

HAMILTON AMATEUR RADIO CLUB
fleamarket

SATURDAY, 12 SEPTEMBER 1992

**MARRITT HALL
ANCASTER
FAIRGROUNDS**

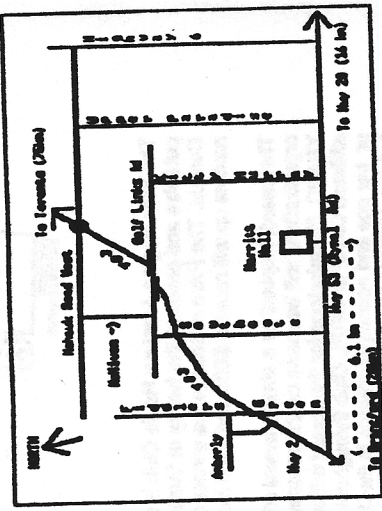
FREE PARKING!!! FOOD CONCESSION!!!
NOW 100% BIGGER!!!
TWO HUGE ROOMS OF VENDORS!!!
FREE HAM TESTING! DOOR PRIZES!
DOORS OPEN TO PUBLIC 9:00 AM
VENDORS SETUP FROM 7:30 AM

TALK-IN: VE3NCF 146.760
ADMISSION: \$4 per adult (children < 12 yrs free)
TABLES: WALL: \$10 + admission (preference given to Commercial Vendors)

OTHER: \$ 8 each + admission
OUTDOOR TAIL GATERS: \$ 5 each + admission (take your chances on the weather)

VENDOR REGISTRATION:
NAME _____ CALL SIGN _____ PHONE _____
STREET _____ CITY _____ POSTAL CODE _____
Number of admissions _____
Number of WALL TABLES requested _____
Number of OTHER TABLES requested _____
Number of TAIL-GATERS _____
TOTAL PAYMENT ENCLOSED = \$ _____

Special Requirements: _____
Major cheques payable to: Hamilton Amateur Radio Club Flea-Market
Our Address: Hamilton Amateur Radio Club, PO BOX 91315, Effort Square Postal Outlet, Hamilton, Ontario L8N 4G4.
You may request tables through the Hamilton Amateur Radio Club (Tel: 416-375-4745), OR through the Hamilton Amateur Radio Club Packet BBS, VE3DC (143.59), OR to VE3JIS@VE3RD; such requests will be considered unless payment is received by Sep 4th. A list of confirmed registrations will be posted on the bulletin and packet BBS towards the end of August. After September 4, list closes, list served!
No refunds after September 4.



SUPER PRIZE! ICOM 735 HF RIG

Supplied by ICOM CANADA & ATLANTIC HAM RADIO
FREE HAM TESTING

The

Hamilton

Amateur

April 1992

(Established 1932)

Field Day 1992!

Mayor Bob Morrow proclaims
Amateur Radio Week

Organization and Workshop
Pictures, Slides...

See the *Ultimate* FD Op

Meeting: 15 April 1992 - 20:00 hrs

Nash Auditorium - Hamilton

HARC EXECUTIVE FOR SEPTEMBER 1991/92:

PRESIDENT: Flore Manga 578-1789
PAST PRESIDENT: Jim Walsh 689-8639
VICE PRESIDENT: Fred Robinson 575-6197
SECRETARY: Everett Englet 365-0679
TREASURER: Emley Mitchell 627-0633
MEMBERSHIP: Mark Gibson 369-4308
Paul Webb 574-0818

HARC COMMITTEE CHAIRPERSONS FOR 1991/92:

AWARDS & CONTESTS:	Open	363-7338
HISTORIAN:	VE3BLG	363-8808
PROPERTY:	VE3DWJ	689-8639
BULLETIN EDITOR:	VE3SON	527-7176
EDUCATION:	VE3EYK	628-4131
EMERGENCY COORD:	VE3SMF	365-0679
FLEA MARKET:	VE3DKJ	529-1603
HEALTH & WELFARE:	VE3GFE	575-6197
PROGRAMS:	VE3GCP	529-4002
PUBLIC LIASON:	VE3GGO	628-4131
HOSPITALITY COORD:	VE3GCP	575-6197
60th ANNIVERSARY PLAN:	VE3GCP	369-6363
SWAP NET CONTROL:	VE3TJB	575-6197
REPEATER:	VE3OCY	578-8266
TECHNICAL:	VE3OCY	560-1960
VE3DC LICENCEE:	VE3FHO	560-1960
VE3NCF LICENCEE:	VE3OCY	365-2786
VE3RCB LICENCEE:	VE3NYC	560-1960
DESIGNATED EXAMINERS:	VE3EYK	527-7175
	VE3DKJ	529-1603
	VE3GCP	575-6197
	VE3SMF	628-4131

THE HAMILTON AMATEUR RADIO CLUB

BOX 91215 Effort Square Postal Outlet, Hamilton Ontario Canada L8N 4G4

CLUB MEETINGS:

8:00pm on the 3rd Wednesday of each month except for July & August (special arrangements are often made for the December meeting as well), in the Nash Auditorium, Chedoke Hospital. Non-members & friends are welcome - coffee and donuts on the house!

EXECUTIVE:

Meets at 1930 on the fourth Wednesday of the month, except June & July, in the Radio Room, Red Cross, 400 King Street East.

STATION:

An emergency radio station is maintained in the RED CROSS, HAMILTON BRANCH (400 King East).

MEMBERSHIP:

\$25.00 per year with a common renewal date of September 1. Included is a subscription to the club bulletin. Additional Family Memberships (no bulletin) \$1.

EDUCATION:

Call Bernie (VE3EKY) or Stan (VE3GFE) for information on Amateur Radio training opportunities. Phone numbers are on the front cover. Licence testing on the 2nd Wednesday of the month (with appointment).

REPEATER:

VE3NCF. Located on the Hamilton escarpment it is available for use by any amateur. Input: 146.16 Mhz. Output: 146.76 Mhz. Part of the VE3RPT Link system. Contact a member of the Club Executive for information concerning Emergency use, Autopatch, Mail-boxes, Links etc.

FIELD-DAY:

HARC operates a multi-station site during Field-Day. Contact coordinator Ev Englert, VE3OQX, for information. His number can be found on the front page.

SWAP-NET:

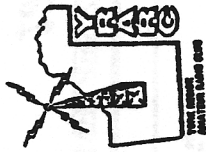
Every Tuesday at 8.00 pm on VE3NCF (146.76/16) except July & August. Contact Ted, VE3TJB if you have items to buy or sell. Swap Shop listings are also available on the club's packet bulletin board station VE3DC operated by VE3JSJ on 145.590 FM.

FLEA-MARKET:

Held during September each year at the Ancaster Fair Grounds. Note that the flea market has both indoor and outdoor sales facilities. Call to reserve tables/power.

BULLETIN:

"The Hamilton Amateur", the official news bulletin of the club, is published 10 times a year and sent to all full club members (family members share a bulletin) during the first 2 weeks of the month (except July and August).



The YRARC National "Young Amateur of the Year" Award

The York Region Amateur Radio Club is sponsoring a national award to help publicize and promote the hobby of "Amateur Radio" among the youth of Canada. The Prize offered to the winner of this award is \$500, first and second runners up will receive \$200 and \$100 respectively.

The award, inspired by a similar award offered in the UK by their national organization, will be made on the recommendation of a panel of directors of the YRARC. Submissions for the award will be welcomed from any official of an affiliated CARF or CRPL Club throughout Canada. Details of the candidate, his or her age and accomplishments in the field of ham radio are the basis for the judging. Nothing specific need be omitted. Candidates must hold a Canadian amateur radio license and be a Canadian resident. As the idea behind the award is publicity for furthering the growth of our hobby, good quality photographs of the candidate will be a definite advantage.

We hope to rely on the help of both the Canadian Amateur Radio organizations to publicize the "Award" however the YRARC hopes to publicize the award recipients, Amateur Radio in general and in particular the importance of this hobby to the younger generation throughout the Canadian general press and media.

Submissions, including details of the sponsor and sponsoring club should be forwarded to :-

Attention: Awards Committee.

The York Region Amateur Radio Club
P.O. Box 352,
Newmarket, Ontario
L3Y 4X7

Submissions should be received by August 31st 1992
For further information please contact the Awards committee at the above address or call VE3ORE Mr Andrew Betterton at (416) - 895 8710
All awards are made at the discretion of the Directors of the YRARC.

FROM THE BULLETIN BOARDS - 1

CARF NEWS BULLETIN 05-92, 15 March 1992
Issued at CARF Headquarters, P.O. Box 356, Kingston, ON, K7L 4W2
Editor: William (Bill) H. Mason VE3NFW

ITEM 1. THE GREENWOOD AMATEUR RADIO CLUB is operating the Special Event Station VE1RCF 1 January - 31 December, 1992 to celebrate the 50th Anniversary of Canadian Forces Base Greenwood, Nova Scotia. For commemorative QSL (and possible certificate) send QSL and SASE (Cnd.) or SA envelope and IRCs to Greenwood ARC, PO Box 63, Greenwood, Nova Scotia, Canada, B0P 1N0. QSLs sent via Bureau will receive QSL card only via Bureau. Lance Peterson, VE1VCL, president Greenwood ARC.

ITEM 2. THE DEPARTMENT OF COMMUNICATIONS has issued the call sign "VICTOR YANKEE 5 OSCAR" as the Yukon prefix for the period of June 1st, 1992 to August 31, 1992 to commemorate the building of the Alaska highway. DOC File 0200-33156.

The Yukon Amateur Radio Association will offer a special certificate to any Amateur that confirms contact with hams along the Alaska highway from Dawson creek to the Yukon B.C. border, one Ham in the Yukon, and any Ham on the Alaska highway from the Alaska Yukon border to Fairbanks, Alaska. That is a total of three confirmations, B.C., Yukon and Alaska. This may be done on any band, or combination of bands, including two metres. The cost of the certificate will be 3.00 U.S. or Canadian funds. Certificates may be obtained by writing: THE YUKON AMATEUR RADIO ASSOCIATION, P.O. Box 4884, Whitehorse, Yukon, Canada, Y1A 4N6. Ron McFadyen, VY1RM, President YARC.

ITEM 3. CHECK YOUR SMOKE ALARM EVERY MONTH and be sure the fire extinguishers in your kitchen, garage and car are fully charged at all times. Don't have any? REMEMBER, the time to get one is BEFORE YOU NEED ONE.

ITEM 4. THINK FIELD DAY - No, it isn't too early to begin thinking Field Day. I realize that we've got a number of things to first think of like the TOLEDO swap, DAYTON and the beginning of spring . . . however for right now . . . Think Field Day! Mike VE3TEK is looking to make us #1 in Canada this year and he needs the support of all. We'll especially be looking for a couple of big CW stations this year. For you CW hounds your support especially is key to our participation. Mark your calendar for June 27/28, Lakeside Park in Kingsville and come on out for a successful Field Day. In the meantime, contact Mike VE3TEK at 250-0586 and let him know how you can help. (VE3ES, Bill Leal)

has been pushed ahead to make sure everyone is notified of this meeting - read their article for details. Apparently we're getting BRANTFORD ARC and K-W ARC involved too, and Environment Canada is being UNUSUALLY GENEROUS with money for equipment, considering it's a government agency.

Don VE3OCY and the rest of the bunch snagged the CQ DX 160 meter SSB 1991 TOP SCORE FOR ONTARIO. They just got their "suitable for framing" certificate. Why not get some hams together and form your own contest group? The club might even let you use the VE3DC callign. These guys have a heck of a lot of fun. Don et al put a lot of work into our old BLUE (GREENY) MONSTER generator - changed the oil, installed running lights, greased it, put in new gaskets, a filter, tires and put on a towbar. Speaking of generators, the executive has authorized VE3MWH Mark to spend up to a grand on a NEW PORTABLE GENERATOR. He is eyeing a really nice Honda EX1000C. At only 57 pounds, it should be easier to carry around than our old one.

Bernie VE3EKY, the Club's Education Guru has purchased a quantity of CARF STUDY GUIDES for sale to prospective hams. Price: \$18 at meetings, \$20 mailed. He's going to kill me for giving out his phone number, he already spends 99% of his Bell time on club business - 527 7175.

The club's venerable VE3NCF repeater is now PLAYING A TUNE - 131.8 Hz. That's about an octave down from middle C. It should help with intermod, especially downtown HAMILTON where the pagers pump out the kilowatts. And it won't affect older and non-CTSS rigs at all.

NOTE FROM GLENN GIBSON VE3FHQ:

Any new members needing an autodial number and/or mailbox on the VE3NCF repeater, please call me, Glenn Gibson VE3FHQ at 385-2786.

SPECIAL OFFERING TO HAMILTON AREA HAMS

2 Meter Hy-Gain antenna complete with base coil, spring and long whip. All new stock, made by Sinclair Radio similar to Larsen NMO150. \$12.

This is a third of the usual price. Quantities are limited so hurry or reserve by phone.

SERVICOM, 26 Garden Ave, Stoney Creek, 578 3350
73, Bill VE3YR

The testing service is provided under the Club's auspices by Communications Canada delegated examiners. Sessions are usually held on the second Wednesdays of the month at the Club headquarters in the Hamilton Red Cross Building, at 7:00 p.m. Contact one of the examiners listed on the front cover of this bulletin to make arrangements. There is a \$3 per evening charge to cover the cost of incidentals.

BITS AND PIECES

We sure had a well-attended meeting for Paul Fleck VE3HTF's presentation on Cellular Technology. This just emphasized for me, once again, the INCREDIBLE EXPERTISE represented by local hams. Paul is a former director of the Club, but has been far too busy with work and family to get involved recently. One theme that kept coming through during Paul's talk was how Canada is on the CUTTING EDGE OF CELLULAR TECHNOLOGY. We are selling our systems and sub-systems WORLDWIDE. Paul traced mobile telephony from the 1946 simplex systems on 150 MHz to the newest Digital Cellular systems being tested. We were warned that our 902 Mhz ham band is being eyed by Cellular companies. Paul outlined the fascinating technology of using one frequency many times over to make maximum use of the 333 frequencies each of the two companies is allocated. He also went into some of the problems with propagation - in a different season, a cell site can have different coverage due simply to the greening of trees. Buildings can pipeline signals. Water can extend the range of a cellular signal - we were told of Toronto-Rochester and Scarborough-St. Catharines interference until the antennas were adjusted. An antenna breakthrough, designed in Canada using Microstrip Phased Arrays (remotely tilted) was described and shown. The use of dual receivers and high speed switching to solve the problem of 800 Mhz "Rayleigh" effect was also described. This was a real treat of a meeting. Thanks Paul and thanks to Fred for talking him into it.

We snagged a NEW MEMBER at the March meeting - hello and welcome to Don Pullen VE3LJU. Visitors to the meeting were Clancy Patrick, Don Gray, VE3TOK Bob, and the beautiful Ada Blythe (VE3CNU's XYL).

Some NEW CALLSIGNS are in; Sam Isram VE3UAN, Ole Magnussen VE3KFI, Zenon Holadyk VE3ZHL, Harry Jowett VE3HRX and Rick Blythe VE3CNU. In case Rick hasn't told you yet, he was the one who SCORED 99% ON HIS BASIC EXAM !!! (don't ask him which question he got wrong, it's still a sore spot with him).

The CANWARN project is going AHEAD at an ACCELERATED PACE. Paul VE3LTD and Jim VE3SON are holding a FIRST MEETING on 8 April at Nash Auditorium, 7:00 pm. This bulletin will be thinner this month because the deadline

FROM THE BULLETIN BOARDS · 2

ITEM 5. ITU NEWS Following the great success of Americas TELECOM 88 in Rio de Janeiro, the International Telecommunication Union (ITU) has been invited by the Government of Mexico to organize the second Americas TELECOM Exhibition and Forum to be held in Acapulco, Mexico from 6-11 April 1992.

This Special Session of the World Telecommunication FORUM will include a Policy Symposium and a Technical Symposium which will provide an excellent opportunity for an exchange of views and ideas shaping the future telecommunications infrastructure of the Americas Region. More than 80 prominent speakers of the world's public and private telecommunications sectors will address this FORUM.

ITEM 6. CARF QSL BUREAU - When submitting cards to the bureau please DO NOT enclose your cards in envelopes with other material. The bureau is for the distribution of cards ONLY. If you want to send letters you must use the regular mail system. Thank you for your cooperation.

ITEM 7. UK NOVICES ON THE AIR - As reported in the RSGB DX News Sheet, the first UK Novice Licence was issued in the last week of July, 1991.

Hugh McNeil, 13-year-old student with the call sign 2E0AAA was reported operating on 28472 Khz around 1100 UTC on Friday 26 July.

As far as the HF bands are concerned, UK novices are authorized to use the following frequencies/modes: (kHz) (phone: means any type of speech modulation - SSB, AM, FM etc.)

1950-2000	CW/phone/RTTY/data	3565-3585	CW
10130-10140	CW	21100-21149	CW/RTTY/data
28100-29190	CW/RTTY/data	28225-28300	CW/RTTY/data
28300-28500	CW/phone	50620-50760	data
51250-51750	CW/phone/data		

Call sign prefixes are:

England 2E, Scotland 2M, Wales 2W, Isle of Man 2D, Jersey 2G, Guernsey 2U, Northern Ireland 2I, in all cases followed by number 0, 2, 3 or 4 and three letters. (from WIA AMATEUR RADIO)

Club Meeting - 15 April 1992

MARK YOUR CALENDAR

ITEM 9. SATURDAY, 11 APRIL, 1992 DURHAM REGION AMATEUR RADIO AND COMPUTER FLEAMARKET Pickering High School, Church St., Pickering Village, Ont. General admission \$5. Doors open 0900. Refreshments, commercial displays. Tables \$10. Talk-in VE3OSH 147.12 up 600 and VE3SPA 147.35 up 600. Co-sponsored by the North Shore and Pickering Amateur Radio Clubs. For information, contact Ron VE3WZ (416) 839-3711, or the South Pickering Amateur Radio Club P.O. Box 53, PICKERING, Ontario, L1V 2R2.

ITEM 11. FRIDAY, SATURDAY, SUNDAY, 24, 25, 26 APRIL, 1992 - DAYTON HAMVENTION - General information: (513) 454-1456, FAX 513-890-5464 att. HAMVENTION, or write P.O. Box 964, DAYTON, OH. 45401-0964, U.S.A. Lodging info: (513) 223-2612 (no reservations by phone) or write LODGINGS, Dayton Hamvention, Chamber Plaza, 5th and Main Streets, DAYTON, OH. 45402-2400, U.S.A. Fleamarket info: (513)767-1107.

ITEM 12. SATURDAY 25 APRIL, 1992, ONTARIO DX ASSOCIATION CONVENTION, Valhalla Inn, 1 Valhalla Inn Road, off Hwy. 427, Toronto, Ontario. Close to Pearson International Airport. Program starts at 0845, continues all day. Guest speakers include Lawrence Magne, editor of Passport to World Bound Radio and Major David Cooke from SPAR, Aerospace Canada.

You cannot do a kindness too soon, because you never know how soon it will be too late.

73 de VE3VCA Steve VE3GRS at the keyboard

Come and find out more about Field Day. Join a workshop to prepare yourself. Listen to a tech talk on the subject. See slides and pictures from past years. Help organize and plan for Field Day 1992. Meet the *Ultimate* FD Op!

Mayor Bob Morrow will also come out to the meeting and proclaim Amateur Radio Week.

CANWARN
UNCLE PAUL WANTS YOU!

Environment Canada in conjunction with the Hamilton Amateur Radio Club has invoked in a very exciting and worthwhile project and your assistance is needed. Canwarn is basically an early warning detection system to report on severe and life-threatening weather. The Brantford and Burlington Clubs have shown extreme interest in joining us in this venture and will be under control of our new station at the Hamilton airport. The backbone of the system is the spotters who invariably report to our net controller who informs Environment Canada on the status of the weather.

TRAINING: A training night has been set up and will be held at the Nash Auditorium on April 8 at 7:00 pm. Your participation in this project is strongly encouraged and you can join NOW simply by calling Paul at 574 0818. The only requirements are your keen interest and your dedication. Lets show Environment Canada that our club has the expertise and willingness to carry the ball. **BECOME INVOLVED.**

de Paul VE3LTD

TESTING REPORT

The results of recent testing sessions are warming the hearts of the delegated examiners. On 11 March 1992, six candidates were tested. Five Basic, one Advanced and one 5 WPM code test were given. All tests resulted in passes. After intensive home study, one of the Basic candidates achieved a score of 99% ! Here are the new hams you will be hearing soon: Richard Blythe, Basic; Edward Spaetzl, Basic; Adrian Harding, Basic (son of VE3CQX, Craig, and in the "under-16 set"); Richard Porter, Basic and 5 WPM; Bernie Geiber, Basic; Larry Langs VE3LRL, Advanced. Congratulations to all.

The Swap Shop: Wanted - 1

To list items:

VE3NCF (146.76) Tuesdays 8 pm, OR Call Ted (VE3TJB) 578-9266 or Ralph (VE3BYM) 388-6146 or Rich (VE3ANB) 547-8192, OR leave message on the VE3DC Packet BBS (143.590 MHz) or via modem on BBS at 575-4745 (pick your password) to Ted Boerskamp.

25 MAR 1992

VE3AOG SID, (416)389-2861
3 HEAVY DUTY ROTOR AND CONTROL

VE3PKY CHRIS, (416)547-3169
2 MANUAL FOR HW20 2M AM RADIO

VE3IRE DAN, (519)623-2307
3 6M RIG

SWL SHERAN, (416)548-9190
3 CCT. DIAGRAM FOR AN ELECTRONIC KEYS

VE3EGT LES, (416)548-6397
3 2M BASE RIG

VE3OZY RICK, (416)544-3253
2 80M PRO-AM WHIP ANTENNA W 5/8 IN. THREAD OR SOMETHING SIMILAR
o DIAWA CN103 OR YAESU YS500 SWR/PWR METER 140-525MHZ

SWL DAVID, (416)383-9612
2 CRYSTALS FOR VE3NCF FREQUENCY

VE3FBK EARL, (519)428-2020
2 CUSHCRAFT 147-22, STACKED 2M BEAMS

VE3OKT DAVE, (416)548-0728
1 SCHEMATIC OR SERVICE MANUAL FOR HEATHKIT RLC-BRIDGE MODEL IB-5281 AND HEATHKIT RF OSCILLATOR MODEL IG-5280

VE3CCF CHRIS, (416)639-8608
1 OLD 18AVT VERTICAL ANT FOR PARTS

VE3JUAN SAM, (416)385-8015
1 2M ALLMODE RIG BASE OR MODEL

GOALS AND OBJECTIVES 1992

1. Update the amateur radio station equipment at The Canadian Red Cross Building, 400 King St East, Hamilton, Ontario. The station should be able to provide emergency communications capability on VHF phone, HF phone and VHF packet radio. A detailed proposal for new equipment will be submitted to the Executive Committee of the Hamilton Amateur Radio Club.
2. Update the Statement of Understanding between the Hamilton Amateur Radio Club, Inc. and the Canadian Red Cross Society, Hamilton Branch.
3. Develop and document:
 - chain of command;
 - terms of reference;
 - job descriptions;
 - fan out list.
4. Develop a training program for radio operators in:
 - disaster response;
 - establishment of fixed, mobile and portable station equipment.
5. Develop:
 - minor simulation exercises;
 - major simulation exercises.
6. Test communications at designated shelter locations.
7. Use of the Red Cross building for training purposes.
8. Develop a training program for Red Cross personnel in:
 - capability of the Hamilton Amateur Radio Club.
9. Develop a resource library/list of amateur radio emergency services/public services related articles.
10. Appoint designated emergency services assistants.
11. Liaise with other amateur radio emergency coordinators in Ontario to develop regional affiliation.

DRAFT: Stuart M. Fedak, VE3SMF, February 25, 1992

EMERGENCY HAPPENINGS

Stuart VE3SMF has defined the duties of the Emergency Coordinator, and also the goals and objectives of Emergency Services. The Executive has given the stamp of approval to them. This is the text submitted to the Executive:

HAMILTON AMATEUR RADIO CLUB

Duties of the Emergency Coordinator

The Emergency Coordinator will:

1. Represent the Hamilton Amateur Radio Club at the Canadian Red Cross Society, Hamilton Branch.
2. Report on his/her activities to the Red Cross Emergency Coordinator and the President of the Hamilton Amateur Radio Club.
3. Regularly attend the Red Cross Regional Emergency Services Committee meetings, and report on amateur radio emergency related activities.
4. Provide an annual list of H.A.R.C. volunteers for disaster response and a fan out list to the Red Cross Emergency Coordinator and the President of the Hamilton Amateur Radio Club.
5. Inform the Canadian Radio Relay League, the Amateur Radio Emergency Service Net and Section Emergency Coordinator of Hamilton Amateur Radio Club participation in exercises and training.
6. Develop a training program for radio operators in disaster response, equipment requirements, traffic handling and establishment of fixed, mobile and portable station equipment.
7. Ensure the availability and operation of equipment for emergency communications at the Red Cross Building, 400 King St East, Hamilton, Ontario. The station should be able to provide emergency communications capability on VHF phone and HF phone.

Signed: Stuart M. Fedak, VE3SMF, Emergency Coordinator (1992)
Hamilton Amateur Radio Club, February 26, 1992

VE3RNK RICK, (416)689-7294

2 QUANTITY 6M RADIOS, SOME 110W MOTOROLA, SOME 100W G.E. UNDER \$200 EA.

VE3FBK EARL, (519)428-2020

2 ICOM IC3200A DUALBAND XCVR W DUALBAND MAGMOUNT \$475

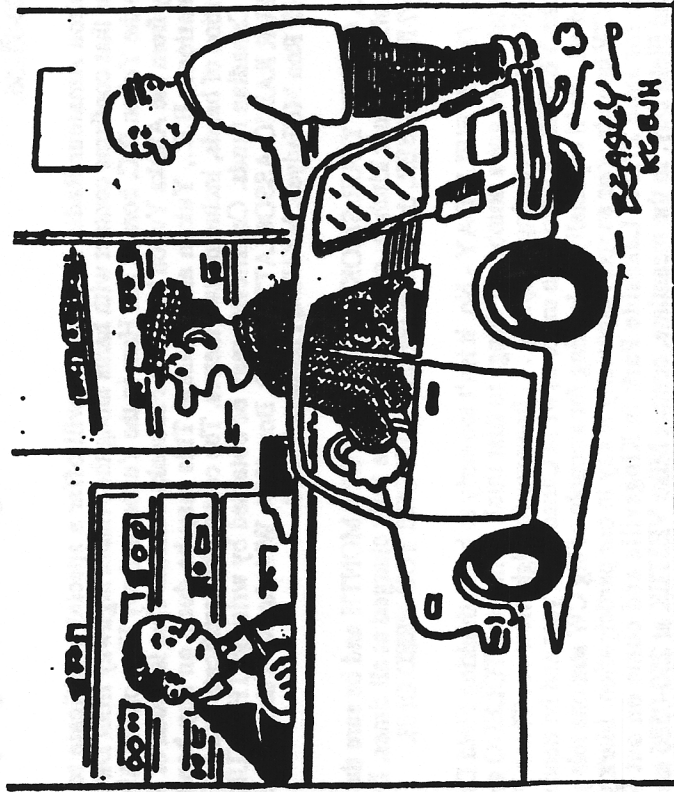
VE3CCF CHRIS, (416)639-8608

1 ALINCO DJ100T 2M H.H., 10 MEM., 12V CIGARETTE ADAPTER \$175

0 JPS NIR-10 DIGITAL NOISE INTERFERENCE FILTER UNIT, 2 MONTHS OLD \$425

VE3HMY ADRIAN, (416)648-0573

1 RCI 2950 10M RIG, STOCK MIC, TURNER +3 DESK MIC \$350



YOU GOT AN HF RIG THAT WILL FIT IN THIS THING,
AND A MOBILE WHIP THAT WON'T KNOCK IT OVER?

- 4) DO NOT use partially discharged cells with fully charged ones to assemble a battery. Assemble the battery with all cells discharged and then charge them as a battery.
- 5) DO NOT carry a fully or partially charged battery on an aircraft without taking proper safety precautions. A short-circuited battery pack can be a time bomb in such situations. Consult the relevant regulations or ask at the airline check-in.
- 6) DO NOT subject battery packs to very high or low temperatures. Never dispose of a battery pack in a fire or throw it out with domestic waste. If it cannot be disposed of properly it is probably best to bury it in the garden in a safe spot.
- 7) DO NOT discharge battery packs below about one volt per cell, otherwise there is a possibility of cell reversal. ZSSJF provides a good deal of other information on charging nicad batteries, and give as a reference a Varta publication of 1982 "Sealed Nickel Cadmium Batteries" from which some of his notes may have been derived.

K-W KILOWATTER PACKET EDITION courtesy VE3WRN
KILOWATR.OCT, 02 OCTOBER 1990

members in the club, all of whom are paid up. Don VE3LJU became a member of the club tonight.

Stuart VE3SMF requested that the club repeater VE3NCF not be used for the duration of the Round The Bay Race, as the repeater will be in use by the net assisting with the race. The meeting was adjourned at 10:00 pm.

E.A. Mitchell VE3JAI, Secretary

NEWS FROM DON VE3OCY

VE3NCF now has CTSS tone on the output only. This frequency is 131.8 Hz as specified by the repeater council. This will NOT disable anyone from using the repeater. If you have CTSS decode on your transceiver it may reduce intermod when the repeater is not transmitting.

The HARC contest group has just received a certificate from CQ magazine for first place, multi-op station Ontario in the 160 meter SSB contest 1991. Please try to work your club station in upcoming contests.

(Assistant Editor's Note: It should be emphasized that hams with older two meter rigs will experience NO CHANGE WHATSOEVER in the operation of VE3NCF. The repeater will still be COMPLETELY ACCESSIBLE to you. Newer rigs with CTSS boards will be able to silence their receive unless a 131.8 Hz tone is heard.

Check your operators manual to see if you can take advantage of this new feature.

The operators of VE3DC for the successful 160 m phone CQ DX Contest were VE3TJB Ted, VE3OCY Don, VE3ANB Rich, VE3VFR Norm, VE3ACA Jerry and Vic Spafford. They achieved a total score of 39,640 running 100 watts.)

MUST be isolated from the other cells since zapping the complete battery will not usually result in a cure. Charge the capacitor to about 30 volts and then discharge it through the faulty cell. Several attempts may be required to clear a stubborn cell.

5) "A BATTERY CONTAINS A CELL WITH REVERSED POLARITY. THE ONLY CURE IS TO REPLACE IT". - NOT TRUE. The reversed cell can usually be corrected by a similar technique as that given for 4). After re-polarizing the cell, the complete battery can be recharged in the normal way. Full capacity can be regained after about five cycles.

6) "A NICAD BATTERY SHOULD BE STORED ONLY IN A DISCHARGED STATE". - NOT TRUE. It can be stored in any state of charge. Due to its inherent self-discharging characteristics it will eventually become fully discharged after a sufficiently long period of storage. To recharge the battery before returning it to service, a "conditioning" charge of 20 hours at the normal charging rate is recommended. Afterwards charge normally; full capacity can again be expected after about five cycles.

7) "IT IS NOT ADVISABLE TO KEEP A NICAD BATTERY ON PERMANENT TRICKLE CHARGE AS THIS CAUSES PERMANENT DEGRADATION OF THE CELLS". - NOT TRUE. So long as the trickle charge current is adjusted correctly, the charge can continue indefinitely without loss in cell capacity. The safe current can usually be obtained from the manufacturer's data, but 0.025C is a reasonable guide (ie. about 100mA for a 4Ah cell and PRO-RATA). This enables the battery to remain fully charged.

SAFETY POINTS TO BE CONSIDERED

- 1) DO NOT short circuit a fully charged battery. This, if prolonged, can cause excessive gas production with the danger of possible rupturing of the sealed case.
- 2) Nicads contain a caustic electrolyte. This is perfectly safe as long as common sense is used in the use and handling of the cells.
- 3) A nicad can supply a very high current for a short period (a 4Ah cell can supply over 500A for a few seconds). Sufficient thought should be given when selecting a fuse between the battery and the equipment. The connecting wire should be capable of passing enough current to ensure the fuse blows quickly in the event of a short circuit.

NICAD BATTERIES - FACTS AND FALLACIES Published in Radio Communication May 1988, TT

Rechargeable nickel cadmium batteries, have, with reasons, become a popular source of power for portable and handportable equipment. They can provide reliable service over many years if due account is taken on their peculiarities. Yet it remains true that many amateurs are failing to appreciate not only the full capabilities but also the limitations of Nicad cells used in battery packs. J. Fielding, ZS5JF, in "Nickel cadmium batteries for amateur radio equipment" (Radio ZS September 1987, pp4-5) provides a useful survey of the facts and foibles of Nicads. The following extracts from his article attack some of the common myths and also provide some safety hints.

1) "RAPID CHARGING CAUSES A DECLINE IN CELL CAPACITY". - NOT TRUE provided that the charge is always terminated at a safe point.

2) "YOU SHOULD NOT CHARGE ONLY PARTIALLY DISCHARGED CELLS AS THIS CAUSES A LOSS IN CAPACITY". - NOT TRUE. It is not necessary to discharge fully, nicad batteries before charging. In fact, THE OPPOSITE is true. Repeated partial charging gives an increase in the number of charge/discharge cycles compared with full discharged cells.

3) "WHITE CRYSTALS GROWING ON THE TOPS OF NICAD CELLS MEAN THAT THE SEAL IS FAULTY AND THE CELL SHOULD BE SCRAPPED". - NOT TRUE. The electrolyte (potassium hydroxide) is extremely searching and can penetrate the seals used in minute quantities. These crystals are potassium carbonate, which is harmless and can be removed with soap and water. The action of the carbon dioxide in the atmosphere reacts with the electrolyte to form the crystals. After removing the crystals, it is recommended that a smear of silicon grease is applied to slow down the growth of new crystals. The amount of electrolyte lost in this way is insignificant.

4) "I HAVE A CELL WHICH APPEARS TO TAKE A CHARGE, BUT AFTER THE NORMAL CHARGING PERIOD THE OPEN CIRCUIT VOLTAGE IS VERY LOW. I HAVE BEEN TOLD I SHOULD THROW IT AWAY". - NOT TRUE. The reason the cell won't take a charge is usually due to minute crystalline growth across the internal electrodes, caused by prolonged storage. A cure that nearly always works is to pass a very high current for a very short time through the affected cell. This fuses the internal "whisker". Discharging a large electrolytic capacitor is one method of doing this. Note that in a battery the faulty cell

HAMILTON AMATEUR RADIO CLUB GENERAL MEETING MINUTES MARCH 18, 1992

The Hamilton Amateur Radio Club (HARC) held its regular monthly meeting at the Nash Auditorium at Chedoke Hospital. The meeting began at 8:10 with Fred Robinson VE3GCP presiding. Fred VE3GCP conveyed regrets from the president of the club, Fiore Manga VE3OQG who was unavoidably absent.

The meeting began with the introduction of four new Hams to the club and was followed by a short presentation by Jim Walsh VE3SON, about HARC's involvement with the Canwarn program. Sign-up forms were available for those interested at the entrance to the auditorium. The HARC will hold a Canwarn training session at the Nash Auditorium on April 8, 1992 from 7pm to 11pm.

Paul Fleck VE3HTF the guest speaker from Bell Canada was introduced by Fred Robinson VE3GCP. Paul began his talk by giving a history of Mobile Radio Technology, noting that the first cellular station was installed in Canada in 1965. Cellular telephone technology has made tremendous advances since then and now the system is world-wide. Canadian engineers have made significant contributions to the development of this technology. He continued by outlining the cellular mobile radio fundamentals and design objectives and touched on frequency spectrum allocation and channel assignment plan. Cells, he said, are approximately one kilometer wide and each operate on a different frequency from its neighbouring cells. Cell phones automatically change frequency as they cross from one cell to another. Diversity reception techniques are used to accomplish this. Paul then talked about the Mobile Telephone Switching Office, and mobile call initiation and reception. He explained how it was possible to initiate a local call in Hamilton for example and drive to the Quebec border without dropping the call. A brief discussion of antennas and their importance to the network and new cellular antennae technology concluded the presentation.

Fred VE3GCP thanked the speaker for his presentation and the meeting adjourned for a short coffee break at 9:25pm.

The meeting was called to order by Fred VE3GCP at 9:45pm. The secretary read a summary of the minutes of the previous club meeting. Fred VE3GCP moved seconded by Bernie VE3EKY that the minutes be accepted as read. Carried

Paul VE3LTD gave the membership report. He noted that there are currently 170

To list items:

VE3NCF (146.76) Tuesdays 8 pm, OR Call Ted (VE3TJB) 578-9266 or Ralph (VE3BYM) 388-6146 or Rich (VE3ANB) 547-8192, OR leave message on the VE3DC Packet BBS (145.590 MHz) or via modem on BBS at 575-4745 (pick your password) to Ted Boorkamp.

Items accepted should be related to the enjoyment of our common hobby, Amateur Radio - this has been interpreted to include also computer equipment, C.B. and other electronic gear that can be used or converted to Amateur Radio use. All prices are negotiable unless otherwise stated. Listings are read over the air for four weeks, published once in The Hamilton Amateur, and posted on the packet and computer BBS VE3DC (synop VE3JSJ Gord) 145.590 and 578-4745. The Swap Shop meets every Tuesday evening, except the summer months at 8:30 p.m. on VE3NCF 148.780. During the swap shop, a telephone number is usually provided for those without 2 meter capabilities (SVL's, new hams) to provide access to the net. Number in front of listing is number of weeks already on.

25 MAR 1992

VE3JIS JACK, (416)648-6443

2 HALLCRAFTERS SW500 HAM BAND + SHORTWAVE RECEIVER \$75

o DI04 MIC \$60 CHANNEL MASTER ROTOR AND CONTROL \$60

o TURNER PLUS 3 DESK MIC \$50

1 YAESU NC1 CHARGER \$30

o MICRON TA SWR/PWR METER 1KW \$15

VE3NYX RENZO, (416)521-1064

2 B+W VS300 ANTENNA TUNER, 300W \$70

VE3NCK BILL, (416)545-3579

3 YAESU FT227RB 2M MOBILE W YM22 T.T. MIC \$195

SWL JACK, (519)583-0833

2 RADIO SHACK PRO23 POCKET SCANNER, 4CH., COVERS LOCAL REPEATERS \$65

o REGENCY 8CH AIRCRAFT SCANNER \$80

o DRAKE R4B RECEIVER CRYSTALS, 160M, WWV, 2-11M, 2-10M \$40/SET

VE3DXT DEREK, (416)387-2936

2 10 ELB 440 BEAM \$50

VE3FZQ BOB, (519)863-3688

2 YAESU FT212RH 2M MOBILE XCVR, 20 MEM.,5W OR 25W, 5/8 MAG MOUNT ANT. \$375