



September 2002

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In this Issue

| | |
|---|------------------------------------|
| 1 | Past President's message |
| 2 | Hamfest 2002 |
| 2 | Contesting |
| 3 | June minutes |
| 4 | Direct bury RG-213? |
| 4 | The end of the line |
| 5 | Tracking noise |
| 6 | AMSAT-Oscar 7 returns to life |
| 6 | Renew your HARC Membership! |

The Hamilton Amateur Radio Club
 PO Box 91215, Effort Square PO
 Hamilton, ON L8N 4G4
 Est. 1932 Inc. 1956

The Hamilton Amateur

The Hamilton Amateur Radio Club Newsletter - 70 Years of Amateur Radio 1932-2002

Past President's Message

Emsley VE3JAI – Pat President

(As the first issue of our newsletter for the coming season is always composed during a state of change among the club executive, I decided to head up this edition with a message from the past president of HARC..ed)

Summer 2002 is almost over and hopefully everyone has had a wonderful summer so far. Our 70th year has just about ended and as we look forward to the future let us also look back at our activities over the year. We had some interesting speakers and topics, such as Paul Cassel VE3SY, who spoke about IRLP, Don Graziano VE3VZ, who told us about two of our top contest and DX stations and Jack Summer VE3XR, who brought an assortment of ham gear for demonstration.

As usual, the club ran a 4A classification on Field Day from the RBG Rock Chapel Sanctuary. We had approximately 20 club members out for the event and we all had an enjoyable time. The contest Group was again very active, participating in the OQP, Canada Day and other contests held during the winter months. It also became a member of the newly formed Contest Club of Ontario (CCO).

Hamfest 2001 was held on October 13 and was a success. The organizers did a fine job and have the gratitude of the club. Hamfest 2002 is now in the works and very soon the organizers for this year's event will be asking for volunteers. It will occur as usual in

October after Thanksgiving.

Elections at the last meeting of the club year saw three new members and three incumbents acclaimed to the executive. They are David Bruton VE3DWJ, Michael Krebs VA3WXS, Murray Thompson VE3ZPV, Walter Bayliss VA3WVB, Stanley Bolibruch VE3GFE and Fred Robinson VE3GCP. David,

Next meeting's Speaker

September 18

"Digital Photography and how it differs from Film Photography"

This promises to be informative, practical and interesting. Camtech Photographic Services on Concession Street is well known in our community and it is from there that our speaker comes.

In fact our speaker is Mr. Roger Burrough who is the founder and owner of this company. Roger will cover some of the basics of DIGITAL PHOTOGRAPHY and HOW IT IS DIFFERENT FROM FILM PHOTOGRAPHY.

If you have recently entered the realm or are thinking of doing so, then this could be for you. Why not bring a friend!

who became president elect at that meeting, has since resigned from the executive for personal reasons. John Vandenberg VE3DVV was appointed to the executive as vice president. Michael Krebs has assumed the position of president.

A very special thank you to all club members who came out to the Canadian War Plane heritage Museum on Aug 4-5 to operate at our special event station, VE3H. VE3H was our special call sign celebrating the club's 70th anniversary

Club meetings – 3rd Wednesday each month (except July and August) - 8pm in the St. John's Ambulance Association building, 500 Upper Wellington Street (on the Mountain). Park behind the St. John's building, NOT the Police station. Complimentary refreshments!

and the inauguration of Amateur radio station VA3CWM. As we enter into our 71st year let us do so with renewed interest and enthusiasm.

Hamfest 2002

Mardy VE3QEE – Chair

Our Club's annual flea market, HARC Hamfest 2002, will be held on Saturday October 19th, the weekend following Thanksgiving, as always at Marritt Hall in Ancaster. Funds from this event along with our membership dues sustain our Club activities for the coming year.

How can you help? Many members contribute to the operation of the flea market. Here are brief descriptions of a few of the jobs that need to be staffed with team leaders and volunteers.

On the day of the event a *Parking Detail* of six to ten people will be needed to sell tickets outside and direct cars to spaces in the parking lot. A few of the *Parking Detail* will be needed starting at 6:30am as vendors arrive. Later, the whole *Parking Detail* will be needed during the rush when HAMs are arriving and lining up at the door up until 9am when the doors open for general admission. As the inrush subsides, a skeleton crew can take turns directing latecomers to spaces in the lot.

At all entrances to Marritt Hall a *Security Crew* will be needed for the duration of the flea market to make sure everyone entering has paid admission and is entering or leaving by the proper door, the shipping door for vendors or the front door for patrons. Once again, the bulk of work for the *Security Crew* will occur during the rush at 9am when hand stamping takes place at the front door and tickets are being sold to those who did not get them ahead of time. Members of the *Security Crew* also answer questions and guide people inside the flea market and generally maintain smooth operation.

This year, for the first time, we have enlisted the help of a group of

Important points

Executive Meetings

HARC Executive committee meets each month, except July and August, at Mohawk College in room E031A. All members are invited to attend and participate. The meetings are scheduled monthly to fit the schedules of the Executive members.

VE3NCF [146.760- & 444.075+ MHz]

HARC operates VE3NCF repeater, located atop the Niagara escarpment. It's open for use by all Amateurs. Special features are a privilege of membership. VE3NCF is part of the VE3RPT link system.

Check-In and Swap nets

HARC "net" is held every Tuesday evening, except July and August, at 7:30pm. HARC "swap net" follows at 8pm.

Examinations

Amateur radio licence examinations are conducted the second Wednesday each month, except July and August. Contact the voluntary examiners to make an appointment. Each test \$3.

Membership Information

Club membership, including all privileges, is \$25 per person, per year, Sept 1 to Aug 31. Additional membership, for immediate family living in the same home, is \$1 per person. One newsletter sent to each address.

The Hamilton Amateur

The Hamilton Amateur is published ten times each year (not in July or August). Deadline for article submission is the *last Saturday* of the month for the next month's issue. Preferred format is .txt file. Articles will be checked for spelling and grammar, but the author is responsible for the factual content. E-mail submissions to David VE3STT at ve3stt@rac.ca

Pathfinders to operate the *Kitchen*.

They will be doing this job on behalf of the Club, and we will be recognizing their contribution with a donation to the Pathfinder group.

Volunteers on the *Flea market Committee* promote and advertise the flea market, design and print flyers and tickets, register vendors, purchase

materials, contact volunteers, and plan the event. This year's *Flea market Committee* began working last year when a contract was signed for the Hall. Work on this committee extends through the year.

On the morning of the flea market many volunteers who may also be doing other jobs also form the *Set-up and Clean-up Crew*. Upon arrival at 6am to set up tables and chairs, this process, with enough help, is completed in about half-an-hour.

As the flea market wraps up the same number of volunteers are needed to take down the tables and chairs, put out the garbage, and sweep the floor, leaving the room in the same condition as it was found in the morning.

One or more volunteers are needed to monitor the talk-in station and be our *Talk-In Host* on VE3NCF, 146.760 (-), and give directions to HAMs driving to Marritt Hall.

A volunteer is needed to make announcements on the public address system at the flea market. The *Master of Ceremonies* will welcome patrons, announce door prize winners and make any other general announcements.

Early on the day of the flea market signs need to be posted at strategic locations on the route to ensure patrons make the right turns to get them to Marritt Hall. We have signs. A *Sign Poster* is needed to put them up and take them down after the event.

These are jobs for which you can volunteer. Please help out in some capacity. The ultimate success of our major fundraiser depends on the involvement of all of us Club members.

Contact any executive member or team leader to volunteer your help at the flea market.

Contesting

David VE3STT – Editor

RAC Canada Day Contest – VE3DC

The challenge was a simple one on July 1st, 2002 for the VE3DC contest group.

In fact, it's the same challenge we always give ourselves – make this the best contest operation yet!

With stations set and ready to go on 2m/6m, 40ssb, 20/40cw, 80ssb, 10/160cw/ssb, 20ssb and 15ssb/cw/80cw we felt confident that we had everything covered!

After a few minutes of “Murphy” of the top of the contest, we settled in only to find that the conditions on most of the key bands were just this side of brutal.

But, the VE3DC crew has learned a thing or three over their many years of working M/M operations and the key is “stay at the radio, despite perceived conditions, and (especially when M/M) call CQ!” in fact, “staying at the radio and operating despite the conditions” is almost the “prime directive” for any contester.

With almost all the positions manned for the highest percentage of contest time I can remember, and despite a few more ventures into “Murphy-land” we came away with our best ever showing on Canada Day!

The line score:

1626 q – 108 mlt – 1,124,496 pts

Each of those numbers marks new territory for VE3DC on Canada Day. It was the first time we topped 1-million points during the summer and some of the other numbers, band scores, etc. equalled and surpassed our best showings in either the RAC Winter or RAC Canada Day contests!

Contest Calendar

Some of the notable upcoming events, as we embark on yet another contest season, include:

Worked All Europe SSB – Sept 14/15
ARRL VHF Qso Party – Sept 14/15
Texas Qso Party – Sept 28/29
California Qso Party – Oct 5/6
RSGB 21/28MHz SSB – Oct 6
PA Qso Party – Oct 12/13

There are several places on the net where you can find information on these and other individual contests. Or, feel free to send me an e-mail through ve3dc@rac.ca (or my e-mail address)

HARC 2002-2003 Executive

President

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Past President

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Murray Thompson VE3ZPV
905-388-2876

and I can point you in the right direction.

June minutes

Fred VE3GCP – Secretary

Minutes of General Meeting held June 19, 2002.

As has been the case over the past year, our president Emsley Mitchell VE3JAI opened the meeting, at 8:05pm. In the congenial style to which we have become accustomed, he welcomed back some of the members who had not attended meetings in some time. In a couple of cases this was as far back as the 1960s.

Getting right on with the meeting he outlined the topic and format for the night. The topic was the use of computers and some specific software for the Ham shack. Of course the source of this technology and knowledge was available within the ranks of our own membership. The first to speak was Rick Danby VE3BK, who is our



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resident contesting guru, and he did a digital presentation of a contest-logging program known as NA. This was particularly appropriate as Field Day is on the upcoming weekend. Most of our FD stations will be using this logging method this year.

Next John Vandenberg VE3DVV, our technical ace, gave a demonstration of several other programs that are available for the Ham shack of today. He also did an active computer demonstration of some other programs that do such things as satellite communications and tracking. He also showed a program called Hamscope, which is used for audio/digital management. One application of this would be IRLP that we have started to hear a lot about lately. A long time member Dave Rypma VE3HTC, who established a live contact with John Dykstra VE3CYC, assisted John. David received “slow scan” pictures sent in real time by John Dykstra and these were projected

to the screen by John Vandenberg, done by using a program called Chroma Pix.

Finally, Emsley did an on screen demo of two programs used to generate and teach Morse code. These were called Morse Academy and Super Morse. One neat aspect of these is that they can take you through the learning process and then determine your rate of improvement and tell you where you strong and weak points are.

Then Bob Milburn VA3MFM was called to conduct the Election of Officers for the 2002-2003 term. Bob did this with great dispatch in announcing that there were only 6 candidates nominated and therefore, the ballot was acclimated. At this time we broke for our traditional fare of donuts, pastries and coffee. The new exec held a meeting to decide who will hold each of the positions as required by our constitution. After the break the new slate of officers was announced as follows:

Past President-Emsley Mitchell VE3JAI, President-David Bruton VE3DWJ, 1st VP-Stan Bolibruch VE3GFE, 2nd VP Mike Krebs VA3WXS, Treasurer-Walter Bayliss VE3WWB and Fred Robinson VE3GCP as treasurer. The club welcomed their new executive.

Mardy Eedson VE3QEE, our membership chair, reminded the members about getting their membership renewals in, especially in time for entry into the free membership draw for those received by September 30, 2002. Mardy is also the education chairman and advised us about Amateur classes that will take place in September at Mohawk College in room EO31A.

Rick Danby VE3BK asked for interested parties to contact him ASAP if they would like to work the Canada Day Contest coming up on the long weekend.

The president adjourned the meeting at 10:10 PM and some informal last minute brainstorming took place with regard to this weekend's Field Day effort.

Hamfests

Hamilton Amateur Radio Club

Hamfest 2002

Marriott Hall, Ancaster
SATURDAY, OCTOBER 26th!

Admission: \$5

Talk in: 146.760 MHz

Contact Hamfest Chair for table info.

Barrie Fleamarket

Barrie ARC

Shanty Bay Community Centre, Hwy
400, North of Barrie

SATURDAY, SEPT 7th!

Admission: \$3

Talk in: 147.000 MHz

London Fleamarket

London Amateur Radio Club

Western Fairgrounds, Special
Events Building, London

SUNDAY, SEPT 22nd!

Admission: \$6

Talk in: 147.060 MHz

York Region Hamfest

York Region Amateur Radio Club

Markham Fairgrounds, McCowan Rd
and Elgin Mills Rd E, Markham

SATURDAY, NOV 2nd!

Admission: \$5

Talk in: 145.350 MHz

For the latest information, about these and other hamfests, visit the RAC website (linked off the HARC website (URL on the front page)!

Direct bury RG-213?

The following note was submitted as e-mail to ve3dc@rac.ca

(Because the fall months are traditionally a time when most of us put final touches on new antenna projects, tower work and upgrades around the yard and shack, I thought it timely to pass along some of the wisdom of one of the major US cable/wire suppliers, Press Jones N8UG, The Wireman, Inc., that I found on the towertalk reflector over the summer..ed)

The claim that a legitimate RG213 is OK for direct burial is one of the most common misconceptions in the business.

1. It is not so rated and never has been. It has a Class IIA (non-contaminating) jacket, which is good for 10-15 years ABOVE ground in sun, or most any environment except in the earth. Many dealers in the Amateur community still spread the direct bury myth, sad to say.

2. Many of the RG213/U types on the market are not even Class IIA, but Class I instead, good for 5 to 10 years, also above ground. Depends on dealer honesty. Generally speaking, if it's under 40 cents a foot (US), it is not Class IIA. Belden 8267, for example, is often as high as 90c a foot.

3. Truly buriable cable usually has a regular or high-density polyethylene (Class IIIA) jacket and a moisture block media in or with the braid. More commercial cable also has "armour" of sorts as well.

4. Another myth regarding "non-contaminating" jackets is that they are best in any cable environment. In fact, a good Class IIA is reduced to Class I when in close company with Class I cable.

5. One more myth is that any and all cable is safe underground in a pipe or tube full of holes. You might as well run it in the pipe to the septic tank, it would at least have no roots or critters!

All of this is pursuant to utilizing the cable one spends good money for according to its designed use. If one doesn't mind getting half or less of the designed life of the cable, or actually wants short life stuff, then most anything is OK. There are dozens of good cables available for the user's use, however unique.

Shop wisely, ask questions - get the right stuff for your project!

The end of the line

The following note was submitted as e-mail to ve3dc@rac.ca

Radio Amateur Callbook is throwing in the towel and will cease publication of its CD-ROM Callbook product effective with its winter 2003 edition, which will come out in November. "Due to

accessibility to the FCC database via the Internet, sales have declined to levels that make it unprofitable to publish future editions," publisher Bob Hughes announced in a recent news release.

In 1997, citing "rising costs and increasing demand for electronic publishing" the company phased out its telephone-book-size paper North American and international editions in favour of its CD-ROM product. The 1997 Callbook, the 75th edition, was the last hard-copy version available.

The Callbook began publishing in 1920.

Tracking noise

The following note was submitted as e-mail to ve3dc@rac.ca

(This also came to me over the summer and I thought it might be some excellent information to pass along. One of the most common problems in any Amateur shack is noise, from any number of sources. This particular story comes via Jim Idelson K11R, but the procedures with which to track noise are somewhat universal inside the shack..ed)

After taking a major lightning strike last summer, there were lots of repairs to do. Both my office and shack were affected. Rigs were blown; computers damaged; it was a mess. While rebuilding, I didn't operate the station much until ARRL DX this year.

One of the things I noticed just prior to the contests was a lot of low-band noise [80/160m]. I did some basic testing, and determined that noise sources appeared to be coming from outside the shack. This determination was made after powering down every item in the shack, except the receiver - and the noise was still there. It would also seem to increase in strength with the 80m yagi aimed away from the house, and it was also strong on the beverages [also aimed away from the house]. So, everything seemed to point to an external noise source. But, there was no time to track and eliminate the problem in the few remaining hours before the contest.

We operated the contests with the noise there, and lost a lot of points as a result.

HARC 2002-2003 Chairs

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Stanley Bolibruch VE3GFE
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Repeater
John Vandenberg VE3DVV
905-692-3802 ve3dvv@rac.ca

Swap-Net Control
Frank Love VA3FWL
905-679-4524

I even got an email from another contester who wanted to let me know just how obnoxious we were on the low-bands, calling DX stations when they were already coming back to someone.

He was right, we were in bad shape, and it showed. The day after the SSB contest, I was so frustrated with the problem that I went out and started to track neighbourhood electrical noises with the mobile rig. Boy, did I find a lot of things. Well, after a long search, I located a very noisy CATV power supply. It was emitting a lot of electrical noise and it was audibly humming away up there on the pole, too. I was 99% sure this was the problem. With a boatload of assistance from well-connected contacts in the CATV company, the power supply was replaced. The electrical and audible noise in the area, immediately around the power supply, were both eliminated. I rushed back to the shack to see if the problem was gone, and to my amazement, it was still there, rock solid.

Although it didn't solve my noise problem, the CATV people said the supply really did need to be replaced, so their efforts were not in vein. I really appreciated their help. Good thing I left that 1% chance in my mind, though. So, I went out driving again. I found more noise sources, two street lamps that were arcing and failing to start properly. They were generating 40-60dB over S9 noise. That noise was being radiated from the power lines for up to 2 miles from the source. I reported them to the power company for replacement.

But, these sources were time-of-day-dependent. During daylight hours, they were quiet. And my noise was still there, all the time, day and night.

At this point, I was completely stumped, almost ready to talk to my wife about putting the house up for sale. Instead, I decided to just take a couple of days away from the problem and return to it later with a fresh approach. When I decided to attack the problem again, I had already thought about how to approach it:

1. Start over - make no assumptions.
2. Recognize that the source will very likely be obvious, when found.
3. Question everything.

So I started over, looking inside first. Once again, I powered down everything

but the receiver. And, there was the noise. But, this time I wasn't going to start looking for external noises so quickly. Was there still a possible noise source in the shack or the house? I realized that I hadn't really powered down everything, the receiver was running off the UPS hidden under the desk! I moved the receiver to straight ac power, and the noise was GONE!

The UPS was installed last summer as a protective measure against lightning and other power failures [we have them frequently in my town]. I had just finished telling the world how great the UPS was during the power glitch we suffered on Sunday morning in the ARRL SSB contest, so the device was fresh on my mind.

The buzzing/hash noise generated by the UPS only appeared when a device was plugged into it. It could be anything. And it would go away sometimes when the device power was turned on, loading the UPS output. This had the feel of a radiated noise from the device power cord. There were a number of potential tests to perform, but the solutions were limited. So, I went straight to the solutions, instead of messing around with testing. I took an old line cord and wrapped most of it around multiple ferrites. I connected the stripped end to a series line filter, and then fed that into a highly filtered multiple-outlet strip with surge suppression. I plugged that into the output of the UPS and started testing for noise. Gradually, I added all the loads back to the filtered UPS output, and determined that these measures have completely eliminated the noise.

Lessons learned or reinforced:

1. The problem is most likely to be blatantly obvious when found.
2. Don't assume too much.
3. Definitely don't be too tough on anybody, like utilities, until you can PROVE they are the problem.
4. It ain't over 'til it's over.
5. The UPS is still a GREAT thing to have in the shack/office, no change in my previous conclusions on this subject.

AMSAT-Oscar 7 returns to life

The following note was submitted as e-mail to ve3dc@rac.ca

The AMSAT-OSCAR 7 satellite suddenly has come back to life after being dormant for more than 20 years.

First heard June 21 by Pat Gowan G3IOR, AO-7 subsequently has been monitored and used by several other amateurs. AO-7 was launched November 15, 1974. It remained operational for more than six years before succumbing to battery failure in 1981.

"I'm blown away," was the reaction of AO-7 Project Manager Jan King W3GEY. "So, this old war horse of a spacecraft seems to have come back from the dead if only for a few moments."

Exclaimed satellite enthusiast and AMSAT Vice President for User Services Bruce Paige KK5DO, "This is really awesome." Paige said the latest turn of events makes AO-7 is the oldest amateur satellite that's still working. AMSAT-NA has now listed AO-7 as "semi-operational."

AMSAT says it seems certain the satellite is running only off its solar panels, not from the onboard batteries, so it will be operational only while it's in sunlight. King speculates that the batteries, which shorted as they failed two decades ago, now are "un-shortening" and causing the satellite to come back to life.

For those attempting to use AO-7, Mode A (2m up/10m down) is not a problem, but Mode B (70cm up/2m down) is. Because of changes in the international Radio Regulations that went into effect in the 1970s as AO-7 was under construction, the 432.1MHz uplink frequency is no longer authorized for space communications.

AMSAT advises potential users that when up-linking to a satellite, they are operating in the Amateur-Satellite Service. AMSAT says up-linking to

AO-7 "is possibly illegal since the Amateur Satellite Service is not permitted at 432.1MHz." The current band plan earmarks the 432.1MHz range for weak signal work. Section 97.207(c) of the FCC's rules authorizes space station operation only in the 435-438 MHz segment.

AMSAT has additional information on AO-7 on its Web site, <http://www.amsat.org>.

Renew your HARC Membership!

The Club membership year runs Sept 1st to Aug 31st the following year. As a new season begins it is time to renew your membership. Individual memberships are \$25. Additional family members living in the same household are \$1 each. If your renewal is received before Sept 30th you are eligible for the early registration incentive draw. The winner will be announced at the October meeting.

To renew your membership send a cheque or money order, with this page/box (or copy), payable to the Hamilton Amateur Radio Club (H.A.R.C.). In return, a membership card and receipt will be issued. As an alternative, the membership chairman will also accept cash at the September meeting.

Membership Renewal

Name (s): _____

Callsign (s): _____

Amount enclosed: _____

Send your renewal to:

**Hamilton Amateur Radio Club,
Box 91215 Effort Square Postal Outlet
Hamilton, Ontario,
L8N 4G4**

Mardy Eedson, VE3QEE, is your membership chairman for the coming year. Contact Mardy if you have any questions concerning membership renewals or new membership applications.