

The Hamilton Amateur

The Hamilton Amateur Radio Club Newsletter – 75 Years of Amateur Radio 1932-2007

The Hamilton Amateur Radio Club
 PO Box 91215, Effort Square PO
 Hamilton, ON L8N 4G4
 Est. 1932 Inc. 1956
<http://www.hamiltonarc.ca/>

In This Issue

Annual Meeting----- 1
 Renew your HARC
 Membership----- 1
 Minutes May 21-----2
 Home Brew Results---- 2
 HARC Executive----- 2
 Experiment on the High
 Seas----- 3
 HARC Chairs----- 3
 Crank Up Tower----- 4
 Important Points----- 4
 Through the Glass
 Feedline Coupler-----5
 News About Town----- 6

Annual General Meeting and Election

Meeting room opens at 7:00 p.m.
 Meetings begin at 7:30 p.m.

Wednesday June 18th.

Our annual general meeting and election will be held on June 18th at the regular time. Joe Urbanski,

VE3OCD has agreed to serve as election chairman.

The management structure of the Hamilton Amateur Radio Club is set out in the HARC constitution. Accordingly, *“the affairs of the Club shall be managed by a Board of seven Directors, each of whom, at the time of his/her election and throughout his/her term of office, shall be a Member of the Club. The Past President of the Club shall be ex-officio a Director and member of the Club. Each of the remaining six directors shall be elected to hold office from the 1st day of September, of the year for which he/she is elected, or from the date of his/her election if he/she is elected during the year, until the 31st day of August of the following year, or until his/her successor shall have been elected or qualified. The whole Board shall be retired on August 31st in each year, but shall be eligible for re-election if otherwise qualified.”*

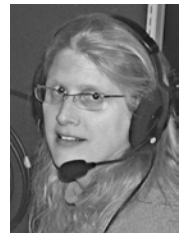
Who will take the portfolios of President, 1st Vice President, 2nd Vice President, Secretary and Treasurer is decided by the directors at an executive meeting taking place at a later date following the general meeting. The new executive will be installed at the September meeting.

To nominate a candidate for director submit your nomination along with the name of a seconder to the election chairman, Joe Urbanski, VE3OCD. Nominations for the election are open now and will remain open until just before the actual election. Joe, the election chairman will be calling for nominations from the floor at the

general meeting, and then he will declare nominations closed. Persons eligible to vote must have been members of the club during the 2007/2008 year. Nobody will be eligible to join the club at the Annual Meeting and by so doing qualify to vote at that meeting. If you received this newsletter by mail you are on the membership list and qualify to vote.

Renew Your HARC Membership

Sherry Goeller,
 VE3ZQV, membership.



The new club year will be starting on September 1st 2008. Now is a good time to renew your membership. Dues are \$25.00 per primary member, and \$1.00 for a family member living at the same address. As in the past we are offering an early renewal incentive in the form of a draw for a free one year's individual or family membership. To be eligible for the draw renewals must be received before the end of the September club meeting on September 17th. Please take a moment to join or renew your membership at this time. Membership dues pay for the room where we hold meetings, the autopatch telephone, repeater expenses, publication of the newsletter, club insurance, Hamfest promotion, web site, and other operational expenses of the club. For your convenience a

Club meetings – 3rd Wednesday each month – 7:30 pm (except July and August) at Hamilton District Christian High School, 92 Glanaster Road corner of Rymal Road (Hwy. #53) and Glanaster Road. Parking on location. Complimentary refreshments.

membership renewal form can be downloaded and printed from the club web site at <<http://www.hamiltonarc.ca/pdfs/harcmembership.pdf>>. Please mail your remittance or bring it to a club meeting.

Minutes of the May 21 Business Meeting

by Mardy Eedson, VE3QEE, standing in for secretary Roger Pimm VE3UFZ



Adoption of the Minutes. Mike VA3WXS moved and Gerry VE3JSO seconded that the minutes be adopted as printed in the newsletter.

Treasurer's Report. Fred tendered a written financial statement to the secretary. There were no questions from the floor regarding finances. Fred VE3GCP offered the remaining Club golf shirts to interested members.

With sadness, Fred announced the passing of Marion Luba VE3FDO, ("five dollar order") one of the original group of thirteen white cane club members from the late 1960s. Marion had owned and operated a 16 unit + 6 store apartment at Barton St. and Sherman Ave. where he did much of the custodial and maintenance work himself. His blindness resulted from military action while Marion served his country in WWII. During his time with the Hamilton Amateur Radio Club Marion was a very active member, and one of the original participants in the White Cane Group who, in those days, had their own station during Field Day. Marion was well into his 80s when he passed away. Mary VE3OGQ will send a sympathy card to the family.

Contest Group. Dan VA3DJ gave a contest report on behalf of Rick VE3BK who could not be at the meeting. Dan extended an invitation for operators and loggers at the Canada Day contest which takes

place following Field Day, on Monday June 30th at 8:00 P.M. until Tuesday July 1st at 8:00 P.M. We will be operating on all bands. If you have a radio to bring out we can get you an operating spot and hook up a suitable antenna. This is a fun contest because it is Canadian and we enjoy contacting our fellow HAMS in all parts of the country. Come and join us for Canada Day at the Contest Site.

Education. Mardy VE3QEE reported that a basic course is scheduled to begin the second week of September on Thursday at 7:00 P.M. at Mohawk College.

Membership. Sherry VE3ZQV reported that we have 71 paid up primary members and 8 family members for a total of 79 at this time.

Adjournment. Mike VA3WXS moved and Joan VA3JNX seconded that we adjourn. The business meeting adjourned at 9:17 P.M.

HARC Home Brew Competition 2008

Adam Mitchell, VE3BAU, was awarded this year's Crawford Trophy with his entry, a portable solar-charged battery-based power supply housed in a handy tool box. A neat package. Shucks, nobody had a camera at the meeting to take a picture.

Runner-up was Bob Zimmerman VE3RKZ. Bob had several entries including the offset fed 2-meter yagi antenna featured in our last issue, of THA and a home brew microwave station with an ingenious glue can cavity filter.

All in all there were seven entries along with show and tell items. Members commenting afterward called this month's meeting one of the best Home-Brew nights they could

HARC 2007-2008 Executive

President

Lorraine MacPherson VA3NZ
905-389-7653
va3nz@hamiltonarc.ca

Past President

Mardy Eedson VE3QEE
905-648-0187
ve3qee@hamiltonarc.ca

First Vice President

Emsley Mitchell VA3QI / VE3JAI
ve3jai@hamiltonarc.ca
905-627-0333

Second Vice President

John Vandenberg VE3DVV
905-692-3802
ve3dvv@hamiltonarc.ca

Secretary

Roger Pimm VE3UFZ
905-560-2628
ve3ufz@hamiltonarc.ca

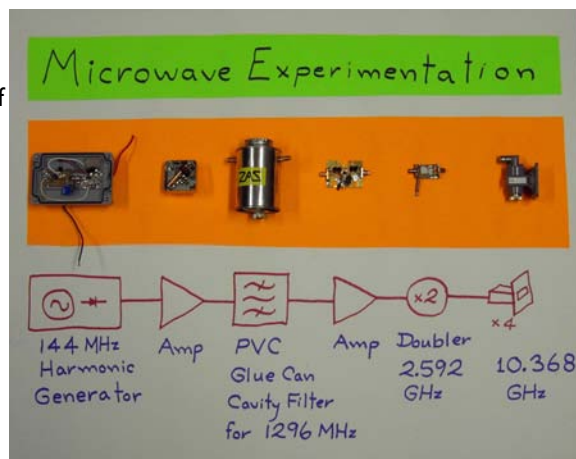
Treasurer

Fred Robinson VE3GCP
905-575-5197
ve3gcp@hamiltonarc.ca

Director

Adam Mitchell, VE3BAU
ve3bau@hamiltonarc.ca

remember. Participation was high, there was lots to see and the ingenious entries showed that home-brewing is indeed alive and well.

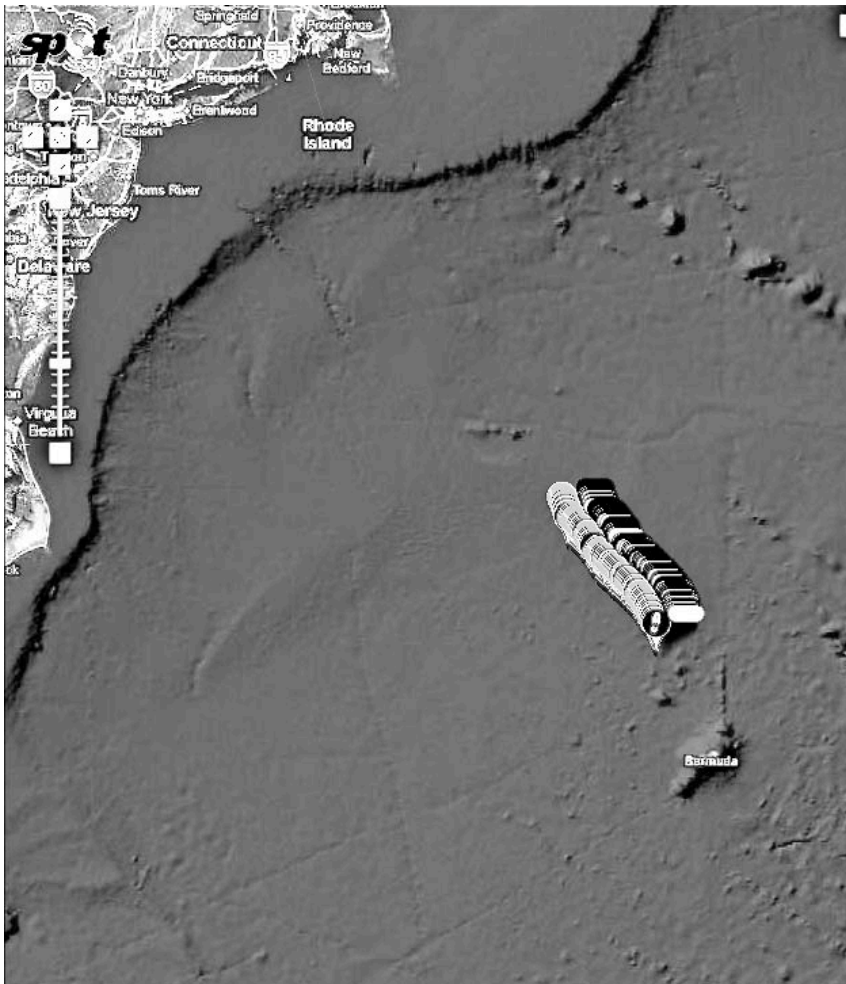


Experiment on the High Seas.

Roger Pimm, VE3UFZ agreed to help Bob Shaw VE3YCT bring Bob's yacht from Bermuda to New York. en-route he'll try to contact us by radio. Here are the details.

Hi folks, On June 7th, I will be flying to Bermuda to help a buddy sail his boat to New York. His trip started in the British Virgin Islands and will proceed via Bermuda to New York and then up the Hudson River to the Erie Canal and home to Bronte. I will be on the Bermuda to New York leg only. Our tentative QSO schedule will be daily at 19:30 on the club rag chew frequency 14.135MHz. We will also attempt to check in to the Mississauga Maritime Net on 14.122.5MHz at 07:30 EDT - Monday to Friday. If you want to track our

progress, check into this web site. The "SPOT" software operates via satellite and produces a track on what looks like a google map. Positions are updated around every 10 minutes continuously. <http://share.findmespot.com/shared/faces/viewspots.jsp?&glId=0B8xG9dPElqmcM6eoMEsIQWDsIb73ptXZ>. Give it a try. All being well with antenna's and tuners, we may be able to communicate on the 20M band... There is currently no HF equipment on board so I will be taking my Yaesu SAT890 and use Mardy's VE3QEE "end fed" 20M antenna. Also, I am not sure what the battery budget is for the boat. We may not be able to transmit for very long periods of time. The priority for battery ampere hours will be autopilot, gps, lights and pumps. Whatever is left over we can use for playing radio. Wish us luck.... Cheers, Roger



HARC 2006-2007 Chairs

Awards Chairman

Casey VanBroekhoven VE3CVP
905-385-8724 <ve3cvp@hamiltonarc.ca>

Contesting Manager / Property

Rick Danby VE3BK
905-544-3253 <ve3bk@hamiltonarc.ca>

Education Chair / Flea Market

Mardy Eedson
<ve3qee@hamiltonarc.ca>

Volunteer Examiners

Lorraine MacPherson VA3NZ
905-389-7653 <va3nz@hamiltonarc.ca>
and
Bernard Granby VA3XJ
905-527-7175 <va3xj@hamiltonarc.ca>

Field Day Co-ordinator

David Bruton VE3DWJ
905-383-9808 <ve3dwj@hamiltonarc.ca>

Repeater Chairman

John Vandenberg VE3DVV 905-692-3802
<ve3dvv@hamiltonarc.ca>

Health & Welfare Chairperson

Mary Urbanski VE3OGQ 905-388-8383

Hospitality

Bernie Granby VA3XJ 905-527-7175
<va3xj@hamiltonarc.ca>

Membership Chair Sherry Goeller

VE3ZQV, <ve3zqv@hamiltonarc.ca>

Newsletter Editor

John Hudak VE3CXB 905-627-9475
<ve3cxb@hamiltonarc.ca>

Public Liaison Co-Chair

Stanley Bolibruch VE3GFE 905-528-4002
Neil Galloway VE3VNG 905-383-6986

Swap Net Controller

Don Grisenthwaite VE3DDQ
905-388-1365 <ve3ddq@hamiltonarc.ca>

Communication

Michael Krebs VA3WXS 905-523-9005
<va3wxs@hamiltonarc.ca>

Web Master

Anita Thomas VA3ANI,
<va3ani@hamiltonarc.ca> and
Emsley Mitchell VE3JAI / VA3QI
<ve3jai@hamiltonarc.ca>

New Crank Up Tower

Recently the Club acquired a crank up tower for the contest site. Here is the story reported by Rick VE3BK (first part) and Sherry VE3ZQV (second part).

Rick (part 1)

I want to thank Sherry and Dave for helping do the picnic table repairs etc. We used Sherry's trailer to get my old one out there, did repairs to it and used pieces of wood and screws from the old table and from the wood pile to make a good solid table that should last us a while. It was a good team effort.

Next off to Tim Hortons to meet John and Joe. Coffee time and then off to pick up Dan and let Sherry and the guys see his place and meet his Mom and Dad. Off to St. Catherines to John's friends place to get the tower. We had it loaded in no time with everyone helping to get the hydro type stakes out of the ground, the stakes holding the base, and loading and tying everything down so that it wouldn't come through the back of Sherry's car if we had to stop in a hurry. Great team effort again. John's friend was a very gracious guy and he showed us his shack, crank-up

tower and he offered us all a drink while we had a good face to face ragchew. I think he was very happy to have a bunch of hams come to his place. He introduced us to his wife as all hams. We maybe ended up staying a little too long but enjoyed ourselves. Sherry even took some pictures. His tower and station was very impressive.

The rest was just dropping things off at the Contest site etc. A great team effort by all.....thanks to everyone that helped. The best is yet to come when we figure out how we are installing the tower. A great day was had by all and I am sure we will have more fun installing and then using this great home made tower.

Sherry (part 2)

Attached is a picture of my trailer with the tower stowed away. The tower when extended to full height is about 70 feet. Not too sure what antenna(s) will be attached to it but I am sure it will get fully used. The folks that went in and got it were Rick, VE3BK, John Vandenberg VE3DVV, Dave Bruton VE3DWJ, Dan Marinak VA3DJ, Joe Urbanski VE3OCD and myself, Sherry Goeller VE3ZQV. It's sitting at the contest site currently with plans on putting up ASAP.



Important Points

Executive Meetings

HARC Executive committee meets each month, except July and August. Members are invited to attend and participate. The meetings are on the Wednesday following the club General Meeting each month. Ask an executive member for the location.

VE3NCF 146.760 - & 444.075 +

HARC operates VE3NCF repeater, located atop the Niagara Escarpment. It's open for use by all Amateurs. Special features are a privilege of membership.

Nets

HARC "check-in net" is held every Tuesday evening at 7:30 p.m. HARC "swap net" follows at 8 p.m. All contacts are welcome.

Examinations

Amateur radio license examinations are conducted the second Wednesday of each month, except July and August. Contact the voluntary examiners to make an appointment. There will be a fee for each examination.

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 factual content. E-mail submissions to Editor, John Hudak VE3CXB, <hudakjm@mcmaster.ca>

Low-Q Thru-the-Glass Coupler for Apartment Dwellers

by Bob Zimmerman
VE3RKZ



Introduction:

Ham radio operators in apartments are often faced with the real problem of how to get their feedline outside. Here we present a thru-the-glass coupler which may be used for this purpose. We will assume that the aluminum window sill is accessible for returning the 'ground' connection on the coaxial cable, either with an appropriate alligator clip or perhaps a sheet metal screw with solder lug.

This coupler is for single-pane windows, and uses a small copper foil patch on the glass to carry the RF current outside. If you have double-pane windows, don't try this as the size of the patch would have to be much larger.

The coupler may be used on 40-30-20 or 15 meters, but only on a single band.

Theory:

We can make a low-loss capacitor (with glass dielectric) to carry RF current by affixing a patch of copper foil on the inside and outside of the window. Of course the patches should be aligned with each other for the highest possible capacitance. I made a 6"x6" square patch from adhesive copper foil available from Digi-Key Corporation, made by 3M. The patch was measured and found to be 270 pF, which is a capacitive reactance at 7 MHz of $-j80 \Omega$.

We can make this reactance effectively 'disappear' by putting a 1.8 uH coil ($+j80 \Omega$) in series with it. Since the capacitor and coil resonate to yield zero ohms reactance, a 50 Ω load outside the apartment will be available inside the apartment unchanged as 50 Ω . Theoretically, the

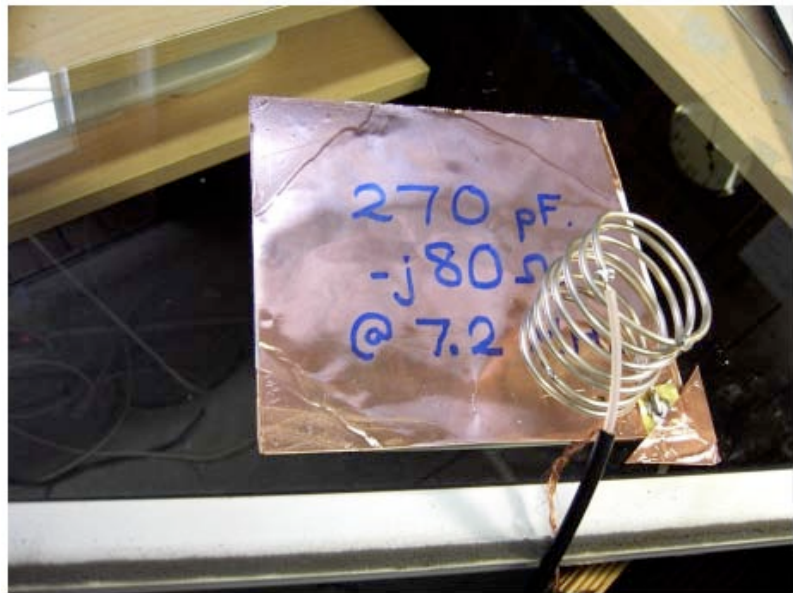


Figure 1 – 40 meter coupler using 6"x6" copper capacitor.

coil can go inside or outside the apartment; I feel it is best to put the coil inside, as it can easily be adjusted by hand and will avoid oxidation & weathering. Figure 1 shows the 40 meter prototype going together.

Scaling:

Table I shows the patch area and coil size for 40-30-20 and 15 meter use.

For example, if we would like to use the coupler on 14 MHz, a smaller patch will readily suffice as the capacitive reactance decreases with frequency, and a $270 \text{ pF} / 2 = 135 \text{ pF}$ capacitor is fine.

Results on 40 meters:

The prototype coupler was made for 40 meters. I attached a 50 Ω non-

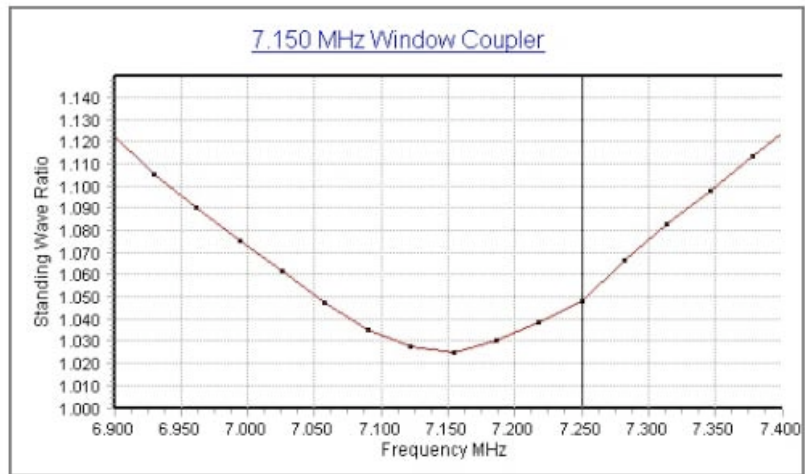


Figure 2 – The bandwidth of the coupler is so wide on 40 meters that almost any 40 meter antenna can readily be accommodated.

| BAND | Patch Size | Reactance | Coil |
|------|----------------------------------|------------------|---------|
| 40 m | 6"x6" = 36 in ² | $\pm j80 \Omega$ | 1.82 uH |
| 30 m | 5.2"x5.2" = 27 in ² | $\pm j80 \Omega$ | 1.27 uH |
| 20 m | 4.3"x4.3" = 18 in ² | $\pm j80 \Omega$ | 0.91 uH |
| 15 m | 3.7"x3.7" = 13.5 in ² | $\pm j80 \Omega$ | 0.61 uH |

Table I – Suggested values for window pane patch and resonating coil.

reactive load resistor outside the window and measured the SWR shown in Figure 2 inside the shack. As a further test, I made a QSO on 7.130 MHz with Mardy Eedson, VE3QEE, to confirm good operation. The SWR in the shack was 1.05:1.

News About Town

by Mardy Eedson, VE3QEE

I got this note Tuesday by e-mail from Doug Last VE3NBL.

Good Morning Mardy. Made contact with Roger this morning at 11:40 UT, position 32deg 35 N 64deg 69 W heading 320 deg. M. Speed 5 1/2 to 6 Knots. All is well on board. I estimate they have just over 700 miles to go to New York Harbour. ETA New York, my estimate, late Sunday or Monday mid day. Roger will try again tomorrow at 8:45 local time on 14:122.5 on the Mississauga Maritime Net. Doug VE3NBL.

A number of Hams from Hamilton were spotted at the Dayton Hamvention this year. Joe and Mary VE3OCD and VE3OGQ met the group for lunch on Friday and Saturday. Don Graziano VE3VZ and Vic Spafford VE3VMO, along with another local ham were spotted in the exhibit hall and on the ramp leading to the outdoor flea market. Mardy VE3QEE, Fred VE3GCP, and John VE3DVV were also in attendance. We also saw Norm Freiden VE3CZI from Burlington and noticed that Maple Leaf Communications had table at the flea market.

It seemed like there were slightly fewer people in attendance than there were last year, and possibly fewer outdoor vendors. However, the crowds were still enormous and there was lots of new stuff to see, well worth the trip.

Several times recently, when we were having all the stormy weather, the CANWARN net was paged up by Environment Canada. A number of local observers were on the net



Kenwood TS-830-S

www.rigpix.com

passing reports of high winds, heavy rain and hail. Thanks to AI, VA3AM and Jerry VE3JSO, and the network of observers for maintaining this important service on VE3RFI - 443.250MHz – tone 151.4KHz
VE3TVI - 146.805MHz – tone 151.4KHz and
ECHOLINK node 149477

For those of you who are members of ARRL, and who subscribe to what used to be called the Contest Rate Sheet, please note that the publication is now to be known as *ARRL Contest Update - News and Techniques for the Active Operator*. It will be published in HTML in addition to the traditional format so that pictures and graphics can be included for the first time.

Rick VE3BK passed along a some information about my mentor the late John Parr VE3ITC (SK). Rick calls this item *A Legacy Continues Here* is the story in Rick's own words:

"John Parr VE3ITC became a silent key about a year ago. He was just mentioned in our bulletin in June 2007. I didn't really know him as well as some of the other members of the club but have heard some things about him and experience his kindness first hand which led me to write this. He left us with no fanfare, but his legacy will live on. First the first hand experience I had with his kindness. I was called by one of our members of the Club and told that this fellow wanted to donate a tower and beam to our Contest Group. Well, right away we went over and took down a Delhi tower and a 20m beam that he donated to our group. He was so impressed by our speediness in getting

his request accomplished so fast (he wanted to get the tower and beam down) that he commented to Mardy about our speediness and team work. Now the other reason for this article. He passed with no fanfare but has left the Ham Radio world with a legacy. He left a radio that has been passed to many hams on (a lot of those Hams were from our Club...you know who you are). The whole idea of that radio being passed from amateur to amateur, was to give the new to HF hams a chance to get on the air, even if they hadn't decided on the HF radio they wanted or didn't have the means to purchase one yet. This radio, a TS830 Kenwood, (pictured above) an older rig that needs tender loving care to tune up with it's tube finals (thing of the past now), is now being passed on to someone else which led me to write this article. What a great thing for John to do so that other hams could educate themselves with HF radio. John, you are not forgotten and may you rest in peace knowing that your legacy is still going on."

73 Rick VE3BK

Finally, the HAM radio community was well represented once again at the City of Hamilton's Emergency Preparedness Day at Bayfront Park. We were housed in Jerry's large tent and had an active HF station along with posters and information showing some of the Amateur Radio capability. The weather was cooperative this year and it turned out to be an entirely pleasant experience. Pictures of the event follow in the pictorial section. Thanks to those operators who came out to pay a visit, to operate the rig, and to answer questions from the public.



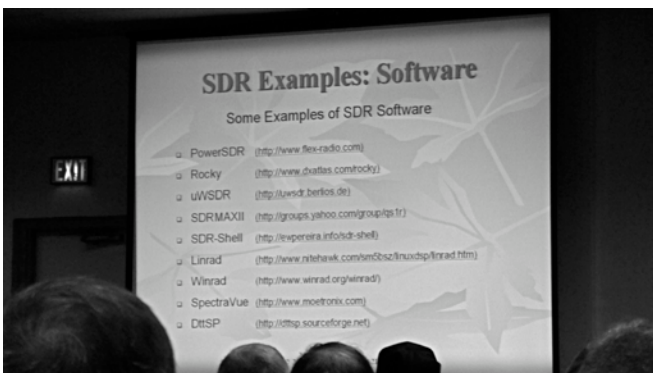
Center to right, Don VE3VZ, Vic VE3VMO, Mardy VE3QEE on the ramp to the outdoor fleamarket at Dayton. The weather was beautiful.



Fred VE3GCP, with the white hat, and John VE3DVV looking down examine a large vacuum variable capacitor at Dayton. If it's made you'll see it there.



This picture shows the typical crowd at one of the manufacturer's displays in the O'Hare ice hockey arena.



Screen in a seminar about software defined radio. With little time to copy things down my digital camera records the web addresses of SDR software.



Food court area at the O'Hare Arena. John and Fred at a table in the center. We brought lunch to avoid waiting in line. You meet hams from all over.



Dan VA3DJ and Jerry VE3JSO L & R facing with Rick VE3BK and Gary VE3TTO L & R backs turned setting up the station and display.



Rick VE3BK making the first HF contact. The antenna was a multi band Cushcraft R7 trap vertical half-wave antenna visible below behind the ambulance.



Here is the scene facing West with the Amateur Radio display on the left and the CERV display on the right. For once, weather at Hamilton's Emergency Preparedness Day was awesome. Below left, a crane lifts an 11 ton school bus. Right, a rescue worker is pulled across the inlet on 11mm rope rigged between two trees.

