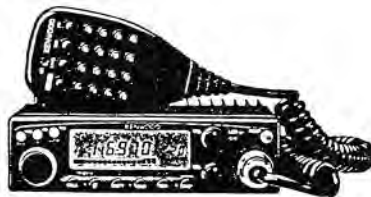
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# QST CANADA

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

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since operations need up to perform radio chores, now that they didn't have to keep their kids happy.

Late in the afternoon, Morris was all petted out, and he ambled over to see what Fluff was doing. I guess she had worked out the low end of 15 with her mighty four watts, so the two of them went for a walk to see if they could find a mouse or something for dinner. Phil was shutting down the net, the cars had all cleared the course, the ambulance had gone back to town, and Tony climbed up the hill to turn off the repeater.

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

## Watch Your Language

An American radio amateur, Allen Burton, KA4URC, was recently fined \$2000 for using indecent language on the air.

The *W5YI Report* stated, "This is believed to be the first monetary forfeiture ever issued for an over-the-air amateur service speech violation that was not linked to an additional, easier-to-prove offence."

For many, this will be welcome news. There seem to be altogether too many instances of thoughtlessly unsuitable language on the amateur bands these days. And it happens both on the HF bands and on VHF.

It is inexcusable on any band, and for that matter on any mode used by Amateur Radio operators.

Mr. Burton's offence was on the 20-metre band during the afternoon, when children might be able to hear it. Depending on propagation conditions it might also have been heard by people on several continents, including listeners who might have known nothing about Amateur Radio.

This kind of behaviour is likely to be even more shocking when it happens on a local two-metre repeater.

Recently, your editor had a young lady visitor in her twenties in the shack. She was keen to get involved in our hobby. She had done some on-the-air work as a broadcaster, and was interested in the tedious as well as the fun aspects of Amateur Radio—conducting emergency operations as well as making friends all over the world. After a typically pleasant evening on HF, we switched on the two-metre shielded, tuned to our repeater, and sim-flo called, "VE3HBF testing". Almost eventidely a rough voice came on with a thering of abuse that forced us to switch M as fast as possible.

The demonstration came to an abrupt end. It was a nasty reminder that all is not well with Amateur Radio when intruders can so bedevil the everyday enjoyment of our hobby.

It would be difficult to believe any disensed radio amateur would behave this idely. Unfortunately, it is not too difficult ext someone without a licence or knowl-

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edge of the responsibilities and regulations governing our use of the air waves to burst onto the air in this way.

Generally speaking, we can often track down offenders with direction finding (DF) and measuring equipment. Our "fox-hunts" provide an enjoyable, competitive way to learn the skills.

There is an international network of volunteers who monitor the HF bands around the world, and seek to identify those making improper use of frequencies allocated to Amateur Radio. But checking up on improper language is not in their terms of reference. That's up to us, individually and collectively. Should matters deteriorate further, it may become necessary for local clubs to conduct a coordinated effort to stamp out this reckless abuse of our Amateur Radio bands.

All of us who use portions of the radio spectrum to transmit and receive radio messages should never for a moment forget that we are greatly privileged to share what is really a public preserve. We, like all other users of the radio spectrum, are subject to national and international regulations and restrictions *when we transmit on the air*. But there is nothing to stop us listening—unless we are in some country where a dictatorial government seeks to curb our freedom by trying to forbid us. Happily "cold war" days, when some nations went to great lengths to "jam" signals they did not want their people to hear, are past.

So, there is nothing to stop us, but neither is there anything to stop anyone else within reach of our signals, from eavesdropping on everything we say. We should keep this in mind every time we "push-to-talk" or activate our microphones by any means.

If we always remember this, we might be less likely to make hasty criticisms of others, and we might be less likely to "shoot off our mouths" with comments that might give offence to others even though that might not be our intent.

"If thou the bending reed would'st break.../By thought or word unkind.../Pray that His spirit you partake.../Who loved and healed mankind." —David Adams, VE3HBF

## SPECIAL NOTE

This issue of *QST Canada* is being sent to all CRRL members in the Alberta Section. It contains a legal notice pertaining to Section Manager elections. —Ray Staines, VE3ZJ

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

## CANADIAN CALLING FREQUENCY FOR TEN METRES?

Because my current HF equipment is limited to operation on ten metres, I have been searching for ways to improve Canadian operation on this popular band. I would like to put forward a proposal for consideration by Canadian amateurs.

This band lacks what are commonly known as calling frequencies. Amateur operators as a group have always shunned these. I could never understand why, but I presume they were looked upon as an encroachment on the freedom of amateur operators to move around freely within

their assigned band limits.

However, the ten-metre band is such a wide one that Canadian activity there is scattered. The nature of the band is such that at times there seems to be no open path between Canadian cities because the few Canadian stations that are present are operating all over the band. At other times the band is open for only an hour or two but no stations can be heard from the US or Canada. Amateurs assume that the band is not open. Yet, at the same time, foreign DX CB stations are coming through loud and clear near 27.990 MHz.

I propose that the solution to these

problems peculiar to the ten metre band is calling frequencies. All it takes is for a few of us to agree on the frequencies and to start using them in a mutually agreed manner.

I suggest that 28.300 MHz become the Canadian SSB calling frequency. Calls could be very brief. A few seconds of the letter V sent in CW, followed by spoken call letters, would be a good way to catch attention. When the band is busy, stations would shift to a secondary Canadian chatting frequency of 28.280 MHz. In the future I would hope that 28.500 MHz would be adopted by amateurs as a worldwide calling frequency. However at this time our main concern is that 28.300 MHz become the Canadian SSB calling frequency. For Canadian AM operators, 29.020 MHz would be a good choice. For Canadian FM simplex, it might be 29.490 MHz. See you on the ten-metre band.  
—Joe Cusimano, VE3OV

### 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 56, Arva, ON NOM 1C0 Tel (519) 660-1200.

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\*Voting member, CRRL Board of Directors

## IPARN "NOT AMATEUR RADIO"

The masthead of *QST Canada* proudly states "Devoted Entirely to Canadian Amateur Radio". Why then did you publish a feature article on IPARN in the December 1992 issue?

IPARN is *not* Amateur Radio and should not be promoted as such, especially in *QST Canada*.

A few amateurs spent time interfacing amateur repeaters to IPARN equipment, but that is the full extent of amateur involvement. The rest of it is solidly commercial-commercial equipment operating

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# Fluff and the Dinosaur

Further adventures of the cat that learned CW...

By Arnold Rivett, VE6AXB  
Box 11672  
Dhahran, Saudi Arabia

It was one of those weekends when you had to make a choice: watch the Stanley Cup Final or work on the Sports Car Club summer rally. It was an easy decision. The rally would be a lot of fun. The usual Calgary Amateur Radio Association (CARA) FM gang would be having a good time, and somebody would bring along a portable TV, and we would watch the game with the TV plugged into a generator of somebody's motor home.

Fluff, the famous Alberta CW cat, liked to come along on these outings, although she couldn't operate on FM. Fluff had learned CW by listening to her owner make teaching tapes, and had then studied for about two years to get an amateur licence. If we needed an extra op, Fluff could key tone CW into an FM mike, but for the most part this was more trouble than it was worth.

Somebody scared up a Heath Hot-Water Eight. We cut dipoles for 15 and 20, and made a box to hold two lantern batteries. Fluff could put up the dipoles by herself by climbing trees, and she got a big kick out of setting up and running the little CW rig.

Morris, Fluff's mate, came along too. Morris had never learned CW, but was lovable and often entertained small children by lying in their laps and purring while they petted him. This was valuable since operators were then freed up to perform radio chores, now that they didn't have to keep their kids happy.

Late in the afternoon, Morris was all petted out, and he ambled over to see what Fluff was doing. I guess she had worked out the low end of 15 with her mighty four watts, so the two of them went for a walk to see if they could find a mouse or something for dinner. Phil was shutting down the net, the cars had all cleared the course, the ambulance had gone back to town, and Tony climbed up the hill to turn off the repeater.

We had just pulled the camp chairs into a circle, and were getting the first round of 807s opened up when Fluff and Morris came back to camp. They jumped up on Ian and me, and with purrs and meows, asked us to come and see what they had found. Ian, Phil, Flo and I walked over to a bluff with the cats to see what it was. Most of the folks weren't radio people. They thought the cats were cute, but didn't realize that Fluff could communicate by sending Morse code.



Headphones removed, Fluff resting on her laurels after a bout of CW contacts.

At the top of a cliff face which dropped down to the river was a hollow which contained a round black object. The cats had dug it out of the soft sandstone, but couldn't get it up to where they could roll it back to camp. We picked it up, and with Morris' help, found another partly buried nearby. Radio amateurs and cats dug it out and we carried our find back to the campfire.

"They look like eggs," said Phil. There was no argument. They were big enough to be ostrich eggs, or something even larger. They were black, sort of shiny and had small bumps all over them. Flo came up with the answer ahead of everyone. "That's Medicine River down there," she said. The campsite was where Medicine River cuts through the Two Medicine formation. Flo had taken geology courses at university. Flo continued with a broad smile. "The Two Medicine formation, in the Lower Cretaceous period, contains dinosaur skeletons. These must be dinosaur eggs".

Trying to explain to Fluff about dinosaurs was beyond us. The cat had no idea of geologic time, and the concept of extinct creatures didn't make sense to her. Flo and I decided to take her to the Tyrell Museum in Drumheller to show her reconstructed dinosaur skeletons. This would allow us to take the fossil eggs to the museum and tell the paleontologists where this new find was located.

Fluff was positive about one thing. She told us she was sure there was something inside the egg.

Ian and Phil were quite interested in the eggs, and we all agreed to make the trip to Drumheller to the museum. Since it was the cats who made the find, the eggs came back to Cochrane with us and wound up in our garage.

Ian was busy the next weekend, and Phil and I wanted to go to the Red Deer Hamfest on the weekend after that. June turned into July and we were still talking about when we would go to Drumheller.

One night, Flo and I got home in that lovely summer twilight, to be met by two cats who were so wound up we couldn't believe it. The cats took us into the workshop which adjoins the garage, and there on the floor was the strangest creature I had ever seen.

It was about the size of a small chicken, and it looked like a bird the way it just hopped around. It was leathery brown, covered with something like a cross between fish scales and feathers. Flo and I looked at each other. It took about three seconds to realize we were looking at a newly hatched dinosaur.

Flo ran for a camera and I got some water to offer our new visitor. I was stunned, and tried to figure what it might eat. I remembered the Norfolk Island pine was of the genus *araucaria*, which is from the Cretaceous, so I

broke off some needles of Flo's potted Norfolk pine to see if the dinosaur would eat them.

Then I realized how lucky we were. The dinosaur hatchling was about half the size of a cat. If it had been much smaller, the cats would have caught it and eaten it. We carefully picked up the fragments of the eggshell. The little creature did take some pine needles, and a little water. We hoped it might live long enough so that scientists could study it and learn from it.

We decided to call the geology department at the university. Fluff didn't think this was a very good idea, but we wanted to do something quickly. Somebody from paleontology listened to the story I told him:

"My wife and I have made a discovery of two dinosaur eggs and some well preserved hatchlings. The find is very fragile and delicate, and we don't want to risk damaging it by moving it. Could you please come out to our acreage and look at our find? We are certain you will find it fascinating, and then you can arrange to take it in for proper handling."

It was the middle of summer, and the paleontologist couldn't understand why we wanted him to drop everything and come the next day. He did agree he would call to say when he would come to look at our find. Flo and I were beside ourselves. We knew that if we had said we had a live dinosaur he would think we were a couple of kooks and write us off. At the same time, we didn't know if the baby dinosaur would live, and we wanted the discovery to be

shown to the world.

There was no call the next day, and so, that evening, we amused ourselves by taking the video camera out, and getting about thirty minutes of video of the tiny dinosaur, eating and drinking and shuffling around. On Thursday morning Flo got a call at her office to say that a paleontologist would be in the area that day, and would drop around to our house at 6 p.m. We came home at 4.30 p.m. and checked on our dinosaur. It had grown in two days, and was now the size of a small rabbit. It still seemed all right, so we went into the house for an 807 to fortify ourselves for the wait.

The university man was late, and dusk was starting to turn into night when he came down our road. I couldn't wait any longer. As he stopped and got out of his car, I went into the garage, picked up the hatchling dinosaur and carried it out into the yard. Then I made a fatal mistake. I put the little creature down on the ground where it could be seen under the yard light, and stepped back. The paleontologist was coming across the yard when a grey and white shadow swooped down from its perch on top of the house, caught the baby dinosaur in its beak and took off for its nest. We all cried with dismay as a large snowy owl flew away with our precious prize in its mouth.

We chased the owl down to the gravel pit, but it got away from us in the dusk and we lost it completely. The university professor had caught a glimpse of the baby dinosaur and was extremely agitated. We went back to the house and looked at the videotape, and some slide

photographs of the egg and the little critter.

Our visitor cleared his throat. Clearly he was a little embarrassed. "The photographic evidence is very interesting and helps to fill in a few gaps in the rock record evidence we get from paleontology. Unfortunately, without the actual dinosaur, this will be branded the worst kind of fake and practical joke. I'm sorry, but this will have to be our secret. However, thanks for the location of your egg find. We will put it on our maps and get somebody to take another look there before long."

So that was that. Fluff and Morris spent several days on top of the house trying to catch the owl, but to no avail. Perhaps their hearts just weren't in it. The other egg never did hatch.

We planned to go back to the campsite to try and find more eggs, but as winter was approaching we decided it would probably be a "next year" project. We had a little party, and those involved—including Fluff, the CW cat—looked at the video three times. It really was the strangest thing. ■

## MOVING?

For uninterrupted delivery of *QST* and *QST Canada*, please send your change of address notice to CRRL, Box 56, Arva, ON N0M 1C0, eight weeks before you move. Don't forget to quote your call sign or the seven-digit number on your mailing label. —Ray Staines, VE3ZJ ■



Six-metre EME array at VE6JW/VE6EME. Up on "the beast": VE6MAA (left) and VE6JY. ■

## Silent Keys

Conducted By Ray Staines, VE3ZJ

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

VE3AEZ, Gil Ford, Scarborough, ON  
VE3AQY, C. Milt Brooker, Orillia, ON  
VE3DCT, Bob Cowan, Bracebridge, ON  
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VE3GCE, Dave Sayeau, Delhi, ON  
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VE3OAI, Bill Seyler, Kanata, ON  
VE5EJ, John Ellis, Regina, SK  
VE7AGQ, Bill Mawer, Fernie, BC  
VO1HC, Max Dyke, St. John's, NF

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

## VE3OSC Reopens at the Ontario Science Centre

Amateur Radio once again has a permanent place in Toronto's Ontario Science Centre. A roster of fully licensed radio amateurs has been operating VE3OSC every day since November 9. This will continue on the following schedule, now that the station has again been granted permanent status:

Monday to Thursday, daily at 1600-2000 UTC,

Friday 1600 UTC to Saturday 0200 UTC, and

Saturday and Sunday, 1600 to 2200 UTC.

Visitors to the Ontario Science Centre are invited to participate as contacts are made on the 10-, 12-, 15-, 17- and 20-metre bands. At present, equipment consists of a Kenwood TS-850S transceiver, with a TH-7DXX seven-element beam mounted on the roof of the centre.

The station is set up in a booth on Level C. The staff of the Ontario Science Centre says that VE3OSC "...is designed to excite our visitors' curiosity about all aspects of radio technology including utilization of the electromagnetic spectrum, the ionosphere, sunspots and the sunspot cycle. We will be introducing this technology in a multicultural communications medium to open visitors' eyes to the world and its peoples."

### MONTREAL AMATEUR RADIO CLUB "MARCS" ITS 60TH ANNIVERSARY

Over 200 people attended the 60th Anniversary Dinner of Montreal Amateur Radio Club (MARC), held on Friday, 1992 October 30, at Bill Wong's Restaurant, Montreal.

The event had been well publicized in advance as "a date to remember" and an occasion to relive the Golden Days of Amateur Radio in the Montreal area. A large display of pictures spanning the 60 years from 1932 to today put everyone into a nostalgic mood. Guests signed their name and call on a huge three-by-four-foot board.

The clanging of a great ship's bell announced the "all you could eat" buffet dinner. Representatives were present from the following clubs:

West Island ARC,  
Townshippers ARC,  
L'Union Metropolitain des Sans-Filistes,  
McGill University ARC,  
Concordia ARC,  
South Shore ARC,  
Club Radio Amateur Laval-Laurentides,



Tony Fegan, VE3QF, David Adams, VE3HBF, and Tom Atkins, VE3CDM, operating the newly reopened VE3OSC.



Montreal Amateur Radio Club (MARC) President Don Dashney, VE2RM (left), and Albert Daelmen, VE2IJ (right), chairman of MARC's 60th Anniversary organizing committee, with newly licensed amateurs Maryse Berthiaume, VE2WIZ (left), and Maggy Venettacci, VE2MGY (right). (VE2HRP photo)

Côte St-Luc Amateur Radio Association,  
Montreal Association for the Blind ARC,  
Canadian Radio Relay League, and

Montreal Amateur Radio Club.  
Master of ceremonies for the evening was Murray Epstein, VE2AUU. Prize committee chairman was Herm Verblow, VE2HV.

President Roger Legault, VE2BWG, of Club Radio Amateur Laval-Laurentides presented several certificates for meritorious service to Amateur Radio. Don Dashney, VE2SH/VE3RM, was recognized as "Most Devoted Amateur Radio Teacher", and Al Daemen, VE2IJ, was recognized for his skills and accomplishments in organizing major Amateur Radio events over the years.

The master of ceremonies read letters of congratulation from CRRL President Dana Shtun, VE3DSS; ARRL Executive Vice President and Secretary David Sumner, K1ZZ; and Dr John Simms, Director General of Montreal Association for the Blind.

Some friendly rivalry determined the oldest amateur present. It turned out that Dick Bird, VE2XO, had seen the light of day just two weeks before Aurele Taillon, VE2DW. Both were 87. Dick, VE2XO, was the longest licensed—70 years. He's been an amateur since 1922! —Adapted from Marcogram, journal of the Montreal Amateur Radio Club, Inc.

### VE3 QSL BUREAU VOLUNTEERS MEET

It takes an army of volunteers to handle the sorting and distribution of QSL cards for Ontario. In the photo, the 16 who recently met at the Islington home of Anne and Gary Westhouse, VE3NIT, to discuss bureau affairs. Seated at centre is Gary, with Ann behind. Bureau Secretary Tony Salvadori, VE3NXQ, is seated on the left. Ernie Poole, VE3NSZ, is standing on the left while Garry Hammond, VE3XN, is standing at the right.

### "HOPPY" HOPWOOD HONOURED

On 1992 September 17, Farrell "Hoppy" Hopwood, VE7RD, President of CARF and President-to-be of the Radio Amateurs of/du Canada (RAC) was presented with an 1992-93 honorary membership in North Shore Amateur Radio Club of North Vancouver, BC. The club wished to honour Hoppy for his leadership in Amateur Radio and for his role in bringing about a single Canadian Amateur Radio organization.



North Shore ARC outgoing President Ian Simpson, VE7CSQ, presents an honorary membership to VE7RD.

### 8 QST Canada



Montreal Amateur Radio Club Vice President Ken Albert, VE2MUX (left), with Dick Bird, VE2XO, now 87. Dick was first licensed in 1922. (VE2HRP photo)



CRRL VE3 Incoming QSL Bureau volunteers at a recent meeting at the home of Anne and Gary Westhouse, VE3NIT.

## Calendar

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

**New Westminster:** Burnaby ARC Fleamarket, Sunday, 1993 February 21 at New Westminster Armories, 6th Street and Queens. Admission: \$2. Tables: \$7.50. Opens at 0900, 0800 for vendors. Good parking. Refreshments. Talk-in on VE7RBY, 145.35 MHz (-) and 442.850 MHz (+). For tables or

information, contact Burnaby ARC, Box 80083, Postal Station South, Burnaby, BC V5H 3X1.

**St Catharines, ON:** The Big Event Hamfest and Dinner Dance, Saturday, 1993 February 6 at the CAW Hall, 124 Bunting Road. Hamfest admission: \$5. Tables: \$5, \$12 for commercial tables. Talk-in on VE3NRS, 147.2 MHz (+). For tables or more information, contact Niagara Peninsula ARC, Box 692, St Catharines, ON L2R 6Y3, Tel (416) 934-3231.





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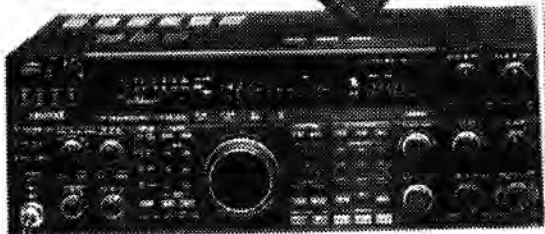


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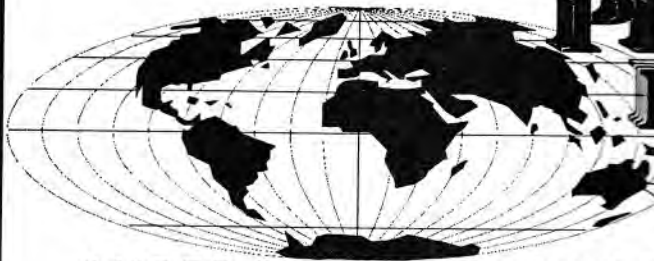
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TH-78/28/26  
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1993

JANUARY

\*Promotions Expires  
31 January 1993

VE2 TRZ

## QSL Bureaus—a Salute to the Volunteers

The CRRL Outgoing QSL Bureau allows Canadian amateurs to send QSL cards to other parts of Canada, the US and overseas with a minimum of cost and effort. This service is free for CRRL members and available to non-CRRL members for a small cost. Information about the use of the bureau may be readily found in various publications, at flea markets, at clubs and from other amateurs.

As well, a CRRL incoming bureau system functions and serves all Canadian amateurs. Membership in CRRL is not a requirement to use this incoming system.

Member-societies of the International Amateur Radio Union (IARU) operate a worldwide system of QSL bureaus. The Canadian Radio Relay League (CRRL) is the Canadian member-society of IARU, and operates a Central Incoming QSL Bureau, and the incoming bureaus for the twelve Canadian call areas.

IARU member-societies send cards to the CRRL Central QSL Bureau. Cards are then sorted and forwarded to incoming bureaus in each of the twelve call areas, where further sorting occurs. At this stage, QSL cards are placed in envelopes and mailed to individual amateurs and clubs. Funds and self-addressed envelopes (SAEs) are held by the local bureau or the individual volunteers who are responsible for particular groups of call signs. At certain bureaus, other methods are used. As stated previously, information is readily available as to how an individual amateur should supply funds and SAEs to a bureau.

This overview of the QSL bureau system has been simply portrayed. To gain a better appreciation of the system's workings, and the people involved, more details follow. Always remember that all the players in the "delivery system" are *volunteers*.

Worldwide operations of QSL bureaus, including Canada's, represent the work of many thousands of dedicated volunteer men and women. Is not this the "spirit of Amateur Radio" at its best? What other organization exists with such worldwide scope and efficiency that cuts across all barriers of race and culture? The impressive phenomenon of a volunteer somewhere in the world at any given time sorting and/or mailing QSL cards—it's mind boggling, the stuff cartoons are made of!

To find out how individual Canadian amateurs are served by the QSL bureaus, let us focus in on a typical sequence.

### INCOMING BUREAUS

The CRRL Central Incoming QSL

Bureau is located in Saint John, New Brunswick. Cards for all Canadian amateurs come to it in bulk from overseas bureaus. They are sorted there into groups destined for each of the eleven provincial or territorial bureaus listed in the *North American Callbook*, and are mailed in bulk to each: VE0, VE1/VY2, VE2, VE3, VE4, VE5, VE6, VE7, VE8, VO1/VO2, and VY1.

Method of distribution may vary at these incoming bureaus, but the principle is the same. Individual amateurs are expected to send to their provincial or territorial bureau a supply of funds, stamps and SAEs. The bureau uses these to mail cards to each individual amateur.

Taking Ontario as an example, the CRRL VE3 Incoming Bureau is at Box 157, Downsview, Ontario M3M 3A3.

Actually, the initial sorting of most VE3 cards takes place in Listowel, Ontario, where one busy amateur sorts them all alphabetically by the first letter of the suffix. From Listowel they are taken to the VE3 bureau secretary and his support group in Guelph, Ontario. He distributes the cards to some local amateurs who look after certain VE3 suffixes, and sends the rest back to Box 157. These are collected and stored by a couple in Islington, Ontario. From there, they are collected by individual volunteers in an area in and around Toronto. This group includes amateurs in Bolton, Cambridge, Fonthill, Guelph, Islington, Kitchener, North York, Oshawa, St Ann's, Scarborough, Sutton, Tillsonburg, Shelburne and Willowdale. Some twenty volunteers are each responsible for certain designated amateurs in Ontario: VE3A calls, VE3B calls, VE3C calls, and so on through the alphabet.

These volunteers arrange to pick up the cards from Islington for their group, and then sort them by the second letter of the suffix. These volunteers also maintain files for each callsign group, including complete records of the funds, stamps and SAEs held for each amateur. It is these volunteers rather than the VE3 bureau itself that maintain direct contact with all of the amateurs for whom they are responsible.

It is essential that amateurs make sure that their volunteer representatives have supplies of funds, stamps or envelopes so those representatives can forward their cards without delay.

### OUTGOING QSL BUREAUS

At present, there are two Canadian outgoing QSL bureaus, CRRL and CARF (see sidebar). As we move towards a sin-

gle Canadian Amateur Radio organization, changes must occur. Whatever emerges within Radio Amateurs of/du Canada (RAC) regarding the QSL bureaus, one truth will continue to apply: dedicated volunteers, as they have in the past, as they do now, will still be with us.

Volunteers, we salute you! The amateur spirit alive and well in the QSL bureaus. ■

**CRRL Outgoing QSL Bureau**  
Box 56  
Arva, ON  
N0M 1C0

Cards are sorted alphanumerically into the following groups:

1. VE3
2. other Canadian provinces
3. US call districts
4. overseas countries

Cards are shipped directly from Arva to the appropriate incoming QSL bureaus —including QSL bureaus in some 200 DXCC countries around the world.

**CARF National QSL Bureau**  
Box 66  
Islington, ON  
M9A 4X1

This bureau is maintained by essentially the same volunteers that maintain the VE3 Incoming QSL Bureau at Box 157, Downsview, ON. Cards are sorted into the following groups:

1. VE3
2. other Canadian provinces
3. US call districts

These cards are shipped to the appropriate incoming QSL bureaus by Box 157 volunteers. Cards for overseas countries are held for volunteers in Oakville, ON, who sort them and ship them to some 200 incoming QSL bureaus around the world.

### January Contests

- ARRL Straight Key Night – January 1
- ARRL RTTY Roundup – January 2-3
- NCJ North American QSO Party – CW – January 9-10
- NCJ North American QSO Party – phone – January 16-17
- ARRL VHF Sweepstakes – January 23-25
- CQ WW 160-Metre DX – CW – January 29-31

# Seasonal Propagation

## MUFs and yearly propagation variability...

By Paul M. Dunphy, VE1UK  
3351 Highway 7  
Lake Echo, NS P0J 2S0

It is well known that HF propagation is affected by many factors. The best known is the 11-year solar cycle. As sunspots increase and decrease over this 11-year period, so does propagation. Coronal mass ejections, the result of solar flares, prominences and coronal holes have short-time dramatic effects and are less predictable. They induce geomagnetic storms that often attenuate signals for days. Those concerned with HF communication are very familiar with the solar cycle and geomagnetic activity. Unfortunately, even with a good understanding of these phenomena, there remains a great deal of uncertainty in predicting HF conditions. The critical frequency, often referred to as the MUF (maximum usable frequency), is ever changing. In addition to the two factors mentioned, the critical frequency also depends on geographical latitude, localized magnetic anomalies, time of day and temporary ionospheric conditions like sporadic-E or meteor showers.

Most of us throw up our hands at this point. There are too many factors to consider. Predicting band conditions appears to be nothing more than a guessing game. This is true to some degree, especially when predictions are made a daily basis. Long-term prediction is somewhat easier. As I mentioned, we all know about the 11-year cycle and we can predict propagation trends with reasonable certainty over a span of years. Superimposed on this 11-year cycle is another relatively stable and predictable cycle. This is yearly propagation variability. As I will explain, research has shown a repeating trend that is remarkably consistent.

### "Lack of Activity" Factor

Amateurs who frequent the HF bands know that activity drops off during local summer. There are several reasons for this. Perhaps the biggest reason is that people enjoy the fine weather. They spend more of their free time on other activities. It's hard to justify sitting in front of the rig when the sun is shining and it's 25 to 30 degrees outside. Those who remain dedicated to Amateur Radio during this time still may not be on the air as often. Antenna projects and similar outdoor station enhancements are typically scheduled for the summer. Another reason is the increase in the QRN, espe-

cially below 20 metres. Static crashes 20 dB over S9 are normal on the lower bands during the summer. Propagation may be good, but it is difficult to carry on a QSO in these circumstances.

It is important to remember that the cycle I will be describing is independent of activity. Often we tune across our favourite band, hear little or nothing, and assume that conditions are poor. We may notice this more in summer and incorrectly assume that the bands are in bad shape. As we will see, April, May and June can be good months for DX from a propagation standpoint—even though they are also the best months for fishing, swimming and barbecues.

### Seasonal Variation of the Critical Frequency

If we remove lack of activity and low-band QRN as factors, given comparable solar flux, shouldn't propagation be the same all year around? It isn't. Even when the flux is high (>200 SFU), we often lose 10, 12 and sometimes 15 metres for days at a time during certain periods of the year. This happens even in the absence of unsettled magnetic conditions.

We all know that the most common form of HF propagation is ionospheric F2 refraction of radio waves. We also know that it is the ultraviolet radiation from the sun that ionizes the upper atmosphere. The MUF, or critical frequency, is directly proportional to the level of F2 ionization. As the level of F2 ionization increases, so does the critical frequency, which often exceeds 50 MHz in the three years around the solar maximum. It has been proven that the 10.7-cm solar flux is directly proportional to the sunspot number, and thus to the amount of ultraviolet radiation produced by the sun.

It has also long been thought that the degree of planetary F2 ionization is proportional to the amount of ultraviolet radiation reaching the earth. But research is now showing that when we analyze the degree of planetary F2 ionization over a long period of time, we find the same level of solar activity generates significantly different amounts of global ionization. This depends on the position of the earth during its yearly revolution around the sun. The ionization density, and thus the critical frequency, exhibits a pronounced maximum around the equinoxes.

Conversely there is a strong minimum around the solstices. Ten years of historical data from 1953 to 1963 was analyzed by Chaman Lal. This analysis covered Solar Cycle 19 that began in 1953 and peaked in the winter of 1957. Chaman Lal's work clearly shows that, "A remarkable feature of the planetary ionization... is the appearance of semiannual maxima that occur regularly and persistently during the months of April and October, and a minimum which appears in July every year." His work shows that, given equal solar flux, the level of F2 ionization during the equinoxes is about 50 per cent greater than in July.

This phenomenon is independent of the 11-year solar cycle. The yearly average of the critical frequency follows the solar cycle very closely. However, we see equinoctial/solstitial maximum/minimum ratio every year regardless of point in the cycle.

### Seasonal Variation in Geomagnetic Activity

As with F2 ionization, a great deal of research has been done on the statistical nature of geomagnetic activity. It has been recognized for over 50 years that this activity exhibits a marked semiannual variation. A study of the Ap magnetic index for 1932 through 1989 clearly shows this trend. Even before good statistical records were kept, it was obvious that auroras were more common during the equinoctial periods. Geomagnetic activity usually reaches minimum during the solstitial month of June and December, and a maximum around March and September.

It has also been noted that major geomagnetic storms occur most often in the spring and fall. There were 42 major magnetic storms from 1940 to 1990. None occurred during June or December. Forty per cent occurred during March and September.

### Why the Seasonal Variability?

This research explains what a lot of DXers already know by experience and intuition. We usually work more DX in April–May and October–November than in January–February and July–August. We now have a scientific explanation for

Propagation—continued on page 6

# Birds Hill Road Race Report

It was a dark and dreary night—whoops—morning, when a team of amateurs from the Winnipeg Amateur Radio Club provided radio communications for the Birds Hill 20-kilometre road race last August 30.

The day before, Winnipeg had received over an inch of rain. It was still raining and very windy when we travelled out to Birds Hill Park on early Sunday morning. The rain slowly changed to showers as the morning wore on. The temperature was in the low teens Celsius.

About 150–200 runners participated in the 20-kilometre race, with about 50–100 in the 5-kilometre race. The 20-kilometre race began at 8 a.m. The winning runner, Roger Schwegel, took just over an hour to do the course—a good time considering the weather. The last runner came in before 10 a.m. The 5-kilometre race started about 8:10 a.m. We were concerned only with the 20-kilometre race.

We used VE4INT repeater which operated on 146.82 MHz (–). It performed

very well, with no major “dead spots”. Our responsibilities were to report any injured runners to the people at the finish line, so that Kay, VE4YF, could inform the medical people located there. We also reported to Kay any logistical problems such as missing supplies. Our third duty was to report the numbers of the three leading males and three leading females to VE4YF as they passed the three water stations. We encountered no problems fulfilling our duties throughout the event.

All five amateurs met in the East Beach parking lot for a short briefing and assignment to location. Mike, VE4MJM, was at the starting line. He also acted as marshal to direct the runners at the turn off to the finish line. He also advised all cars that there was a race on, warning them to please watch out for runners. Derrick, VE4VV, handled the first water station, then moved on to the third one. Dave, VE4KU, operated from the second water station. Kay, VE4YF, did a very professional job at the finish line. Your

humble scribe was a rover. I drove along the course, watching for any problems.

The only problem we experienced was from many cars speeding up and down the roads. Usually Birds Hill Park is closed on race day until 10 a.m. Unfortunately there was a Bryan Adams rock concert had been held at Birds Hill Park on the previous evening. Quite a few fans had stayed in the park for the whole night, and could not wait to get out on Sunday. Luckily none of the runners was hit by a car.

After the race, all the amateurs stayed for awards to the winners and the random draws for prizes. Each of the amateurs, with the notable exception of Derrick, VE4VV, won something. This kept the record intact, of always winning something at the Birds Hill Race.

Thanks to the following amateurs for outstanding performance on a miserable day: Kay, VE4YF; Derrick, VE4VV; Mike, VE4MJM; Dave, VE4KU; and myself! —*Dick Maguire, VE4HK* ■

## Strays/Méli-Mélo



### NEW PRODUCTS FROM M.A.S ENTERPRISES

M.A.S. Enterprises, 104 King Street South, St. Jacobs, ON N0B 2N0 announces the following:

1. A new six-metre transverter,
2. a 23-cm FM ATV transmitter, available as kit or assembled in two versions: 300-milliwatts output, and 12–14 watts output, and

3. a two-metre intermod filter that cured the intermodulation and front end overload problems of the two metre transceiver at this year's Canadian National Exhibition. As a result, amateurs at the “Ex” were able to continue to demonstrate digital communication to the general public.

Here are the details on the six-metre transverter:

Transmitter:

Input frequency	28–30 MHz
Output frequency	50–52 MHz
Input power	0.01–10 W
(6 W on FM)	
Maximum output power @	
12 V (IM3 ≤ 35 dB)	10 W
Maximum output power	
FM/SSB	6 W
Output stable at SWR	<3:1
Spurious harmonics	<56 dB
Operation	PTT

Receiver:

Input frequency	50–52 MHz
-----------------	-----------

Output frequency	28–30 MHz
General:	
Supply voltage	11.5–14 V
Current Rx/Tx	0.2 A/1.8 A
Connectors	BNC

M.A.S. Enterprises, owned by Manfred Zielinsky, VE3ZIE, imports the SSB-Electronic Line from Germany, including the famous Fox-Hunt Transmitter for 144.05 MHz FM, 0.5–1 watt output with time sequencer for code identification.

### LUXEMBOURG DX CONTEST GROUP FORMED

Girding up for the CQ World Wide WPX contest in March 1993, a formidable group of a dozen DXers from the Grand Duchy of Luxembourg, including two German amateurs, has been organized.

Special prefix for the occasion will be LX4A. This is the only time the number “4” has been used for a Luxembourg station.

Leaders of this contest team, and their responsibilities, are as follows: LX1NO—operator and computer software,

LX1SP—antenna building,
LX2KW—chief cook and operator
LX1NW—computer software and operator,
LX1AT—aufbau and computer,
DL6RAI—software and operator,

LX1KC, LX1EA, LX1RQ, and DA1DW—operators, LX1RQ/XYL—secretary, and LX1NO—QSL manager.

### WORLD WAR 2 FIGHTER PLANE RESCUED FROM GREENLAND ICE

Amateur Radio has played a vital part in an extraordinary sequel to a wartime drama.

During World War 2, two B-17s and six P-38 fighters were abandoned on the Greenland ice cap in bad weather while heading for Britain.

Several years ago, the airplanes were located by radar, deep under the ice, and a rescue mission was launched two years ago to try to bring them to the surface. An Amateur Radio operator headed this extraordinary quest. Daily contact was maintained with Ernest Bracy, W1BFA, who runs the Air Traffic Controllers Net, and many others.

During the third summer of work tunneling 80 metres down through the ice, a P-38 plane was brought up piece by piece, carried by ship to Europe and then back to the US, where it is may eventually be restored to flying condition. One of the B-17 bombers was reached the previous summer, but it had been crushed beyond redemption by the pressure of the ice.

We hope to publish the full story in an upcoming issue of *QST Canada*. ■

# European World Wide Awards

The European World Wide Awards (EWWA) are sponsored by the Council of Europe Radio Amateurs Club (CERAC), whose station, TP2CE, is located in Strasbourg, France.

The Council of Europe is the oldest European international political organization. Founded in 1949, its aims are:

- protecting and strengthening pluralist democracy and human rights,
- seeking solutions to the problems facing European society, and
- promoting awareness of a European cultural identity

The EWW HF awards are of particular interest to Canadian amateurs. Rules are as follows:

A—Mixed Mode (CW/phone /RTTY): 200 confirmed contacts with 200 different countries from the official EWWA countries list, from January 1, 1980, onward.

B—CW: as above.

C—phone: as above.

D—RTTY: as above.

E—Five-Band EWWA. Work and confirm 100 countries from the EWWA list on each of the 80-, 40-, 20-, 15- and 10-metre. Award is available for mixed, CW, phone, or RTTY modes.



F—Nine-Band EWWA: As for the five-band awards but includes 160, 30, 17 and 13 metres.

Both QSL cards and log information must be submitted when applying for

these awards. For more information, contact Terrance Lowd, VE2PJ, who is checkpoint for North American applications. His address is 910 Argyle, Sherbrooke, PQ J1J 3J4.



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PS-55 ..... 269

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# Manitoba Amateur Radio Museum Opening

The Manitoba Amateur Radio Museum (MARM) was opened with fine fanfare last summer. On July 23, 1992, Manitoba Minister of Agriculture Glen Findlay cut the ribbon in the presence of numerous officials, including Larry Flynn, representing the New Horizons Program of the Government of Canada, and regional and national officers of CRRL and CARF.

The museum is located on the grounds of the Manitoba Agricultural Museum at Austin, Manitoba, between Portage la Prairie and Brandon.

MARM, Inc. was founded in 1984 by Dave Snyder, VE4XN of Brandon, Manitoba. Dave, who currently serves as CRRL Midwest Director, recognized the need to preserve the heritage of Amateur Radio and to tell the public about it.

Many dedicated volunteers now give their time, staffing and maintaining the museum. The museum is open daily at 0900-1700, starting on the long weekend in May and running until October 1.

Amateur Radio station VE4MTR has operated from the grounds since 1980. It now operates from the museum.

MARM, Inc. is interested in augmenting its collection of Amateur Radio related material and will be happy to receive gifts of vintage equipment, books, documents and historical memorabilia. Tax deductible cash donations are gratefully received from anyone wishing to support



MARM float pulled by Arthur, VE4ADN, on his tractor. Volunteers, from left to right: Dave Snyder, VE4XN; Bonnie, VE4BCN; Dick, VE4QK; Jean, VE4BEL; Paul VE4AEY; Ron, VE4YQ; Margaret—XYL of VE4IW; Ruth, VE4XYL; Terry, VE4UX; Tom, VE4SE, and grandson, KA0LI; and Bob, VE4RO.

the museum and further its aims.

For additional information, contact the Manitoba Agricultural Museum office at (204) 637-2354, or Dave Snyder, VE4XN, MARM's secretary-treasurer and curator at (204) 728-2463.



Opening day at the Manitoba Amateur Radio Museum (MARM), July 23, 1992. From left to right: CRRL Midwest Director Dave Snyder, VE4XN, founder of MARM; CRRL Past President Bruce Balla, VE2QO; Larry Flynn of New Horizons, Government of Canada; MARM President Dunc Emerson, VE4OD; Manitoba Minister of Agriculture Glen Findlay; CARF President "Hoppy" Hopwood, VE7RD; CARF Midwest Director Bob Shehyn, VE5FY; and Bob Anderson, President of the Manitoba Agricultural Museum.

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## The CRRL Field Organization Forum

### SECTION MANAGER ELECTION NOTICE

To all CRRL members in the Alberta 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 Alberta Section. It is advisable to have more than five signatures. Photocopied signatures are not acceptable. Signatures must be on the petition. Petition forms FSD-129-C are available from CRRL HQ in Arva, Ontario, but are not required. The form below is acceptable:

..... (place and date)

CRRL Field Services Manager  
Box 56

Arva, ON N0M 1C0

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

A Section Manager must be a resident of his or her Section, a licensed radio amateur holding a Canadian Advanced 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 CRRL Headquarters in Arva, Ontario until 1600 EST 1993 March 11. If only one valid petition is received, the person nominated will be declared elected. If more than valid petition one is received, a balloted election will take place. Ballots will be mailed from CRRL Headquarters by 1993 April 01. Returns will be counted after 1993 May 20. A Section Manager elected as a result of these procedures will serve a two-year term of office that will begin on 1993 July 01.

You are urged to take the initiative and file a nominating petition immediately.  
—Ken Oelke, VE6AFO, CRRL Field Services Manager

### REPORTS FOR OCTOBER 1992

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

**British Columbia:** SM: Ernie Savage, VE7FB. BC Public Service Net (BCPS, 3729 kHz, 0130 UTC daily): Net Manager Jim, VE7JN reports check-ins: high—206, low—128, and total—5192. The BC Emergency Net (BCEN, 3652 kHz, 1900 UTC daily): Net Manager Ray, VE7BCL, reports QNI 1289 and QTC 464. The *BCEN Newsletter* has a new editor: Ferdie, VE7EJU, General Delivery, Heffly Creek, BC V0E 1Z0. He will be going to press soon. November starts a new year for BCEN

18 *QST Canada*

**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.

and the SM's office is mailing Section Net Certificates to members who checked in 50 or more times to BCEN. We in the SM's office wish to say thanks to NM VE7CBL and A/NM VE7BNI for their excellent monthly record keeping and the fine annual report. Also, thanks to all BCEN members for their support—a job well done by all. John, VE7CTJ, our STM is in hospital, and Pete, VE7JT, is back in hospital. Also Ernie, VE7BBH, is in hospital after being involved in a head-on crash in which an RCMP officer was killed. 73.

**Manitoba:** SM: Bill Crooks, VE4JR; A/SM: VE4IX; STM: VE4STU; SEC: VE4TM; NM's: VE4FP, VE4LB, VE4TE, VE4TY. Not much to report this month. A report from Blake, VE4AFF, on the flea-market held by the Winnipeg ARC on October 18. He said there were 289 attending. The tables were all filled with a great assortment of goodies. Blake would like to thank those who volunteered to help: VE4s ACX, AKI, BC, DAR, JBN, KZ and son, LA, NQ, PLG, UA and YU. Yori, VE3ACX, had a table where he set up equipment to test VHF and UHF rigs. There were also tables manned by representatives from the Manitoba Amateur Radio Museum at Austin, as well as two vendors from Winnipeg: Prairie Communications and Comtelco Electronics. Thanks to all who attended. The Muddy Waters Computer Society held their flea-market on the same day, and any monies collected at the door were donated to Winnipeg Harvest whose people do very good work distributing food to those in need. Just received a note from Bruce, VE4BWA, that the Interlake ARC helped train and pass seven more amateurs to get their Basic. They are Colleen, VE4COL, Don, VE4DNP, Rick, VE4ELF, Judi, VE4JDI, Nick, VE4NIK, Anita, VE4QTF, and Wendy, WND. Congratulations to all. Interlake ARC now has 38 members of which 11 are husband-and-wife teams. 73.

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

**Ontario:** SM: Larry Thivierge, VE3GT @ VE3OSQ; A/SM and BM: VE3AV @ VE3JF; A/SEC: VE3GT @ VE3OSQ; STM: VE3CYR @ VE3KRG; TC: VE3EGO. Good to see a large turnout for the Ottawa ARC flea-market, including VE3QJN who has been appointed Emergency Coordinator for the City of Cornwall and the counties of Stormont, Dundas and Glengarry. Welcome aboard the ARES, Mel. ECs reporting this month are VE3AFP VE3FS VE3LVO VE3LPM VE3QJN VE3OVV. Thanks, guys! VE3GKG is a new BBS located in Kenora about 30 miles from the Manitoba border. Traffic comes in from VE3JUV in Fort Frances and future plans include establishing a satellite gateway and HF forwarding. Good to meet VE3FS, VE3IFP and VE3ZDC who were attending a course in Arnprior. Regrettably, I report that VE3RU, VE3NFB and VE3OAI have become Silent Keys. North Shore ARC members VE3s AJY, CRK, HMG, TIG and RWN provided communications for the World Class Orienteering competition held at the Ganaraska Forest. VE3XJ is back on the air, on all modes, complete with antenna farm from Rockland. Honour Roll DXer VE3BX recently gave Border City ARC a well received talk on his favourite subject, including tips and other information. National Traffic System

(NTS) nets operating in the Section are as follows:

Net	MHz	UTC	Manager
OQN (D)*	3.667	2100/daily	VE3ORN
OLN	147.66/06	2330/daily	VE3POJ
OQN (E)*	3.667	0000/daily	VE3CYR
OPN*	3.742	0000/daily	VE3AJN
KTN	147.96/36	0200/Tu/Th/Sat	VE3AJN
OQN (L)*	3.667	0300/daily	VE3GSQ

\*Denotes Section Nets; others are local nets. The newly elected 1992-93 executive for Sun ParLOUR ARC in Leamington include VE3s GNH, EWX, IIS, SUO and GKA. VE3DY suggests a CW counterpart for the Snowbird Net, perhaps on 20 metres, to help relieve some of the congestion.

**Quebec:** SM: VE2ALE; STM: VE2ED; OBS: VE2GOP; QSL MGR: VE2IJ. VE2ED is still looking for a Section Emergency Coordinator for the Quebec Section. How about one of you Advanced Amateurs accepting this position? October was a busy month for amateurs, SWLs and scanner buffs with the West Island Fall Auction. On the same week, the Annual Montreal Hobby Show at the Bonaventure Hotel was attended by many. The following weekend the Côte St-Luc ARC Hamfest was held, and at the end of the month, the Montreal ARC 60th Anniversary Party was attended by some 220 amateurs and guests. Amateurs in attendance included VE2s AUU, IJ, XO, HV, and MPD, and VE3s RM, AX and AGS. Murray, VE2AUU was emcee, and since the chit-chat from the podium took a fairly long time, the dancing portion was suspended. VE2IJ and VE3RM did an excellent presentation of years gone by from the start of the club, and Herm, VE2HV, was emcee for drawing of the many door prizes. At the Montreal Hobby Show, VE2DRL, had set up HF, VHF and UHF transceivers with straight key and Bencher paddle to draw people in to the Amateur Radio display area. On Sunday, VE2ALE, brought along a short tape recording of Warren Gariot aboard Space Shuttle Columbia, recorded back in December, 1984. Great interest was shown by the younger generation. Again I mention that this column is not my personal sounding board. Thanks to those who have sent us items. How about the rest of you? Please send something to share with your fellow amateurs. Don't forget the two daily sessions of the PL Net, 3.787 MHz at 0800 and 1600 local time. There is a need for VE2s to check into the Snowbird Net at 21.212 MHz at 0900 local time, to pass on messages and conduct phone patches for those who have gone south for the winter. For CW buffs, there is the QSN Net by VE2ED.

**Saskatchewan:** SM: Joan Lloyd, VE5JML @ VE5AGA. Congratulations to new amateur Greg, VE5TTT. Plans for the 1993 Saskatchewan Hamfest, to be hosted by Regina Amateur Radio Association, are well under way. This hamfest will be held in Regina on July 30-August 1. More details as they are released. Swift Current area amateurs will hold a fall flea-market on November 28, with time and location to be announced. Thanks to the following Regina amateurs who provided communications for the annual Boy Scout/Girl Guide Food Bank Drive on October 24: VE5s AAA, ACX, BV, CS, DCP, EP, FAR, GW, IC, IG, KL, MH, RJR, UK, UU and WJ. The following Moose Jaw amateurs provided communications for the annual Moose Jaw Hal-lowe'en Patrol on October 31: VE5s ABC, AFU, AQ, AV, BBB, FY, IL, JJP, NG, MML, MRY, RQ, RVP, TTT and XC. Congratulations to Bruce, VE5ND, on another fine issue of *QSO Magazine*. 73. ■

## Power Supply Connectors—a Postscript

My suggestion to establish a standard for power supply connectors has led to a recent exchange of packet messages with Ferg Kyle, VE3LVO. Ferg's idea is to have, in every emergency kit, a few Marr connectors—not the “wire nut” variety, but the type having a brass insert with a set-screw and a plastic cover that screws on over the insert. In an emergency these can be used quickly to join a radio and power supply where the fitted connectors are incompatible. A Marr 1SH connector will join up to two #12 wires and offers a current carrying capacity of 20 amperes. No soldering is required and they are quite inexpensive. I can't believe that any amateur, in an emergency, would be one bit concerned about having his or her rig's power supply leads cut in order to connect the rig to an available power source. A great suggestion, Ferg!

### EDMONTON ARES

Congratulations to the Edmonton ARES group which celebrated its first birthday in October. Here are some of the things this live-wire group has accomplished in its first year, according to Gord Kosmenko, VE6SV.

- developed a working relationship and agreement with Red Cross,
- constructed a first-class station at Red Cross House; the station is active on HF and VHF including packet,
- created an on-the-air resource net for 75 and 2 metres,
- participated in major training exercises with Red Cross, and
- developed an on the air BBS, with a focus on NTS and emergency traffic.

Nice going, people!

### BC PROVINCIAL EMERGENCY PROGRAM (PEP)

In the Victoria Short Wave Club's newsletter, *Zero Beat*, Jim Durance, VE7DJR, has provided an interesting history and description of Amateur Radio's part in this important program. Over the past several years I have heard and read about the BC's PEP program. Jim's report has filled several gaps in my knowledge. Here is his report:

“About six years ago, a group of BC radio amateurs volunteered to provide an Amateur Radio Service (ARS) to the British Columbia Provincial Emergency Program, to assist in the development of emergency communications. After some discussion the offer was accepted and experienced Amateur Radio operators were selected to serve as municipal emergency coordinators in municipalities that

wished to use the ARS. Some municipalities have not yet recognized a need for this service, but there is now a province-wide network of Amateur Radio operators in nearly every city and town in British

Columbia. Headquarters of the Provincial Emergency Program is in Victoria, where the ARS has an operations room equipped to cover recognized emergency frequencies using a wide range of antennas on the

## Field Organization Reports October 1992

### CRRL Section Emergency Coordinator Reports

Reports were received from the following:

Reporting	ARES	Members
VE3GT	136	
VE6AFO	372	
VE7HJS	160	

### CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Divd	Total
VE1BTV	0	13	14	0	27
VE1YS	0	5	7	0	12
VE1ALU	0	3	3	0	6
VE1VAR	0	5	1	0	6
VE1BO	0	2	3	1	6
VE2ALE	0	104	246	0	350
VE2GOP	0	33	80	0	113
VE2ED	1	15	8	6	30
VE3ORN	14	55	59	11	139
VE3GT	0	55	77	0	132
VE3CYR	0	67	26	1	94
VE3GNW	0	44	47	0	91
VE3HZQ	1	29	60	0	90
VE3AJN	0	60	28	0	88
VE3GSQ	6	45	16	0	67
VE3BDM	0	15	33	1	49
VE3WV	0	40	5	0	45
VE3PXR	4	19	12	8	43
VE3DVE	0	10	19	0	29
VE3NVJ	0	10	13	3	26
VE3FS	0	12	9	3	24
VE3SB	0	12	10	2	24
VE3KXB	0	9	8	3	20
VE3BAJ	0	6	8	2	16
VE3LPM	0	3	8	3	14
VE3DBG	0	2	9	2	13
VE3GKB	2	2	5	1	10
VE3MNI	0	0	7	0	7
VE3KCZ	1	2	3	0	6
VE3DBG (Sept)	0	4	10	1	15
VE4JR	0	36	12	12	60
VE5KZ	7	134	135	3	279
VE5JML	1	7	0	0	8
VE6CE	15	27	21	3	66
VE6XG	7	29	9	11	56
VE6CPP	1	20	10	0	31
VE6AKY	2	2	2	2	8
VE7BNI	26	203	260	45	534
VE7BCL	1	129	39	16	185
VE7ANG	0	62	54	3	119
VE7EJU	0	37	79	0	116
VE7CJ	5	39	39	6	89
VE7OM	3	26	28	4	61
VE7XA	0	15	28	0	43
VE7FB	0	19	11	5	35
VE7OM	0	14	15	2	31
VE7FME	0	25	6	0	31
VE7FRZ	2	18	7	1	28
VE7BZI	7	10	7	3	27
VE7GKA	0	20	6	0	26
VE7BCF	0	18	3	0	21
VE7EGM	1	14	5	1	21
VE7DKS	0	16	3	0	19
VE7VO	1	9	5	2	17
VE7BUU	0	15	1	0	16
VE7SR	0	10	5	0	15
VE7WI	0	7	5	1	13
VE7ALV	1	8	1	0	10

Call	Orig	Rcvd	Sent	Divd	Total
VE7BOP	0	6	1	0	7
VE7CZW	0	3	1	0	4

### National Traffic System

Net (Mgr)	Sess	QNI	QTC
APN (VE1YS)	24	121	56
QSN (VE2ED)	15	69	9
KTN (VE3AJN)	13	120	16
OLN (VE3PQJ)	26	799	28
OPN (VE3AJN)	30	655	148
OQN-D (VE3ORN)	29	92	20
OQN-E (VE3CYR)	30	131	80
OQN-L (VE3GSQ)	25	72	20
MEPN (VE4LB)	31	1239	14
MMWX (VE4TE)	31	379	17
SEPN (VE5CJ)	31	1668	21
APSN (VE6AKY)	31	1212	8
ATN (VE6CPP)	31	153	65
BCEN (VE7BCL)	31	1289	446

### 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.

### Public Service Honour Roll

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

PSHR: VE2ED (111), VE3ORN (143), VE3BDM (129), VE3AJN (128), VE3GT (128), VE3CYR (127), VE3HZQ (119), VE3GNW (102), VE3GSQ (94), VE3FS (90), VE3LPM (85), VE4LB (89)

### Service and Specialized Nets

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

Net (Mgr)	Sess	QNI	QTC
GBN (VE3WV)	30	83	14
GBSSN (VE3WV)	30	95	38
Manitoba Repeater	9	482	0
Aurora 1 (VE5ND)	30	1320	4
Aurora 2 (VE4FP)	31	1282	0
Prairie WX (VE5EX)	31	705	0
Sask ARES (VE5FY)	4	180	0
Sask 2-Metre (VE5HG)	29	803	2
MJARC 2m (VE5JJP)	31	475	0
ARG 2-Metre (VE5EE)	28	881	0
Alberta ARES (VE6AKY)	8	244	5
BCEN (VE7BCL)	31	1122	506

roof of the building. Each municipality is responsible for funding its own emergency communications facilities under the authority of its local mayor and council, and the ARS maintains a regular schedule of contacts with each municipality.

"The Amateur Radio Service is not considered a 'backup' to any existing service, but is there if required in the wake of a major disaster. The way it is planned to operate is to have an Operational Command and Control Network of experienced operators, using their own equipment, ready to pass on information, notify other parties, and render assistance when needed. It may be necessary for the ARS to handle heavy volumes of traffic. A lot of attention has been applied to develop standardized formal procedures to reduce the possibility of confusion, and to train the volunteers in the municipalities to use these procedures through periodic simulated exercises."

### LENNOX AND ADDINGTON COUNTY PLAN

This eastern Ontario county has been hard at work creating an Emergency Plan. Like other plans, it sets forth the functions and responsibilities of the numerous officials and emergency response agencies that may be involved. The section of the plan entitled "Emergency Communications" illustrates how one county views ARS services:

"Experience has shown that the telephone system may not operate in a major disaster. Even if telephone facilities are not damaged as a result of the disaster, the system, including cellular telephones facilities, becomes overloaded very quickly. Then radio communications must be used. These are available from many sources—police, fire, ambulance and Amateur Radio.

"The Kingston Area and Hastings County ARES groups are part of a continent-wide organization of federally licensed radio amateurs committed to providing communications in emergencies. Both are available to assist Lennox and Addington on request. ARES members are equipped with base, mobile and handheld equipment, and are trained through periodic exercises and practice sessions to handle emergency communications efficiently. The Radio Act specifies that no charge whatsoever may be made for this assistance.

"ARES emergency communications plans set forth a callup procedure and specify net operating procedures. Messages can be handled in the immediate area, throughout the province or continent-wide. The federal government has established an Amateur Radio station VE3GOC in Ottawa for country-wide communications in an emergency. ARES members will be in contact with this station in the event of a widespread disaster.

"In an emergency, ARES will activate the stations it has established at the Kingston, Kingston Township and Belleville Emergency Operations Centres. Portable stations will be set up on request at other appropriate locations such as the disaster site, reception centres, hospitals, morgues, etc.

"Assistance from ARES can be obtained by calling any of the following..." There follows a list of the ECs and AECs for the two ARES groups, with their telephone numbers."

### SO YOU WANT TO HELP...

Cary Mangrum, W6WWW, provides some thought-provoking comments in August 1992 *Worldradio*:

"There's a message on the repeater. A devastating explosion occurred in Neighbour City and Amateur Radio operators are needed. So you hop in the family chariot and head out. You have a mobile rig, two handhelds, a portable repeater and a portable packet system—tems you've carefully put together 'just in case'. You feel good about it as you speed to the scene, anxious to see how bad it really is in Neighbour City.

"Right action? *No*. Wrong in most instances. Your first act should be to assess the situation, *not* jump in the car. Are you *authorized* to respond? What skills are needed? Do you really possess those skills? Was the callup for registered emergency responder members of a trained group only? Do you know? Did you check?

"Will your departure place your family in a vulnerable condition? Was there prior preparation to decrease or remove that vulnerability? Are they trained in how to handle matters in your absence—or for injury or death if that happens on a response?

"How are *you* prepared? Do you know the significance of, and difference between "break" and "over"? Have you used the tactical calls and understand why they are used? How do [DOC] identifications required for amateurs apply to emergency communications and tactical calls?

Are you an experienced net control operator—in a time-limited and stress-simulated exercise or the real thing? Do you know why VHF net control differs quite significantly from HF net control?

"How do you react to stress? Does your mind go wild with concern, worry, fear or other energy-depleting reactions? How do you feel inside: calm, mildly shaky, a case of jitters, or climbing the wall? How might you respond to severe pressure at an emergency operations centre or a field post miles from your family, worried about whether they are safe, with no way of you finding out? How are you responding to these questions? Do they irritate you? Why? Because you don't want to think about this, just act? Isn't

that a warning?

"Why are *you* responding? Because you're trained and know your abilities and limits? Or because of an urge to help, even though untrained? Do you think training is unnecessary? After all, you talk on the radio all the time and know how to operate, so do you really need training? Is the urge to respond more to see the damaged area than it is to help?

"Is *your* need, whatever its basis, more important than the need of the community. Be candid! You'll be the benefactor, as well as your community. If you are not properly trained, most times it's best to stay out of the way. More than one ARES unit has had to refuse help after experiencing once too often the untrained, unprepared response from fellow amateurs who turn out for personal reasons.

"In general, the only time you, if an untrained responder, are useful is when you call in and let the coordinator know the degree of your inexperience and lack of training—but your willingness to help if needed, and then await the call for the time and place where you can be best utilized."

That's it for this month. Keep those reports coming.—*Bob Boyd, VE3SV*

*This column appears in both The Canadian Amateur and in QST Canada. We hope that it serves as an ongoing source of news and information about ARES for members of both CRRL and CARF.*

*A reminder that ARES is part of the CRRL Field Organization, although you do not have to be a CRRL member to take part. For more information about how to set up an ARES group, contact your CRRL Section Manager (address appears on page 3 of this QST Canada) or your CRRL Section Emergency Coordinator.* —*Editor* ■

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Happy  
New Year!



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and waiting to  
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- **20 full-function memory channels** store frequency, repeater offset, sub-tone frequencies, and repeater reverse information. **Repeater offset on 2m is automatically selected.** There are **four channels** for "odd split" operation.
- **Tone Alert System with Elapsed Time indicator.**
- **Auto-power off function, and time-out timer.**



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As supplied, one RC-20 will control one transceiver. **Most often-used front panel functions** are controllable from the RC-20. The RC-20 and IF-20 combine to allow control of up to four radios.

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- **Supplied accessories.** Mounting bracket, DC cable, fuses, MC-44DM multi-function DTMF mic.

### Optional accessories

- **DRU-1** Digital Recording Unit
- **DTU-2** DTSS unit • **IF-20** Interface unit, used with the RC-20, allows more than two transceivers to be remotely controlled
- **MA-700** 2m/70cm dual band antenna with duplexer (mount not supplied)
- **MB-201** Extra mounting bracket
- **MC-44** Multi-function hand microphone
- **MC-55** (8-pin) Mobile mic. with time-out timer
- **MC-60A, MC-80, MC-85** Base station mics.
- **PG-2N** Extra DC cable
- **PG-3B** DC line noise filter
- **PG-4G** Extra control cable
- **PG-4H** Interface connecting cable
- **PG-4J** Extension cable kit
- **PS-50/PS-430** DC power supplies
- **RC-10** Handset remote controller
- **RC-20** Remote control head
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