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# QST CANADA

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## ABOUT THE COVER



Yes, Virginia, there really is a *CRRL Bookshelf*. Whatever your needs in CRRL, ARRL or RSGB books and materials, CRRL can supply your needs from its headquarters in London, Ontario. ■

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

## What Happened in March

We should have called this editorial "Where are my magazines?". By now, every reader knows that their March issues of *QST* and *QST Canada* were not in their mail boxes on time. The story begins in the fall of 1989.

As is so often the case, it was government action that got things started. The proposed Goods and Services Tax (GST) will soon impose a sales tax on magazines. Under the government's proposals, CRRL must pay this tax, both on *QST Canada* and *QST*.

Traditionally CRRL Headquarters prepares the address labels for *QST* and ships them to the printer in Kentucky six weeks before *QST* is delivered. The printer affixes the labels, gives the magazines to the US Postal Service and bills CRRL for the postage. The problem with the GST, as we saw it, was that *QST* would cross the border in mail sacks with other US magazines, some of which had paid the tax, and some of which had not. We were concerned about delays in Customs, the possibility that addresses would be asked to pay the tax before the magazine would be delivered, and so on. We wanted to avoid these problems for CRRL members.

There was a second problem, also government related. Early in 1989, the federal government announced a reduction in the subsidy it pays Canada Post for the delivery of magazines. While neither *QST* or *QST Canada* (despite all our best efforts over several years) qualify for or receive these subsidies, the message was clear. In the long term, mailing costs would rise. There were also indications that the US Postal Service had plans for a rate increase, which, of course, would affect *QST*.

At CRRL, we do not think that our primary function is the production and distribution of magazines. We believe that we exist for the maintenance and development of Amateur Radio in Canada. We achieve this goal by liaison with DOC, by supporting and participating in IARU, and by encouraging and assisting potential amateurs to obtain their licence. We were formed 70 years ago with these goals in mind, and these goals remain valid today. We are pleased to bring *QST* to our members and we are proud of the Canadian volunteers who supplement *QST* with *QST Canada*, but MacLean-Hunter we are not, nor do we aspire to be. Magazines are important to us only to the extent that they help achieve our primary goals.

We viewed the government proposals in the light of the extra costs they would impose on CRRL members—and how

those costs would reduce the funds available for CRRL's primary mission. In October, we were approached by a mail contractor who claimed expertise and experience in collecting US publications, transportation, Customs clearance, sorting to Canada Post standards and mailing. Their service seemed to offer an excellent solution to our problems. They would mail *QST* in Canada for less than the US Postal Service had been charging, and they would mail *QST Canada* in a cost-effective manner, replacing our London contractor and giving us the control that would flow from having all our distribution "under one roof". In mid-February, the new contractor collected *QST* from Kentucky, and *QST Canada* was shipped from London. The system was up and running, to plan and on schedule.

As it turned out, that was the last time the schedule was kept. Whether we will ever know the full story is uncertain. CRRL became conscious of a problem on March 02 when no staffers had received their March *QST* or *QST Canada*. That day started a series of telephone calls to the contractor which continued throughout the month. By month-end, a story had been pieced together. Back in mid-February, the new contractor found that they were not able to transport US magazines to Canada as quickly as they had hoped. New customers had resulted in increased volume, and increased volume resulted in delays at Customs, as each magazine title had to be cleared separately. Once the magazines were in their plant, they found they did not have the equipment needed to process the large volume. Older equipment broke down and new equipment had to be acquired and installed. Although CRRL was not told, deadlines for delivery had passed and neither *QST* or *QST Canada* had been processed. When the contractor finally got to *QST Canada*, they found it was sized differently than their US magazines. *QST Canada* had to be taken off the line and sent to a subcontractor for additional work. By the third week in March, both magazines were finally delivered to Canada Post. However, we were told by the contractor, the magazines then ran into shipments of other magazines which were now "backed up" at the postal plant. And now it was mid-March.

Mid-March is normally when the April editions of *QST* and *QST Canada* are delivered to the post office. CRRL told the contractor in the most forceful terms

It Seems—continued on page 20

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All letters are 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.

## BOUVET: THE FINAL WORD

*Back in February QST Canada, we printed a letter from NW2I concerning the behavior of Canadian Amateur Radio operators during the recent Bouvet Island DXpedition. Since Patricia had the first word on the subject, we think she should also have the last. Here's her new letter. We know you'll appreciate it.*

Dear Radio Friends in Canada: I received a number of replies to my letter published in *QST Canada*. My letter was not meant to be published; however it happened. Since I cannot possibly respond to all who wrote to me, I want to thank you for your enlightenment. I must say I was a bit

hasty to accuse the Canadian operators for the happenings during the 3Y5X DXpedition. I hope we can all go forward and enjoy the many pleasant QSOs we wish for so much.

The culprits who "destroyed" 14.145 MHz are not true operators. I'm sure many of you have an idea who they were, and will ignore them during DXpeditions and forever more.

Special thanks to AI, VE1AL; Walt, VE3WW; Stan, VE3FKD and others. Your letters were appreciated. It's easy to accuse (sometimes unintentionally), but to say "I'm sorry" shows a good deal of honesty. Most sincerely, 73. —Patricia Murray, NW2I, East Aurora, NY

## DX BEEF

I have a "beef". On March 17, I was listening to a station on 15 metres using a CF2 call. He was subject of a pileup that would do credit to rare DX. When I couldn't find him in my DXCC list, I sat and listened, eventually to hear him identified as a VE2 in Montreal using a CF2 prefix for the anniversary of the Canadian flag. Since he had an accent, I'll bet most stations thought they had a DX treasure.

This is misrepresentation which we should not condone. CF bears no resemblance to VE and raises false expectations. —Leslie Saul, VE7GBT, Thetis Island, BC

## 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.

**Blainville, PQ:** Auction and Fleamarket, May 5, at 40-84th Ave. Sponsored by Laval-Laurentides ARC. Talk-in on VE2REL, 147.315 MHz (+). For more information, contact Ron Montgrain, VE2AHE, Tel (800) 361-6322, ext 21.

**Kitchener, ON:** Central Ontario Amateur Radio Fleamarket, June 2, at Bingham Park, 1380 Victoria Street. Sponsored by Guelph and Kitchener-Waterloo ARCs. Ontario's premier fleamarket. Opens 8 a.m., vendor setup 6 a.m. Admission: \$5. Tables (all inside, no outside vendors): \$8. Talk-in on VE3KSR, 146.97 MHz (-), VE3ZMG, 144.21 MHz (-), and 146.52 simplex.

**Halifax, NS:** Down East Fleamarket, May 25-26, at Exhibition Park, Atlantic Winter Fair Grounds, Halifax. Sponsored by Halifax and Dartmouth ARCs. Friday evening get-together at nearby hotel. Fleamarket opens Saturday, 9 a.m. Vendor setup: 6-9 p.m. Friday, and 6 a.m. Saturday. Tables: \$8 private, \$25 commercial. For more information, contact Bob Swinwood, VE1PQ, Box 768, Bedford, NS B4A 3H5.

**Orillia, ON:** Annual Olde Tyme Radio Operators' Reunion, Thursday, June 21, at Couchiching Park. Look for VE3 licence plates and meet near Champlain's Monument at 2:30 p.m. Cash bar at 4 p.m., dinner 5-7 p.m., Saturn Room, Sundial Inn, five minutes from the park. A few surprises, but no speeches. Dinner tickets \$16. Order by June 1 from Bob "Ding" Dunn, VE3ATK, 318 Short Ave, Woodstock, ON N4S 4B1, Tel (519) 537-7343. Other information from Roy Bennet, VE3VS, Willowdale, ON, Tel (416) 493-5526.

**Sorel-Tracy, PQ:** Quebec Provincial Hamfest, Saturday, May 27, at the Tracy Curling Club. Sponsored by Sorel-Tracy ARC. Opens 9 a.m., vendor setup 7 a.m. Admission \$5. Outdoor tables \$8, indoor tables \$10 (quantities limited, reserve before May 15). For more information, contact Sorel-Tracy ARC, Box 533, Sorel, PQ J3P 5N6.

**Red Deer, AB:** Annual Picnic, June 15-17. Sponsored by Central Alberta Amateur Radio League. Activities for amateurs and the whole family. Registration: \$15 per family unit camping, \$10 per single unit camping, \$10 for optional private stall, \$6 per person not camping. Registration includes all activities and Sunday pancake breakfast. Saturday barbecue extra: \$5 per adult, \$3 per child.

# Reducing Interference in a Multi-Transmitter Setup

How to be a good Field Day neighbour...

By Edward P Swynar, VE3CUI  
48 Evergreen Dr  
Whitby, ON L1N 6N6

**I**t happened again last year, didn't it? Every time you tried to call someone, those \*^%\$#@ guys in the other Field Day tent started wiping you out. Call it cross-mod, intermod, front-end overload or whatever, the fact remains that when you crowd as many as seventeen HF stations together on a Field Day weekend, there is bound to be some interaction between rigs. What can "those other guys" do to alleviate the situation? They can do exactly same things you can do in your Field Day tent—to help yourself and everyone around you.

For starters, take a look at basic things, specifically the tuning and operation of your transceiver. This is particularly critical if you're using a buddy's rig, a rig that you're not 100% familiar with. Make sure you understand the meter functions perfectly, and don't stray from the manufacturer's specs when the rig is in transmit. By running the radio the way it was designed, with respect to the final drive, plate or collector current, etc, you will not only minimize or eliminate adjacent-channel interference (splatter on SSB, clicks or "burps" on CW), but will probably extend the life of the components in the rig itself—very critical if you intend to continue friendships after Field Day!

A case in point: some years ago, our 40-metre CW station was suddenly and very effectively "wiped out" every time the 40-metre phone station fired up. The overload was so bad, we were able to trace the source of the problem because we could recognize the SSB operator's voice. A quick trip over to the SSB tent revealed that the microphone gain control had been zealously cranked fully counter-clockwise, "...to help cut through the QRM." Heaven knows how that phone signal must have sounded to other phone stations on the band. The owner of the transceiver was located post-haste, and after the initial shock of feeling the cabinet of his rig (it was radiating heat like a massive heat sink), the controls were set "on the nose", the interference ended, and the SSB crew finally started making some contacts.

The situation could easily have been reversed. How many times, in the heat of a DX pileup on CW, have you cranked the



Field Day: lots of fun, but also lots of potential for mutual interference.

drive control up to gain a few extra watts? In fact, that extra power could cost you, in terms of the quality of your signal, pushing the finals into a non-linear range and creating key clicks, burps and harmonics. No one needs this aggravation. Remember to tune up properly. Go "by the book".

So the people in the other tents have their transmitting controls set exactly as indicated in the manuals, and you're still getting clobbered. What next? It's time to take a look at the receive section of your transceiver. For starters, switch *off* the automatic gain control (AGC). Any strong unwanted signal "sneaking through" the front-end of your receiver section will only "pump" the AGC, making interference more difficult to control. Next, crank the RF gain control back to minimum sensitivity, and crank the AF gain control to maximum volume. Do not touch the AF gain control again; instead, use the RF gain control to manage the volume of the signals emanating from your speaker.

Doing this gives you the ability to control the levels of the signal passing through the early stages of the receiver section in your rig. Strong signals from

adjacent tents, which otherwise might overload your front end, are reduced to a level your receiver can handle. Of course, added flexibility is afforded by an attenuator. Proper use of an attenuator, as with most things in Amateur Radio, can be determined through experiments. You may not wish to activate the attenuator. Then again, you may decide to run with a constant 10–20 dB of attenuation in the line, cranking up the RF gain control to compensate. See what works best for you.

What else can be done to eliminate Field Day interference? Take a second look at that 100-foot extension cord running from the rigs to the generator. If you've ever had TVI, one of the first things you probably did was ensure that your signal wasn't entering the television set via the ac power cord. Your HF transceiver is no different. That 100-foot extension cord makes a dandy antenna for all that RF at your Field Day site. Solution? Before this year's Field Day, take a few moments to make a quickie line filter. Wrap several turns of the power cord of your transceiver—the closer to the rig, the better—onto a large toroid. The core from the yoke of a colour picture tube, or a dis-

carded television flyback transformer will do nicely and the price is certainly right (see Fig 1). A *word of warning*. Flyback transformers are in the high-voltage cage. Be careful to *discharge nearby capacitors* if you've just tried the television set "one more time" before you began raiding it for parts!

Often, we use a high-pass filter to cure a case of TVI. What kind of filter can minimize interference to another HF rig? A transmission line filter. Don't confuse it with a low- or high-pass filters which have specific upper or lower frequency limits. A transmission line filter is a band-pass filter, tuned so only a narrow band of frequencies will remain unattenuated. It is good for only a single band. Anything higher or lower in frequency will be severely attenuated. Fortunately, it can take the form of a quarter-wave stub—very easy to make.

Simply cut an electrical quarter-wave-length of 52-ohm coax, short the centre conductor to the braid at one end, and install a PL-259 at the other. The formula for the length of the stub (in feet) is:

$$\frac{234}{f} \times \text{velocity factor of the coax}$$

where  $f$  is the desired operating frequency in MHz, and the velocity factor of the coax is 0.80 for foam-core, 0.66 for solid.

The stub is attached—right at the rig—to one side of a T-connector. The coax to the antenna connected to the other side of the connector (see Fig 2). The installation of a properly constructed stub will have very little effect, if any, on the SWR at design frequency. At design frequency, electrically speaking, the stub is simply "not there"! But remember that the stub can be used only on one band. You cannot, for instance, use a stub designed for 7 MHz on the 20-metre band. The stub would look like a dead short on 14 MHz—both on transmit and receive.

Let's look at a practical example to see exactly how the stub can help. What advantage would there be for, say, a transmitter on 40-metre CW operating with a stub in place? Plenty. On transmit, the second harmonic from the 40-metre rig (and any even harmonic, for that matter) that could clobber the 20-metre gang would be drastically reduced, shorted directly to ground via the stub. Likewise, if the 20-metre tent was physically close to the 40-metre tent, the chances of front-end overload when receiving on 40 metres would be minimized by virtue of the stub shorting the unwanted 14-MHz energy to ground. Simple! For something as easy to build as this, it's hard to understand why every Field Day participant hasn't yet taken time to adopt such cheap insurance for a pleasant weekend!

What more can be done to reduce or eliminate interaction between various sta-

tions at the Field Day site? People in the VHF tents will love you if your HF stations employ low-pass filters. You use them at home to prevent VHF TVI; the same principal applies to VHF FM, SSB and CW. You can run with a transmatch or antenna tuner even if you already have a flat transmission line, to take advantage

of an additional tuned circuit on transmit and receive. If you're not particularly fussy about antennas, prior to Field Day, conduct a survey of the skyhooks others plan to use. Then choose your skyhook accordingly. For instance, if you're going to operate 20-metre CW, and the 20-metre SSB tent is planning to use a vertical, your choice of a horizontal antenna would go a long way towards minimizing interaction. If you're both running rotatable beams, compromise a little to avoid beaming directly at each other.

An additional but still untried idea is to use a choke to prevent extraneous RF on the shield of the coax from being coupled back into the receiver. This choke would consist of several turns of the coax cable looped through a large toroid, right at the back of the transceiver. Wanted RF flowing inside the cable would be unaffected, but unwanted RF flowing on the outside of the cable—this happens when long feedlines are involved—would effectively be eliminated by the counter-EMF generated in the "choke".

This technique has proven very effective in preventing front-end-overload TVI, and it will be given the "acid test" in this year's Field Day.

Finally, if worse comes to worst, you can always ask the offending transmitter to reduce its power to a level you can live

with. This should only be done after the suggestions in this article have been tried and found ineffective. No one should be penalized because someone else failed to take precautions.

None of the ideas presented here are particularly new or radical, but they are effective. Being a good Field Day neigh-



Figure 1—An effective way to decouple ac power cords for Field Day. The ferrite core is from the back of an old colour television picture tube. Another cheap source of ferrite cores: flyback transformers from a discarded television sets. But be careful retrieving it (see text)! The power supply shown is for a Heathkit SB-102 transceiver.

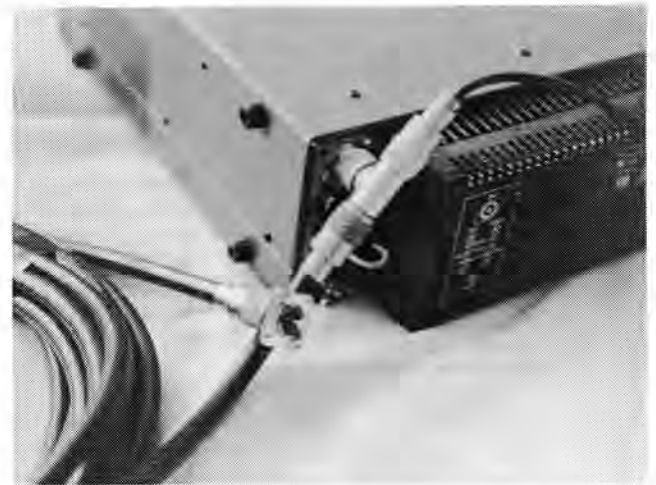


Figure 2—A quarter-wave stub (to the left in this view) at the back of an IC-751A transceiver. At HF, it makes little difference if the stub is laid straight or coiled up. Either RG-58 or RG-8 coax may be used, as long as the impedance is 52 ohms and the velocity factor is taken into account. Note the method used to terminate the stub; a PL-239 screwed into a shorted SO-239. This allows the coax to be used for other functions (e. g. a coax "extension cord") between Field Days. (All photos by the author)

bour is possible when we all make an effort to insure our mutual enjoyment of the air waves. I hope that, as we participate in this wonderful annual exercise, we will realize that by helping ourselves, we are really helping one another—for free. What else comes as cheaply as this? ■

# 2-Metre Extended Double Zepp

An effective fixed antenna for emergency communications.

By John Lester, VE3MB  
Box 55  
Foxboro, ON K0K 2B0

In the Belleville area where I live, 2-metre mobile operation can be difficult, since our repeater is located out of town. Because of this, I have actively been engaged in locating fixed antennas on buildings in and around Belleville, where they might prove useful in an emergency. The extended double-Zepp antenna described in this article has been very popular with members of our Quinte Amateur Radio Club. It has been adopted by our ARES group for emergency work.

Each antenna has two radiating elements. Each element is  $5/8$ -wavelength long. The elements are fed in phase. They are joined by a hairpin section which provides both structural support and a convenient feed point. This antenna is very easy to construct and very easy to tune. It is also quite weather resistant. Performance is excellent, there being few losses and considerable gain over a base-loaded whip.

To duplicate this antenna, you'll need just over 12 feet of plumber's  $1/2$ -inch diameter Type-L hard-drawn copper pipe. Two pieces 48 inches long and one piece 50-inches long are required, as are four end caps, two 90-degree elbows, and four "tees".

Refer to Figure 1. The 48-inch pieces are used as is. The 50-inch piece is cut into sections as follows: two pieces 14-inches long, four pieces 4-inches long, and two pieces 3-inches long. For those who have not worked with copper pipe before, follow the next set of directions carefully. Polish the outside of each pipe and the inside of each fitting with fine emery cloth. Lightly coat the ends of the pipes and the insides of the fittings with soldering paste. All pipes and fittings should be assembled on a flat surface. The plastic spacer should be placed midway up the 14-inch pieces while soldering. This will prevent the spacer from becoming hot and melting.

When everything has been cut and test-fitted, solder each joint using plain 50/50 solder. The copper should be heated until some solder will melt on it. The solder should then be applied to the edge of the joint, where it will flow into the joint until the joint is filled. Enough heat must be applied to cause the solder to flow, but excessive heat must be avoided. With the right temperature, the solder will flow easily, but not cause the plastic spacer to

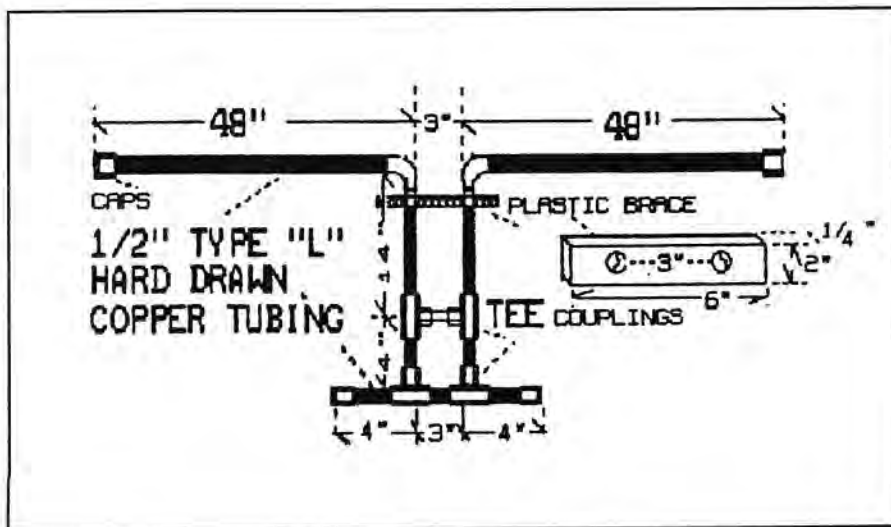


Figure 1—The extended double Zepp for 2 metres. Drawing is not to scale.

melt or previously soldered joints to come undone.

Once a joint is filled, discontinue applying solder. Avoid excess solder on the outsides of joints. After all joints have been soldered and the whole assembly has cooled, tap the plastic spacer along the hairpin so it rests snugly against the 90-degree elbows. File off any excess solder near the elbows so the spacer will fit snugly. If the spacer is a bit loose, tape or cement it into place.

RF is fed to this antenna through 50-ohm coax, RG-8 or RG-58. This is a balanced antenna and the feedpoint impedance is considerably above 50 ohms. You will need to make a coax balun. The coax in the balun must be an electrical half-wave long. Length of this coax will vary depending on whether you use polyethylene-core coax (velocity factor = 0.66) or foam-core (velocity factor = 0.80). Length of coax needed for a balun cut for 146 MHz will be:

$$\frac{5540 \times .66 \text{ (or } .80)}{146} = 25.04" \text{ (or } 30.35")$$

for polyethylene-core and coax foam-core respectively.

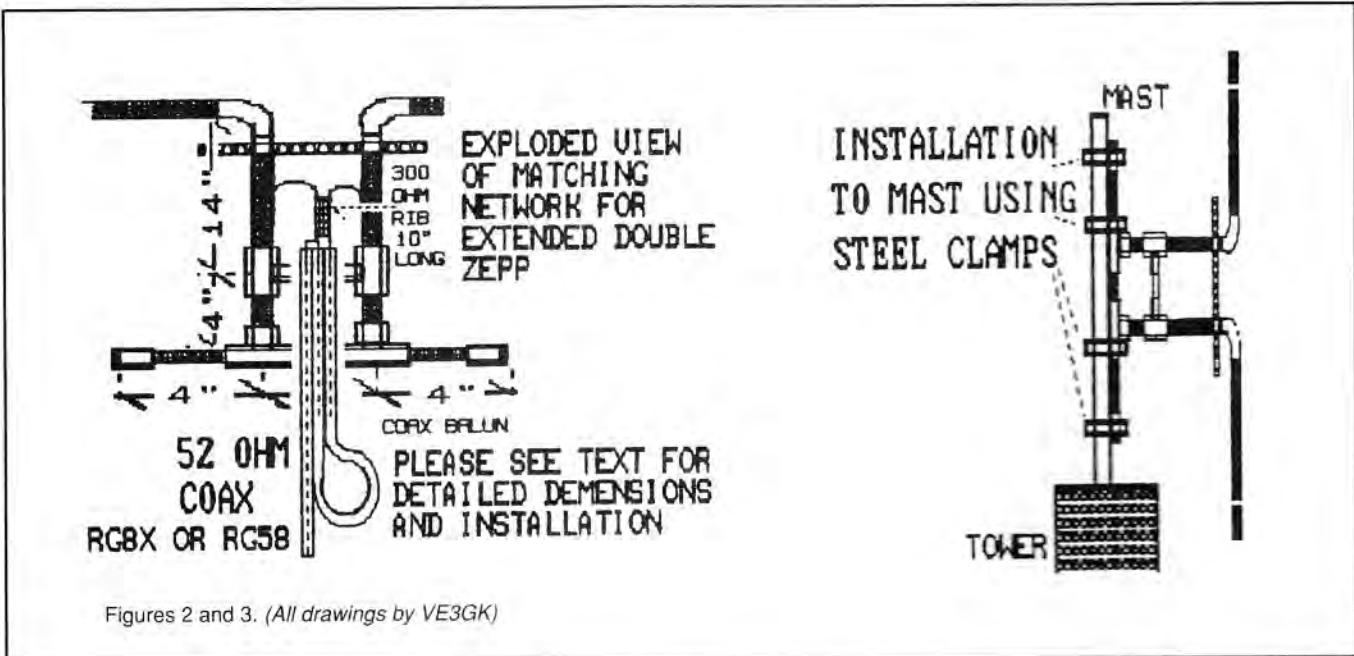
To prepare the coax ends, let the braid show for  $1/4$  inch or so, leaving  $1/4$  inch of dielectric exposed for isolation of the core. Measure the balun length from end to end of the braid. Then take a 10-inch length of the highest quality 300-ohm TV

ribbon you can get, and tie the exposed conductors to the ends of the coax as shown in Figure 2. Solder. Wrap a piece of bare tinned wire around the three pieces of braid to assure a complete bonding job, and solder. Wrap the whole assembly with PVC tape to produce a waterproof joint.

Next, lay the coax-ribbon assembly on the antenna so the 300-ohm ribbon part lies in the centre of the hairpin, with the end of the ribbon pointing at the plastic spacer. Tie the coax to the assembly carefully and strongly, using butcher's cord. Wrap the cord tie with PVC tape to render it waterproof.

Bare the end of the 300-ohm ribbon  $3/4$  inches and split the ribbon 4 inches. Use emery cloth to clean up 3 inches on the sides of the hairpin. The cleaned-up areas will be centred 8 inches from the back of the hairpin. Temporarily tie the exposed conductors of the ribbon to the sides of the hairpin, one conductor to each pipe, using scraps of tinned wire.

Now it's time to tune the antenna. Apply RF at the desired frequency via the coax. Slide the ribbon ends along the sides of the hairpin until an SWR meter in the feedline shows that a perfect match has been achieved. Solder the ribbon ends to the hairpin and tape the soldered joints with PVC tape. Finally, seal all of the PVC with clear silicone bathtub sealer, or an E-6000 or similar styrene-base sealer.



Figures 2 and 3. (All drawings by VE3GK)

(If you use bathtub sealer, be careful. Most such sealers contain a vinegar-type acid that is conductive. Getting it on the wrong place could spoil your perfect match.) Cover your PVC tape carefully so that water cannot work inside to the joints over time. You want your antenna to last!

The antenna can now be mounted on a vertical mast using stainless steel clamps of the type intended for use with polyethylene semi-rigid pipe. Use two clamps above the hairpin and two below to hold the 4-inch pieces of pipe against the mast (see details in Figure 3 above).

These antennas have a very long service life—just what may be needed for your application. They certainly worked in ours. Total cost to build each antenna, including the four clamps, is under \$30. Try this effective 2-metre antenna—an extended double-Zepp. We guarantee you'll like it. ■

### Update: Defence of Amateur Radio Fund

The Defence of Amateur Radio Fund was created to raise money to help IARU protect our amateur frequencies at WARC '92. Up for review: 3-30 MHz, 500MHz-3 GHz, and 12.7 GHz and above. The fund, now independent of CRRL, is chaired by Ralph Cameron, VE3BBM, well known for his work in the Jack Ravenscroft case. It currently stands at \$6000. Read this month's IARU column. A WARC is coming, and your support is vital. Please send your contributions to the Defence of Amateur Radio Fund to Box 56, Arva, ON N0M 1C0.

The Defence of Amateur Radio Fund thanks the following for their contributions: Jack Cutforth, VE3JAC; Rob Robinson, VE3FYV; Norman and Doris Weedmark, VE3NFV; Ed Clapham; Frang Endenburg, VE3KLM; C McN Rolfe, VE7GMR; Robert Boyd, VE3SV; Paul Caccamo, VE3KOI; Dennis Garrod, VE3CYR; Garry Hammond, VE3XN; C Stredulinsky, VE7SCS; D Bordeleau, VE2LDB; G Skoreyko, VE6OV; G. Herrington, VE3UB; Edna and Ernie Savage, VE7FB and VE7SH.

The following have contributed \$50 or more: Allan Taylor, VE3WV; Northern Alberta ARC; J Riopel, VE2BRO; R Mitchell, VE3BXF; F Daigeneault, VE2AAY; F Hamer, VE3LI; James Barber, VE3AAH; Maurice Girard, VE6OA; Kelowna ARC.

The following have contributed \$100 or more: Roger Swickis, VE3BZQ; Thornhill RAC; W Routledge, VE3AOC; D A Page, VE3XZ; R Wahlgren, VE7BLW.

The following have contributed \$250 or more: Winnipeg ARC; Calgary ARA; Noel Eaton, VE3CJ; Chatham-Kent ARC. ■

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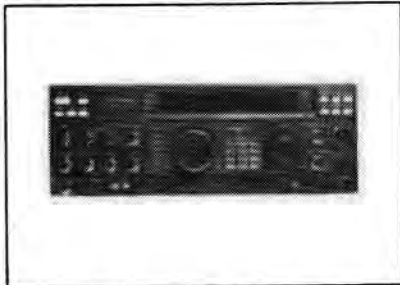


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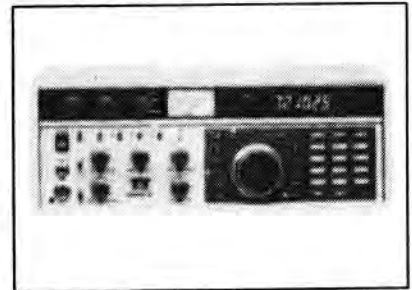
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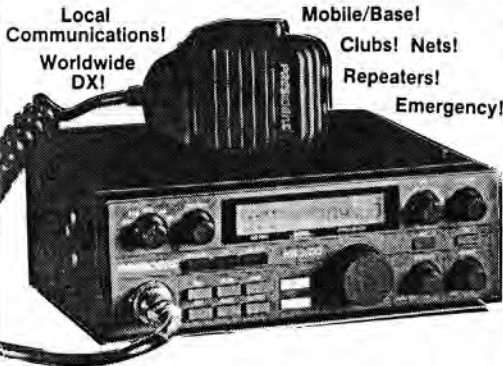
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**W**e have an amazing hobby. Every new contact is as exciting as the first, no matter how long ago that was. Take 10 meters, for instance. Just the other day 10 was open as I cruised along a road near my house. As I tuned around on my 10-meter rig I heard Cyprus, Malta, and Ireland. Not being one to let an opportunity go, I called each station, and what do you know! They came back to me: Cyprus on the first call, Ireland on the first call, and Malta on the third. The amazing thing is that it was all done with 25 watts from Uniden's modest power level transceiver, the HR-2600, into a base-loaded, mag-mounted mobile antenna.

The HR-2600 looks the same as its predecessor, the HR-2510. About the only way you can tell them apart is the HR-2510 label on the older model and the RPT setting on the front panel of the HR-2600. That's it.

excerpt from 73's review by Marc Stern on HR-2600 Mar90

## CAUTION !

During the past few months several new outlets that offer Amateur Radio Products have come on the scene. **A WORD OF CAUTION !!** Make sure that the dealer you buy your expensive transceiver from is an **authorized** dealer for that product in Canada!! Only an **authorized** dealer can provide after purchase service from the manufacturer in Canada. If you aren't sure ask if the warranty is good at Kenwood Canada or Icom Canada, or check with the company directly.

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As of March 19, 90 we still have the following positions available:

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**Technician** - This position requires you to be very familiar with amateur radio equipment repair, especially recent technology. You should hold a technician's or technologist's diploma. Starting salary depends on qualifications and also on your experience, up to \$50,000.

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## DOC Notes—and More

### DOC NOTES

□ In March, the rumour that DOC had decided not to implement Restructuring of the Amateur Service continued to spread. CRRL was contacted by several concerned amateurs and even two US Amateur Radio magazines. CRRL rechecked with DOC and verified that the rumours were just that and untrue. Date for publication of the new regulations in the *Canada Gazette* has slipped, but DOC remains committed to implementing the Restructured Amateur Service later this year.

□ From more recent discussions with DOC, CRRL has learned that DOC now plans to implement examinations for the restructured amateur service on October 1, not September 1 as previously announced. At that time, all holders of a current Amateur certificate will be "grandfathered" into the new service and receive full Advanced level privileges.

□ DOC is getting out of the tower-approval business. DOC will no longer be involved in approving antenna towers to ensure that they are not a hazard to aircraft. Amateurs will now obtain approval for towers (current regulations mention over 50 feet high within three kilometres of an airport, over 75 feet high elsewhere) from their nearest Aviation Group office of the Department of Transport (DOT).

□ DOC has changed the special prefix for use by Sault Ste-Marie amateurs on June 15-24. The prefix will now be CK3. Previously, the prefix was CF3.

### ACROSS CANADA

□ Radio amateurs in Windsor, Ontario, are enlisting the help of Amateur Radio clubs across their province in asking the Ontario Ministry of Transport to add the words "Amateur Radio" to callsign licence plates.

□ Each year during August-early September, Toronto-area Amateur Radio clubs operate VE3CNE from the Canadian National Exhibition, the world's largest annual exhibition. This year, VE3CNE organizers are holding an Amateur Radio photo contest to help them get interesting material for their display. Why not enter and win a prize? Send your photos (4 by 6 inches minimum, colour or black and white) to VE3CNE Hamfotos, Box 307, Station H, Toronto M4C 5J2. Include an SASE if you need your photo back.

□ Canada's largest SWL group, the Ontario DX Association (ODXA), is celebrating its 15th anniversary with a new callsign for its Amateur Radio station.

Listen for VE3ODX anytime, but especially this year on the fifteenth of each month on the 15-metre band, 21.15-21.25 MHz. Interested in shortwave listening? ODXA has over 1000 members all across Canada, in the US, Europe and even Japan. The club's monthly publication, *DX Ontario*, is excellent. Contact ODXA at Box 161, Station A, Willowdale, Ontario M2N 5S8.

□ Calgary Amateur Radio Association and Calgary Disaster Services recently signed a Memorandum of Understanding recognizing the value of Amateur Radio in time of emergency, and outlining principles of cooperation between Calgary amateurs and the City of Calgary. The two-page document is a model of what every ARES or other emergency communications group should strive for. Text of the Memorandum of Understanding will appear in an early *QST Canada*.

### SOUTH OF THE BORDER

□ South of the border, the US FCC has proposed shifting the US 80-metre Novice band from 3700-3750 kHz to 3675-3725 kHz. This would benefit US Novices and Canadian phone operators alike, since Canadian phone operation extends down to 3725 kHz, often resulting in mutual interference with Novice CW operation.

□ ARRL is fighting several local and state ordinances prohibiting the ownership of equipment capable of monitoring frequencies used by law enforcement agencies. Such equipment includes many modern extended-range 2-metre transceivers. The solution ARRL is seeking: an FCC ruling granting federal preemption for US radio amateurs.

□ The US FCC has changed the band segments available to US beacon stations. Automatically controlled beacons above 28 MHz must now transmit on 28.2-28.3, 50.06-50.08, 144.275-144.300, 220.05-220.06, 222.05-222.06, and 432.300-432.400 MHz, or on the 33-cm band and above. Main reason for these changes: to minimize interference to weak-signal operation, particularly in the 2-metre and 70-cm bands.

□ The US FCC recently increased its fines for unauthorized operation of a radio station by \$250. Normal fine for a first offence is now \$1000-1250.

### SATELLITE NOTES

□ Four recently launched Microsats are providing amateurs with reams of telemetry data. Telemetry protocol is AX.25, allowing anyone with a 2-metre or 70-cm rig, a TNC and a proper modem (PSK in

the case of AO-16, WO-18 and LO-19, and AFSK in the case of DO-17) to tune into what's going on. Of course, they need a special program to translate all those numbers into intelligible information about the health of the "birds". Several such programs are available for IBM and IBM-compatible computers. Programs for Apple Macintosh® are in the works. These programs can be downloaded from the AMSAT/DRIG BBS in Texas, Tel (214) 394-7438.

□ UoSAT OSCAR 15 has been found. Last reported reception of signals from the launched satellite was at 0500 on January 23. The search for life aboard the satellite then moved from the downlink frequency, 435.12 MHz, to the frequencies of the satellite's local oscillators in the 132-136-MHz range. These were very difficult to detect, as local oscillator signals were down, -60dBm at the spacecraft's antenna, at launch time. Next task, now that the satellite has been located: bring it back to life.

□ On Wednesday, March 14, the DOVE Microsat on-board computer crashed. The satellite's 145.85-MHz transmitter was locked in key-down condition, blocking the uplink command channel. On March 17, the problem was partly solved with the help of N4HY and W5UN. W5UN owns what is believed to be the world's largest private 2-metre antenna. Using the 32.5 dBi array which produces nearly two megawatts EIRP, W5UN turned off the satellite's 2-metre transmitter, paving the way for analysing the problem and uploading new software. An outstanding rescue operation in space!

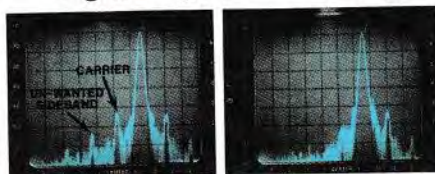
□ Dates of the next two Space Shuttle launches, both carrying Amateur Radio experiments, have slipped. STS-35, originally expected to be launched on April 26, is now scheduled for May 09. STS-37, originally scheduled for June 4, is now expected to be launched sometime in November.

### DXCC NOTE

□ Walvis Bay is a new DXCC country. By unanimous vote, the ARRL Awards Committee accepted the recommendation of the ARRL DX Advisory Committee that ZS9 be added to the DXCC countries list. Walvis Bay is an enclave of the Republic of South Africa completely separated from the rest of that country by the newly-independent country of Namibia (formerly Southwest Africa). DXCC credit will be given for contacts after 1977 September 01. See *QST* for additional details. ■

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### Digital Signal Processing



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- **Uses the same accessories as the TH-25AT (except soft cases).**
- **Volume and balance controls, plus separate squelch controls on top panel.**
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Small Cloth Diamond (3") (OT)	2.00	2.00	151	.75	<input type="checkbox"/>
ARES Circular Patch (4") (OT)	4.00	4.00	161	.75	<input type="checkbox"/>
Set of 3 CRRL Logo Decals (OT)	1.00	1.00	180	.75	<input type="checkbox"/>

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	Non-Member	Member	Stock#	Postage	✓
Fifty Years of ARRL	5.75	5.25	460	.75	<input type="checkbox"/>
From Spark to Space	25.00	22.50	465	1.00	<input type="checkbox"/>
Gil (cartoon collection)	6.25	5.75	860	.75	<input type="checkbox"/>
Night Signals (adventure)	6.00	5.50	856	.75	<input type="checkbox"/>
Tompkins Adventures (6 books)	30.00	27.00	855	1.50	<input type="checkbox"/>
200 Metres and Down	10.00	9.00	560	.75	<input type="checkbox"/>

## OPERATING AIDS

	Non-Member	Member	Stock#	Postage	✓
1990 North American Callbook (OT)	35.00	31.50	721	2.00	<input type="checkbox"/>
1990 International Callbook (OT)	37.50	33.75	711	2.00	<input type="checkbox"/>
Chicken Junction Directory (OT)	15.00	13.50	780	1.50	<input type="checkbox"/>
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 (pad) (OT)	2.00	1.75	170	.75	<input type="checkbox"/>
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"/>
ARRL World Map (OT)	14.00	12.50	840	2.50	<input type="checkbox"/>
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"/>
Callbook <i>folded</i> Map of the World (OT)	6.50	6.00	RA10F	1.00	<input type="checkbox"/>

## ANTENNA BOOKS

	Non-Member	Member	Stock#	Postage	✓
ARRL Antenna Book	\$22.50	\$20.50	411	\$1.50	<input type="checkbox"/>
RSGB HF Antennas for All Locations	19.00	17.00	330	1.00	<input type="checkbox"/>
Antenna Compendium #1	12.50	11.75	420	1.00	<input type="checkbox"/>
Antenna Compendium #2	15.00	13.50	421	1.00	<input type="checkbox"/>
Antenna Notebook, W1FB	12.50	11.25	405	.75	<input type="checkbox"/>
Novice Antenna Notebook, W1FB	10.00	9.00	425	.75	<input type="checkbox"/>
Antenna Impedance Matching	19.00	17.00	450	1.00	<input type="checkbox"/>
Yagi Antenna Design	19.00	17.00	630	1.00	<input type="checkbox"/>
All About Cubical Quad Antennas	12.50	11.25	RP110	1.00	<input type="checkbox"/>
All About Vertical Antennas	13.75	12.50	RP120	1.00	<input type="checkbox"/>
Simple, Low-Cost Wire Antennas	15.00	13.50	RP140	1.00	<input type="checkbox"/>
Transmission Line Transformers	12.50	11.25	880	.75	<input type="checkbox"/>

## OPERATING

	Non-Member	Member	Stock#	Postage	✓
Operating Manual	19.00	17.00	522	1.50	<input type="checkbox"/>
Complete DXer, 2nd edition	16.00	14.50	441	.75	<input type="checkbox"/>
Low Band DX	12.00	11.00	890	.75	<input type="checkbox"/>
Low Band DX Software (available for many computers; send SASE for prices)					

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1990 ARRL Handbook	29.00	26.00	495	2.00	<input type="checkbox"/>
ARRL Electronics Data Book	15.00	13.50	516	.75	<input type="checkbox"/>
Radio Frequency Interference	5.75	5.25	532	.75	<input type="checkbox"/>
Solid State Design	15.00	13.50	551	1.00	<input type="checkbox"/>
Hints and Kinks, 12th edition	6.25	5.75	512	.75	<input type="checkbox"/>
QRP Notebook, W1FB	6.25	5.75	590	.75	<input type="checkbox"/>
Transmitter Hunting	21.25	19.00	390	1.00	<input type="checkbox"/>

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All About VHF Amateur Radio	15.00	13.50	RP130	1.00	<input type="checkbox"/>
Satellite Anthology	6.25	5.75	700	.75	<input type="checkbox"/>
Satellite Experimenter's Handbook	12.50	11.25	540	.75	<input type="checkbox"/>
Space Almanac	27.50	25.00	705	1.50	<input type="checkbox"/>

## PACKET AND COMPUTERS

	Non-Member	Member	Stock#	Postage	✓
AX.25 Packet Protocol	12.75	11.50	430	.75	<input type="checkbox"/>
Computer Network Conference #7	12.50	10.00	602	1.00	<input type="checkbox"/>
Computer Network Conference #8	15.00	13.50	603	1.00	<input type="checkbox"/>
Gateway to Packet Radio, 2nd edition	16.00	14.50	901	.75	<input type="checkbox"/>

\***Callbook Maps—A Special Note:** Callbook maps (rolled versions only) ordered together can be shipped together. Add \$3.50 postage only once on orders of two and three Callbook maps.

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## The CRRL Field Organization Forum

### SECTION MANAGER ELECTION SECOND 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 1990 June 08. For full details, see 1990 April *QST Canada*, or contact CRRL Headquarters. —*Jack Strangleman, VE3GV, Field Services Manager*

### REPORTS FOR FEBRUARY 1990

**Alberta:** SM/STM/DEC: Bill Gillespie, VE6ABC; ASM: VE6AMM; SEC/TC: VE6AFO; OO: VE6TY. Some new amateurs are beginning to appear as local amateurs classes near their conclusion. The 80-metre band was very poor towards the end of the month, and month-end reports were very hard to come by. Next month, the Alberta Public Safety Services is conducting another Emergency Site Manager's Course. Amateur Radio will take part.

**British Columbia:** SM: Ernie Savage, VE7FB. On February 23, BCEN Manager Bill McLaughlan, VE7DDL, suffered a heart attack in his sleep and became a Silent Key. Assistant Net Manager Angela, VE7ANG, just-retired Net Manager Ferdi, VE7EJU, and Tom, VE7BNI, have taken over BCEN until a new net manager can be appointed. Bill excelled in CW. He served in the Royal Canadian Signals during the war. During 1947-56, he served in 22 stations in the Northwest and Yukon territories, and then moved to Kingston as a wireless instructor, and to posts in Egypt and Germany. In 1970, he retired as a warrant officer and moved to British Columbia where he continued in the electronics field, and worked to help the elderly and handicapped. He will be much missed by all members of BCEN and Cowichan Valley ARC.

**Manitoba:** SM: Jack Adams, VE4JA; ASM: VE4IX; SEC: VE4TM; ATC: VE4ADP; NMs: VE4LB, VE4IX, VE4TE. Spring is just around the corner, and what's happening in Manitoba? The Manitoba Digital Emergency Communications Group (MDECG) has expanded its LAN to include the Dauphin area. This LAN will likely expand into Saskatchewan in the near future, with nodes at Grandview and Roblin. Membership in MDECG is encouraged so that backboning can be accomplished to speed up the system. Enquires about the system may be directed to Terry, VE4VR, in the southeast, and to yours truly in the northwest. Dauphin ARC has agreed to finance a linking system from the Dauphin area to the WRS repeater system. This system would link Baldy or DPN with Spearhill and Lundar repeaters, with links to the west to tie in with the Yorkton and Ituna repeater systems, and to the southeast into NEP or Gimli, both linked into the WRS system. Come and join us in Dauphin at our first and hopefully annual Hobby Fleamarket and Model Aircraft Show at the Sekio Ukrainian site located near the north gate of beautiful Riding Mountain National Park. We need lots of fleamarket items, so clean out your shack/shed/basement. If you're like me, you will not only sell, but buy many things, to ensure that your storage area is kept active. Date and time: May 26 at 1000 CD. Talk-in: 147.03 MHz(-), 146.64 MHz(-), and 146.52-MHz simplex.

**Maritimes-Newfoundland:** SM: Carl Anderson, VE1UU; ASM: Ned Mulrooney, VO1MN; STM: Mel Lever, VE1VX; BM: Brent Taylor, VE1APG. I was fortunate to get to both Truro and Moncton Area ARCs in February. Truro ARC (TARC) meets monthly on the second Monday. Officers are Don Roland, VE1AOE, president and acting treasurer; Harvey Winters, VE1AFE, vice president; Bev Reynolds, VE1TL, secretary; and Rod Smith, VE1ALP, auditor. TARC operates the all-hearing VE1TRO 2-metre repeater atop Nutby Mountain

**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.

north of Truro. At both the TRAC and Moncton Area ARC (MAARC) meetings, we had good discussions about the changing times in Canadian Amateur radio, including restructuring, deregulation, the impending WARC and the possibility of a single Canadian Amateur Radio organization. Jim Wade, VE1DH, CRRL VE1/VY2/VY9/VE0 QSL Manager, is a member of MAARC, and gave us an interesting description of how the bureau operates. In 1987, the bureau handled 44,600 cards. In 1988, this went up by 50 per cent to 67,337 cards. In 1989, it went up again, by 11 per cent, to 74,995 cards. Jim's 200,000th card since he has been manager went out in February to Art Goldstein, VE1XG of St John, NB. Jim would like to receive newsletters and membership lists from clubs to help him keep his database up to date. Jim also reminds VE0 licensees that he is there to serve them too. Twenty Halifax Amateur Radio students passed written exams given by DOC at their last night, of class, February 20. Some have now passed their code tests as well, and are on the air. MAARC has approximately 30 students aiming to finish in May, and Charlottetown ARC has about eight. I will be in St. John's in mid-March, and hope to make the SONRA meeting. Then I will be at sea for a month (too bad—no maritime mobile operation permitted). I plan to attend other club meetings this spring as time permits. Don't miss Halifax and Dartmouth ARCs' big Amateur Radio and Computer Fleamarket at Nova Scotia Winter Fair Exhibition Park (same place as last year). Doors open to the public at 9 a.m. Check into the Maritimes Phone Net, 3750 kHz, 1900 ADT, for details. Last year, the combination of Amateur Radio and computers proved to be a real winner. This year's event should be even better.

**Ontario:** SM: Larry Thivierge, VE3GT; BM: VE3GSA; SEC: VE3GV; STM: VE3CYR; TC: VE3EGO; NMs: VE3AJN, VE3BDM, VE3CYR, VE3GSQ, VE3ORN and VE3POJ. After four years as manager of the Ontario Phone net, Don, VE3IN, is stepping down to pursue other activities. Don, who has been on the net almost every night since he began, has been a most dedicated net manager and will be sorely missed. We wish him well and hope that he enjoys the travelling he has planned. George, VE3BDM, no stranger to the net, has been appointed new manager. VE3HMM is now VE3RFP. Thirty-five amateurs from Ottawa and five amateurs from Montreal, under the direction of VE3HYS, provided the communications for the 160-km Canadian Ski Marathon from Lachute to Gatineau. The event lasted two days and repeaters VE2RM, VE2RBH and VE2CRA were used. Next year will mark the silver anniversary of the event. Nice to hear VE3DHB back on the air from Oakville. VE3FGT is the new manager of the Laurentian Net. VE3SSN, Science North at Sudbury, is back on the air more often using a host of volunteer operators. The Algoma ARC held its annual winter dinner with a group of 30 in attendance including out-of-towners VE3HK, VE3TSE and VE6WRU/8. Hal, VE3QA was presented with his QCWA 50-year certificate No. 1464, with update seals, by VE3BYX. Hal was first licensed in Vancouver as 5EH in 1922. He has been a radio amateur for 68 years. His call will be familiar to many DXers as he has been on the DXCC Honour Roll for many years. Niagara Peninsula ARC recently held the grand showing of its new video entitled *Making Contact*. This short video, which was professionally recorded, edited and produced by Dan Braun of Niagara College, shows a good variety of Amateur Radio modes, equipment and services, all, explained by VE3BGH, VE3NCT, VE3OZT and VE3PTR. Dan was presented with a

plaque by the club in appreciation of his work. VE3SJC, who recently received his Advanced, has been heard on 20-metre SSB working DX. Kitchen-Waterloo ARC, in partnership with Guelph ARC, will be hosting the Central Ontario Amateur Radio Fleamarket on June 2.

**Quebec:** SM: Harold Moreau, VE2BP; STM: VE2EDO; SEC: VE2LYC; BM: VE2ALE. Interested in traffic? If so, contact your STM or SM. Les membres de VE2CAM (Ste-Hyacinthe) ont été actifs, lors des activités à la Polyvante Hyacinthe-Delorme. Avec regret, j'ai à vous annoncer le décès de Michel, VE2MOB. Constant, VE2AZC, et Germain, VE2GT, sont de retour de leur vacances dans le sud des États-Unis.

**Saskatchewan:** SM: Bruce Rattray, VE5RC; ASM: VE5GHC; STM: VE5ELJ; SEC: VE5FY. The Winter Games held in Melville on February 18-24 were very successful. Area amateurs set up and ran a communications network to coordinate this event. Thanks to VE5s AEI, AGF, II, RF and amateur-to-be Robert. Congratulations to Prince Albert amateurs who provided communications for Sask '90. This annual event features a 60-km ski run for Easter Seals. The Speed Skating Club of Regina held its annual Triathlon on February 11. Local amateurs VE5s AFQ, BCU, DSC, DW, EE, HC, IC, IQ, KZ, SWR and UU did the talking. The Dr Paul Swan Sweetheart Run was held in Regina on February 18. VE5s AAA, AFQ, BCU, BWCS, EE, ELJ, IC, KZ and TH braved very cold temperatures to provide communications. The display or WW2 vintage radio gear at Moose Jaw's Western Development Museum is well under way. They are looking for R-1155 receivers. See Fred, VE5IL, or Doug, VE5QN, if you can help. The Canada geese have come back to Regina, so the worst of winter is over. On to spring, and those great hamfests and fleamarkets! 73! ■

## Silent Keys

Conducted By Ray Staines, VE3JZ

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

VE3ANT, Allan Stinson, Dubrobin, ON  
VE3ARF, Archie McDonald, Bowmanville, ON  
VE3BRN, Howard Dunham, Ingersoll, ON  
VE3CRT, Ron Hall, Lakefield, ON  
VE3FHO, Konrad "Doc" Hollatz, Waterloo, ON  
VE3FWI, Ernie Roulston, Hagersville, ON  
VE3GKN, Robert Baille, Don Mills, ON  
VE3IZM, Ken Paddock, Cambridge, ON  
VE3KA, Charles "Chuck" Bailey, Toronto, ON  
VE3MJJ, George Tutt, Ottawa, ON  
VE6RC, Ben Collier, Edmonton, AB  
VE6STI, Steve Kostiuik, Leduc, AB

**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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## About This Column—and the 13-cm Bandplan

I hope everyone out there is enjoying this column. I am working hard to keep it interesting and informative. My primary motive for writing this column is to promote interest among Canadian amateurs in using our spectrum above 50 MHz to its maximum potential. That means using SSB, CW and ATV as well as FM and packet. I know there are still a few people around the country who are uncomfortable with the concept of operating non-channelized spectrally-efficient SSB or CW on VHF-UHF. Most HF operators understand the concept of a continuously tuneable VFO-controlled rig. However, a whole group of amateurs were introduced to Amateur Radio through rigidly channelized FM. These amateurs don't always understand, and they are the ones I hope will enjoy finding out what can be done on VHF-UHF with SSB, CW and other modes of communication. Don't get me wrong. As secretary of the Toronto FM Communications Society (VE3RPT and other Toronto-area repeaters), I am not anti-FM by any stretch of the imagination. I merely want to get all of us using a variety of modes, to help prevent massive congestion on our repeaters—and resulting interference problems, exemplified by those "Touchtone Tommys" we all suffer in our urban areas.

I'm always glad to get reports of new stations on 6-metre SSB, 2-metre CW, 439.25-MHz ATV; and of amateurs using 6 metres to control model aircraft, getting on 223-MHz FM or 220-MHz SSB, using new satellites, working on a continental UHF-FM trunking system, or working the world via moonbounce, aurora, meteor scatter, sporadic E, FAI and other modes of long-haul communication. Really, the possibilities are endless.

### 13-cm (2300–2450 MHz) BANDPLAN

Wow! 150 MHz of spectrum with room for exotic modes like FM television, satellites (Mode S), spread spectrum and high-speed packet and of course SSB, CW, FM voice, control links and probably just about anything else you can think of!

That's fine you say, but there's no equipment. Well, there are a number of sources of gear: simple transverter designs you can build and commercial stuff. (Transverters make good club projects. Are any clubs out there interested?) Developing high power can be a bit of a problem, but you can buy amplifiers that will produce anywhere from 50 to 150 watts. Antennas are no big deal. They can be commercially made or you can roll your own. Loop yagis, or better yet, sur-

### CRRL 13-cm Band Plan

AMATEUR STATUS: SECONDARY

MHz	UTILIZATION
2300–2303	HIGH SPEED DATA (≥4800 baud)
2303–2303.5	PP PACKET (≤2400 B, 25-kHz channel spacing)
2303.5–2303.8	RTTY, PACKET (≤2400 baud)
2303.8–2303.9	PP PACKET, TTY, CW, EME
2303.9–2304.1	CW, EME
2304.1–2304.2	CW, SSB, EME
2304.100	NATIONAL CW/SSB DX CALLING FREQUENCY
2304.200	NATIONAL CW/SSB LOCAL CALLING FREQUENCY
2304.2–2304.3	SSB, SSTV, AMTOR, PACKET, FAX
2304.3–2304.32	PROPAGATION BEACON NETWORK
2304.32–2304.4	GENERAL PROPAGATION BEACONS
2304.4–2304.5	SSB, SSTV, AMTOR, PACKET, FAX
2304.5–2304.7	CROSSBAND LINEAR TRANSLATOR IN
2304.7–2304.9	CROSSBAND LINEAR TRANSLATOR OUT
2304.9–2305	EXPERIMENTAL BEACONS
2305–2305.2	FM SIMPLEX (25-kHz channel spacing)
2305.200	NATIONAL FM CALLING FREQUENCY
2305.2–2306	FM SIMPLEX
2306–2309	FM REPEATER INPUTS
2309–2310	CONTROL AND AUXILIARY LINKS
2310–2390	FMTV, EXPERIMENTAL MODES
2390–2396	FAST-SCAN TELEVISION
2396–2399	WW HIGH-SPEED DATA (≥ 4800 baud)
2399–2399.5	PP PACKET (≤ 2400 baud)
2399.5–2400	CONTROL AND AUXILIARY LINKS
2400–2403	SATELLITES
2403–2408	SATELLITES, HIGH-SPEED DATA (≥ 4800 baud)
2408–2410	SATELLITES
2410–2413	FM REPEATER OUTPUTS
2413–2418	HIGH-SPEED DATA (≥ 4800 baud)
2418–2430	FAST-SCAN TELEVISION
2430–2433	SATELLITES
2433–2438	SATELLITE, HIGH-SPEED DATA (≥ 4800 baud)
2438–2450	WBFM, FSTV, SPREAD SPECTRUM, EXPERIMENTAL

plus TVRO dishes can provide lots of gain. For aiming to the horizon, a 4- to 6-foot mesh dish will yield good results. ATV? There's lots of space for experimenting with wideband FM television, using converted commercial equipment. Satellites offer another avenue of operation via Mode S. Generally efforts to get on this mode will yield satisfying results, and you can even experiment with moonbounce if your antenna is good enough.

The 13-cm band—our "S band"—is interesting territory, but not the upper limit in our technological capabilities. Still many Canadian amateurs shy away from this band because they are intimidated by having to do more than plug in a radio. Come on up, folks, the band is fine!

### VUAC NEWS

The ARRL's VUAC (VHF/UHF Advisory Committee) and VRAC (VHF Repeater Advisory Committee) have been tasked with a review of the bandplans for 50, 144, 220 and 430 MHz. CRRL's VUAC will be adding a "Canadian" opinion to the process to ensure North American compatibility. Your input regarding bandplanning is always

welcome. Send comments to your provincial VUAC REP. or to CRRL VUAC Chairman, VE3DSS.

### CANADIAN VHF CLUB IS OFF AND RUNNING

The Toronto VHF Society is back and running on all cylinders! First meeting of the new decade was held at VE3DSS's QTH on February 3, 1990. Officers for the year are: Peter, VE3EMS, president; Kevin, VE3KDH, vice president; and John, VE3OZB, secretary/treasurer. The club has a goal of 50 members by June, and 100 contest entries for the June VHF Contest. I do believe that Canadian amateurs are up to the challenge of sending in their logs! If you are interested in joining, drop VE3DSS \$2 (yes, two bucks!). Incidentally, June will mark the 40th anniversary of the Toronto VHF Society's annual "do", originally held at the Riverside Tavern in Oakville, Ontario. The "do" traditionally follows the June VHF Contest.

### NEWS! NEWS!

☐ If you are on our contest mailing list you received a copy of our new VHF/UHF Activity Reporting Form. Thanks to Ross, VE5LY, we now have this handy form for reporting DX worked, new provinces, states and countries, and even ragchews for inclusion in this column. I hope everyone will use these forms. If you didn't get

one, send us an SASE. Thanks also to Bob, VE3BFM at Sinclabs, for handling the mailing of over 500 contest notices across Canada.

Thanks to friends in the UK, we have an up-to-date list of names and addresses of 6-metre QSL managers. If you need a copy of this list or just an address, send us an SASE.

Yes, it's meteor shower time again. Look for the following showers coming up soon (*shower*: date, local time, duration):

*Lyrids*: April 22, 0842, 2.3 days

*ETA Aquarids*: May 6, 0837, 3 days

*Arietids*: June 7, 1408, 2 days

BC's RF Grid Hoppers Group is planning a trip to CN99 in central BC for the June VHF Contest. This will be the first time this grid has been active. Attempts to cheat Mother Nature last year failed (it snowed). Look for Orid, VE7BEE, and company on 50.130, 144.210 and 432.110 MHz operating from Blackwall Mountain, 6768 feet above sea level.

### ACTIVITY REPORTS

**50 MHz:** The bad news is that 6 metres took a bit of a rest in the last few weeks of January, but with solar flux numbers trending up to 243/15/4, the morning of the 24th brought the welcome bleepings of the FY7THF beacon, S5 on 50.038 MHz at 1400 UTC, and good signals from a HK repeater on 50.124 MHz. Unfortunately, no other signals were heard and by 1440 UTC, propagation was gone from Toronto, from Gord, VE3KKL's QTH in eastern Ontario and from Monty, VE3EVW's QTH in southwest Ontario.

January 25 brought improved conditions with numbers of 251/15/2, and the band did open briefly to the west coast with VE3KKL working K6MYC, and VE3DSS contacting W6BJI. On January 27, solar activity improved with a flux of 237/2/0. HK3AVR was heard working W1s, southern W3's and W4's, giving them S9 signals. However he was only weak in Toronto from 1412 to 1440 UTC. Len, VE3BGH, managed a QSO with a G18 station and heard an OH station calling CQ weakly between 1500 and 1600 UTC.

On January 31, flux numbers were running at 213/17/3. Things continued to deteriorate early in February as the flux plunged and stayed around 150. DX, where wert thou? Not in the Great White North, that was for sure.

February 15 did bring some transcontinental auroral E to Doug, VE5UF, who worked Lefty, KITOL, in Maine. Doug must have been in the magic circle because no one else in the west could even hear Lefty. Doug commented that other than a bit of aurora, things were mighty quiet in Saskatoon during January and February.

March brought increased DX activity from Eastern Canada. Don, VE2DFO, and Stu, VE2FUT, even heard the ZS beacons on the morning of March 3.

From across the pond, reports from the British 6-metre gang: it is fantastic to see what is happening in IARU Region 1. Four new countries have joined the 6-metre club, with Austrian licensees granted permission to use 50-52 MHz for a one-year period from February 01, with some geographical restrictions due to TV broadcasting. Swiss amateurs may now apply to operate on 50-52 MHz outside of TV hours. The Belgian PTT has granted class A and B licensees permission to use the 6-metre band on a trail secondary basis until 1993, using 50-50.45 MHz and 30 watts maximum power. Danish amateurs, including those on the Faroe Islands (OY) will be allowed to use 50-52 MHz until the end of 1990, with power levels of 500 watts input for class A

and E amateurs and 100 watts for other classes. There are no antenna restrictions. An FT-620B is being sent to OX3LT in Greenland.

In the South Pacific, look for 6-metre operation from the Lord Howe Island DXpedition, VK9LE, March 25-April 16. Also, W6JKV may be putting Easter Island on the air in March or



Top: Richard Staron, VE3FAC (left), and Bob Williams, VE3FVW (right), display their homebrew kW amps for 6 metres and 70 centimetres. Both amps are based on the K2RIW design. (VE3DSS photo) Bottom: Members of the Aurora VHF-UHF Society are active on 50, 144, 432 MHz and up. From left to right, VE6JW, VE6BMP, VE6BLO, VE6JY, VE6KD and VE6KY. (Photo courtesy VE6JW)

April. Thanks to Radcom, David, G4ASR, Ted, G4UPS, and Byron, G6HCV, for this information.

In coming months, look out for aurora and perhaps some north-south band openings. Still no sign of the peak yet, ladies and gentlemen. Perhaps we won't see it until fall.

**144 MHz:** The January VHF Contest brought the bands alive with CW and SSB signals galore. Stations heard included VE3KDH, VE3UOT, VE3EMS, VE3ASO, VE3FAC, VE3BQN. Signals were up and down, with a smattering of aurora, but everyone had fun. Ted, VE3BQN, and Steve, VE3SDJ, ran multiop from FN04 and managed 131 QSOs in 34 grids, operating on 2. Dennis, VE3ASO (FN25), made a whopping 293 contacts in 54 grids. Kevin, VE3KDH, ran into some real Murphy when an localized bout of freezing rain left him with an inch of ice on his antennas and a high SWR. No one else reported icing. Kevin promises to have a four-bay array of Boomers up this spring, and a 4CX1500 driving them. Look out, moonbouncers! You're in for some real competition!

We noted aurora on 2 metres a number of times in February and March, including March 12 and March 18 with "buzz" signals from stations on the east coast and as far south as Virginia and Kentucky coming in loud and clear.

Speaking of aurora, Mike, W9IP/2 (FN14) has an auroral propagation beacon running 35 watts to a 5-element yagi pointed north, currently on

144.047 MHz, but probably moving to 144.285 MHz pending an FCC decision. In February, John, VE1BVL, reported hearing the beacon on numerous occasions when no other auroral signals were heard! The beacon is a great way to keep tabs on aurora and Mike would like anyone hearing the beacon to send reports to him, Mike Owen, 21 Maple St, Canton, NY 13617.

Don't forget that May is Sporadic E season. Keep an ear tuned to 144.200 MHz, but remember, if the band opens, get off 200 and spread out!

**432 MHz:** VE3FAC and VE3FVW are now QRV with high power. Look for their big signals on 432 MHz. Richard notes that it is definitely easier to attract the DX with 200 watts plus output power! Up in FN04, VE3BQN is ready for 432-MHz EME with a big array of yagis, but he still is waiting for his N7RT kW amplifier using a pair of 3CX800s. Hans, VE3CRU's array took a bit of a pounding during the winter. However, some minor realignment should fix things up. Hans continues to close in on 70-cm WAS.

A word of caution: UHF radiation can be a hazard, so if you are building a UHF kW, remember not to operate the amplifier with the covers removed. Also don't enter the field of your antenna when your key is down. Make sure you keep exposure to high-energy RF fields to a minimum. This also applies to UHF handheld radios held in close proximity to the face! Anyone not heeding this warning is taking a serious risk with damaging eyes or other soft tissues. Right now, the US Air Force is performing an 18-month test using 200 mice, exposing them to long periods of low-level 435-MHz RF, to see if there is potential for risk. To date similar studies have yielded little definitive data. Ye olde conductor of this column is involved in a review of the whole issue of Electromagnetic Fields and their attendant risks. He will report back later this year.

**902 MHz:** Barry, VE4MA, is ready to fire up on 902-MHz (33-cm) EME. He has clearance from DOC and now just needs some time to finish assembly and testing of his rock-crusher amplifier. Also getting ready for 903-MHz EME: WB0TEM, and WA2WEB at Trenton New Jersey State College.

Peter, VE3EMS, is now QRV on 33 cm with an SSB Electronics transverter. Stu, VE2FUT, will be on soon with a homebrew 15-watt system and a loop yagi on his new 80-foot tower.

### CONTEST REMINDERS

Hey, the big VHF contest of the year is approaching! Are you ready? Keep the weekend of June 9-10 open and plan to take part. Remember that VHF contesting can take many forms. Consider using FM simplex. It's legal on all simplex frequencies as per the bandplan, except on 146.52 MHz. Long-haul DX is worked every year using FM. Why not try it? Find a high hill in a rare grid square and see how popular you can be! The contest also provides a ready-made "simulated emergency test". Remember, a major disaster like a tornado or earthquake could leave us operating in the open with reduced repeater availability, so simplex must be made to work. Try it!

Don't forget ATV. Contacts are valid using any simplex mode. Send a copy of your log to ARRL, and a separate copy to the conductor of this column so you'll be in the running for the "Canadian Contest Achievement Certificates" sponsored by the Toronto VHF Society.

For those who can't get enough VHF contesting, the Smirk (Six-Metre International Radio Klub) annual contest will be held on the weekend of June 16.

## ITU Secretary-General Speaks to Amateurs

*The following address was presented by Pekka Tarjanne, Secretary General of ITU, the International Telecommunications Union, to participants at the IARU Region 1 Conference held in Torremolinos, Spain, April 1-6. This conference was attended by CRRL Past President Tom Atkins, VE3CDM, who serves on the IARU Administrative Council. Torremolinos will be the site of WARC-92, the next ITU World Administrative Radio Conference. Decisions made at this WARC could adversely affect radio amateurs.*

The International Telecommunications Union (ITU) has more than an official relationship with the International Amateur Radio Union (IARU). Amateur Radio, and radio amateurs are important "genes" of telecommunications, shaping much of its development and character the world over. Moreover, the extraordinary fraternal spirit and universality of Amateur Radio is felt in the negotiations at many international radio conferences as a force for mutual understanding and cooperation. Friendship and global insights of amateurs have long bridged national and regional boundaries.

Perhaps the attention of the world has best been captured by Amateur Radio emergency communications in times of natural disaster, provided on many occasions, most recently following the earthquakes in Mexico City and Armenia. The contribution of radio amateurs to emergency and relief operations is legendary, given sometimes at considerable personal cost, even risk of life. Many of you will know of the official recognition by ITU of this aspect of Amateur Radio, in the Radio Regulations, Resolution 640, adopted by the World Administrative Conference in 1979. Those of us deeply involved in telecommunications development also recognize another of Amateur Radio's fundamental contributions, to education and technical training in technology for young people.

ITU and national telecommunications authorities understand well that the word "amateur" means something different in radio, more serious than the usual dictionary definition. While there are many aspects, including technically skilled and creative aspects, hobby and personal communications aspects, none of us in the business sees the word "amateur" in radio as suggesting little competence or discipline. The Amateur Radio community is known as highly disciplined, self-regulating in many countries, and immensely knowledgeable. The training and experience of young amateurs has seeded important pioneering in telecommunications and information technology. One need only see a few biographical sketches of leaders in the communications and computer industry, or in scientific and professional societies, to find career-roots in Amateur Radio. Who can doubt its importance in developing countries?

The role of the International Amateur Radio Union, begun in 1925, is widely recog-

nized as a worldwide binding force in Amateur Radio. I am pleased to celebrate with you the 40th Anniversary of IARU's Region 1, and to bring you best wishes from ITU in its own 125th Anniversary year. That your Region structure follows that of ITU regions set up for radio regulations and frequency allocations is but one signal of our close ties. Your President, Dick Baldwin, and Region 1 Secretary John Allaway, are familiar figures on the Geneva scene at ITU conferences and CCIR meetings. The IARU team did a marvellous job of presenting Amateur Radio to tens of thousands of visitors to ITU Telecom in 1987. IARU has given encouragement and assistance to the ITU's International Amateur Radio Club (IARC), and amateur station 4U1ITU, sponsored by ITU and managed by IARC on ITU premises, is operated by visiting amateurs from many countries. I am told that 4U1ITU is a highly-sought "QSO". One need only sign the call letters to have a channel full of calls.

As I know of your interest in ITU, I would take this occasion to tell you that today, ITU activities across the board are preoccupied with the "changing environment in telecommunications", much discussed at the Plenipotentiary Conference in Nice, 1989. The primary forces of change are the increasing globalization of economic activity with its dependence on information, the entry of many new telecommunications institutions and services with close links to international commerce, and the development of many new services and means of delivery.

The Plenipotentiary Conference concluded that the changing telecommunications environment had fundamental consequences for national, regional and international policies and structures in telecommunications. Recognizing that ITU is the only telecommunications organization in which virtually all countries of the world are members, ITU has set out to understand the impact and challenges of the changing telecommunications environment on the Union's role, and to continue to adapt itself to meet these challenges. This is being done conscious of the needs for developing countries to cope with challenges of the new telecommunications environment at the same time they are building their national networks. This study and the steps that flow from it could affect the basic objectives and orientation of future ITU activities.

At the same time, a "High-Level Committee" has been formed with experts designated from twenty-one countries to study options for structure of the Union and its permanent organs. This is an important aspect of ITU's determination to ensure that the Union responds effectively to the demands placed on it by the changing environment.

The Plenipotentiary Conference also decided that a World Administrative Radio Conference should be held in 1992 to deal with frequency allocations in certain parts of the spectrum. The Amateur Service has allo-

cations in these parts. Possible extension of the HF frequency spectrum allocated to broadcasting will be considered. Reallocation in the approximate frequency range of 1 to 3 GHz will be considered to provide necessary spectrum for mobile-satellite and other mobile services, including future public land mobile telecommunications, and possibly satellite sound-broadcasting. Future use by a fixed satellite service of bands near 18 to 20 GHz and 27 to 30 GHz will be considered. A worldwide band for satellite high-definition television (HDTV) is expected as well as an associated HDTV feeder-link band. Some thirty other questions are in a draft agenda.

You know that things went fairly well for Amateur Radio at the last major ITU frequency allocation conference held in 1979. The allocation of new amateur bands was seen to be important and was agreed to in an environment of intense competition with other services. There will be competition again at the 1992 conference, especially in the 1 to 3 GHz range where mobile, satellite mobile and broadcasting satellite services seek additional allocations. A World Conference in 1993 will deal with HF broadcasting matters.

These WARC's, especially WARC-92, once more challenge Amateur Radio on the international conference front. Although, by definition, radio amateurs do not have large financial or political resources at their disposal, their activity has survived and even prospered, thanks to the resourcefulness of its participants. And it has "guardian angels", as every participant at an ITU radio conference knows. Even in conferences where opposing participants are fighting fiercely for every kilohertz for commercial or governmental services, the amateurs present—and there are often many of them among the "combatants"—will join ranks to protect or improve the amateur services in the bands under consideration. The CCIR includes Amateur Radio in its studies, publishing updated reports on technical developments, frequency utilization of amateur and amateur satellite service, frequency sharing and interference considerations.

But neither its recognition for public service, nor its guardian angels, add up to a "carte blanche" for Amateur Radio in the allocations battle. Far from it. During virtually every radio conference, the amateur service is threatened, sometimes very seriously. It is the vigilance of radio amateurs everywhere, and the national, regional and global leagues that serve as collective voices for the amateur services, that address the pressures on allocations. National amateur organizations have been effective in contributing to national positions for conferences. The IARU, as the global voice of amateurs, provides a means of communication in preparation for and during a conference itself...

73, and my best wishes for your IARU Region 1 Conference. —Pekka Tarjanne, Secretary-General, ITU

## KENWOOD



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(B) WITH ICOM IC-735 AND PS-55 POWER SUPPLY

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36-MONTH LEASE—\$153.55 PER MONTH  
42-MONTH LEASE—\$137.54 PER MONTH

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

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

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42-MONTH LEASE—\$278.00 PER MONTH

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36-MONTH LEASE—\$277.27 PER MONTH  
42-MONTH LEASE—\$243.56 PER MONTH

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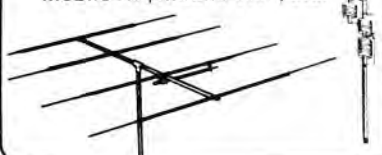
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- Radio Amateur Callbook
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1278

**MFJ** 1270B, 1274, 1278

## Some Notes from All Over

Elsewhere in this issue is a description on an extended double-Zepp 2-metre antenna for emergency communications. John, VE3MB, has done a fine job of constructing and installing these antennas at critical points in the Belleville area. So far, he has placed them on the Emergency Operations Control Group headquarters buildings in Belleville and Trenton, Red Cross headquarters in Belleville, the Ontario Provincial Police buildings in Trenton, and at Belleville General Hospital.

Why not look at your area and decide where the installation of this kind of antenna would improve communications in an emergency? The antennas are effective, inexpensive, and fun to construct!

### CUMBERLAND EMERGENCY EXERCISE

Rick, VE3NJM, has provided an interesting and thought-provoking report on a recent exercise conducted by the Cumberland (Ontario) group. The scenario was a simulated collision between a passenger train and a chlorine tank truck at a level crossing in a small village. The village required evacuation, and his group provided communications between the disaster site, the Emergency Communications Centre, and evacuation and medical sites. As always in an exercise, a number of lessons were learned:

- always have sufficient backup operators.
- know the true capabilities of your equipment and have a contingency plan to cover weak-signal areas.
- make sure your equipment is stored where it is supposed to be; on a regular basis, send someone or go yourself to verify the status of your equipment.
- have a status board for keeping track of operators and their assignments.
- have a second operator at the NCS to handle messages, keep the log and update the status board.
- have up-to-date maps available.
- be very cautious about information given out on the air (for instance, in an exercise, have the NCS repeat, "This is an emergency exercise," at frequent intervals).

Congratulations to the Cumberland group for an excellent exercise.

### NEW ARES GROUPS

In recent months, we have received several letters from amateurs planning to establish ARES groups in their areas. In response to their requests, here are some suggestions and tips on how to get started.

Dave, VE7DWA, writes, "Saltspring Island, where I live, is one of those com-

munities with a dormant emergency program... I would like to find out how to energize our plan on this island... The role played by Amateur Radio operators has been worked out on paper, but the amateurs have not had any training... How can they to receive training in message handling, setting up control centres, erecting emergency antennas, etc? How does one become a member of ARES?"

John, VE3GOX, writes, "As licensee

of VE3SVR, the Morrisburg repeater, and personally, I would be interested in learning how to become affiliated with ARES. Presently, I am in the process of putting together a proposal to present to the Ontario Lotteries Corporation for funds to upgrade the Morrisburg repeater. Involvement with ARES is a must in this upgrading process, to make the repeater more useful in an emergency."

Lorne, VE3MNR's letter says, "I am

## Field Organization Reports February 1990

### 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 922.

Reporting	ARES Members
VE3GV (VE3s DAN, EFX, FOB, GNW, ITL, ITT, JJA, KBU, LPM, MB, SV, TNL)	578
VE4TM	34
VE6AFO (VE6s AMM, AKY)	254
VE7FB	56

### CRRL Section Traffic Manager Reports

Call	Orig	Rcvd	Sent	Divd	Total
VE2BP	3	16	18	15	52
VE2WH	2	11	11	13	37
VE3DPI	1	118	149	3	271
VE3ORN	6	95	85	16	202
VE3GT	0	51	64	0	115
VE3BDM	0	66	41	0	107
VE3GNW	0	40	53	0	93
VE3KK	28	16	38	6	88
VE3BCZ	2	37	41	2	82
VE3DVE	0	33	41	2	76
VE3EUI	2	29	40	5	76
VE3SB	0	25	26	3	54
VE3CYR	0	36	10	1	47
VE3IN	1	35	4	6	46
VE3KCZ	1	13	6	8	28
VE3LPM	1	9	9	6	25
VE3AJN	0	9	11	0	20
VE3MNI	0	3	5	1	9
VE3BAJ	0	0	5	0	5
VE3WM	0	1	3	0	4
VE3WV	0	0	3	0	3
VE3FGU	0	0	2	0	2
VE3NVJ	0	0	1	0	1
VE4JA	14	76	80	50	214
VE4JR	0	20	30	10	60
VE4TE	0	20	10	5	35
VE4LB	0	14	10	4	28
VE4STU	0	10	10	7	27
VE6CE	0	24	14	1	39
VE6XY	0	14	5	1	20
VE6XG	7	6	6	1	20
VE6GUS	-	-	-	-	8
VE6AKY	-	-	-	-	2
VE6ABC	-	-	-	-	2
VE7BNI	17	89	104	38	190
VE7ANG	0	97	78	0	175
VE7EJU	0	51	100	1	152
VE7FB	2	30	28	4	60
VE7XA	0	28	24	5	57
VE7CCJ	10	22	13	0	45
VE7FRZ	3	12	19	0	31
VE7BZI	2	13	2	13	30
VE7AVA	0	9	14	0	23
VE7ESA	0	16	4	0	20
VE7OM	5	10	5	0	20

Call	Orig	Rcvd	Sent	Divd	Total
VE7BCL	3	10	3	1	17
VE7BCF	6	4	6	0	16
VE7EGM	0	7	3	0	10

### National Traffic System

Net (Mgr)	Sess	QNI	QTC
APN (VE1BKM)	26	83	53
KTN (VE3AJN)	12	64	8
OLN (VE3POJ)	26	413	33
OPN (VE3IN)	28	614	122
OQN-1 (VE3GSQ)	23	51	1
OQN-D (VE3ORN)	27	113	84
OQN-E (VE3CYR)	27	167	86
MTN (VE4IX)	27	220	20
MEPN (VE4LB)	27	1055	26
MWX (VE4TE)	28	343	20
APSN (VE6AKY)	28	1150	11
BCEN (VE7ANG)	28	845	210

### Brass Pounders' League

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

BPL: None this month

### Public Service Honour Roll

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

PSHR: VE4JA (156), VE4LB (110), VE3GNW (106), VE3ORN (105), VE3BDM (101), VE4STU (84), VE4JR (62)

### 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	135	2
ARES Ontario (VE3GV)	1	8	0
CRRL ONTARS (VE3FQV)	28	10218	0
Grey-Bruce (VE3BDM)	28	112	52
Grey-Bruce SS (VE3BDM)	28	82	17
Laurentian (VE3FGT)	28	-	6
Transprovincial (VE3EUI)	28	8207	34
ARES Alberta (VE6AMM)	28	108	4

writing on behalf of the Timmins Amateur Radio Club. We have an active membership of some twelve amateurs out of thirty-five licensed amateurs in the area. We have been asking Canadian Red Cross to [have us] participate in their emergency planning exercises... We would like to investigate the possibility of developing a local Amateur Emergency Communications Plan, to see if we can better serve the community, particularly, the Red Cross.

Rick, VE3NJM, writes, "The coordinators of the Cumberland Emergency Radio Group feel it is important to reap the benefits of the experience and knowledge of other emergency groups. With this in mind, would you please advise what is required for our group to become affiliated with ARES?"

(Editor's note: A reminder that ARES is a CRRL-sponsored program, although you do not have to be a CRRL member to take part. The answer to these letters is that the group should contact the CRRL Section Emergency Coordinator (SEC) or Section Manager (SM) in the group's CRRL Section. Addresses of CRRL Section Managers appear on page 2 of this *QST Canada*.)

#### COMMUNICATIONS VANCOUVER

Janis, VE7JAN, called to invite me to attend the March Emergency Communi-

cations Seminar organized by Communications Vancouver. Also invited: representatives from private and public emergency response groups in the Vancouver area. This initiative by the Vancouver ARES group was planned to explain the capabilities of the group in an emergency. It sounded like a worthwhile effort. It was with great reluctance that I had to decline the invitation.

#### KINGSTON ARES

Here in Kingston, we have just finished revising and reissuing our Emergency Communications Plan. While we weren't unhappy with the previous plan, issued several years ago, experience had shown the need for some changes. In addition, we had gleaned a number of good ideas from plans sent in by other ARES groups across the country. To ensure maximum input from our members, we devoted two recent ARES meetings to a page-by-page review of the old plan. Some excellent suggestions for improvement were elicited, and incorporated into the revision. A useful by-product of this review was that now we all have a better understanding and appreciation of the plan's contents.

The revised plan is being issued to various local emergency response agencies including Red Cross, municipal emergency control groups, police and fire departments, and ECs in neighbouring ARES groups. We are trying to get back all previous copies of the plan, to prevent confusion that might result from the use of an obsolete plan under emergency conditions. —Bob Boyd, VE3SV

*It is hoped that this column, which also appears in The Canadian Amateur, will serve as an ongoing source of news and information about ARES activities across Canada. ARES members, particularly ECs, are invited to send information on what they are doing and developments they would like to share. We will pull this together for future columns with the objective of increasing our ability to serve, should disaster strike.* ■

#### It Seems—continued from page 1

that there would have to be no problems with the April issues. The reply was, "There will be no problems. We had some teething troubles, but we now have solutions to all our problems and future months will be on time." Since it was now mid-March, CRRL had no choice but to stay with the new contractor for April *QST* and *QST Canada*.

As this is being written the outcome of the March mailing is not yet known. What has come to light is the first delay with the April issues, and we now know that

the new contractor cannot ensure delivery before April 01. For us, this was the final straw. We have now ended our relationship with the new contractor and have reverted to our tried and true process. I hope you will be reading this issue of *QST Canada* before May 01.

The underlying problems of the GST and future postal hikes remain unsolved. One thing is very clear. If the GST does cause a delivery delay, it will be a far smaller delay than our "solution" caused. Of course, we are on the lookout for better solutions, and we would appreciate hearing your ideas.

To all of you, our sincere apology for the delays and the inconveniences that were caused. Like you, we were victims of circumstances over which we had little control. Unlike you, we caused those circumstances by a decision we made. That we thought our decision was the right one, and would benefit every CRRL member, is our sole excuse. —Ray Staines, VE3ZI, General Manager, CRRL

A final note. Several hundred amateurs contacted the CRRL office during the mailing difficulties. We would have liked to respond to each message individually, but this was impossible. Thanks to all for your understanding and patience. —Harry MacLean, VE3GRO, Editor ■

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466-5779 469-0654  
8:00 AM TO 5:30 PM  
MONDAY THRU FRIDAY

A OF  
BADGE  HONOUR

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(founded 1947)

If you were first licensed in 1964 or earlier, you can belong to the exclusive society of QCWA. Join Southern Ontario Chapter 73, and exchange memories, experiences, banter and technical information with others of your own generation at our twice-annual luncheon meetings and on weekly nets. Special pins, certificates and QSL stamps also recognize those who have held an amateur licence for 50, 55 or 60 years.

Our next get-together is scheduled for May 12, at the Mohawk Inn, Campbellville, Ontario—on the Guelph Line 100 yards north of Highway 401. Join us, and bring a friend, prospective member or not.

For fees and application form, contact Phil Wharton, VE3RE, Secretary QCWA Chapter 73, Box 183, Waterford, Ontario N0E 1Y0. Other chapters in the National Capital Region, Alberta and British Columbia. Ask for contacts.

\* 170 CHAPTERS WORLDWIDE! \*

# Consider the Benefits... ...Join CRRL Today!

# Pensez aux avantages... ...Devenez membre dès aujourd'hui!

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!

Count me in! Here's my application for a one-year CRRL membership! I choose... / Comptez sur moi! Voici ma demande d'adhésion. Je veux devenir membre pendant un an et recevoir...

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Name/Nom: \_\_\_\_\_ Call/Indicatif: \_\_\_\_\_

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