

The Dummy Load

Official Bulletin of The Cambridge A.R.C. (Swarc Inc)
serving the community since 1964

Club Executive President

Calvin Benoit VA3CBE
14 Edmund Rd. Kitchener, ON, N2H1J6

Vice President

Scott Buell VE3ANT
15 Woodland Dr. Cambridge, ON, N1R 2X7

Treasurer

Hugh Martin VE3IHM
301/400 Champlain Blvd. Cambridge, ON, N1R
7J6

Secretary

Bob Kernohan VE3MF
1215 Avonlea Rd. Cambridge, ON, N3H 4Z7

Bulletin Editor

Steven Nyul VE3USP
58 Duchess Dr. Cambridge, ON, N1S 4C1

Club Historian

Mike Papp VA3MP
80 Attwood Dr. Cambridge, ON, N1T 1L4

Call Custodians

VE3SWA

Calvin Benoit VA3CBE
14 Edmund Rd. Kitchener, ON, N2H1J6

VE3SWR

Tom Franks VE3MAH also

Member at Large

264 Fearnwood St. Cambridge, ON, N3C 3W9

Past President

Dave Lott VE3BHZ
51 Lincoln Ave. Cambridge, ON, N1R 4W6

Meetings

Meetings held at 8:00 P.M. on the second Monday of the month, Board Room Preston Arena (Bishop St at Hamilton St.) No meetings in July and August. Visitors always welcome.

Club Net

VE3SWR repeater 146.790 Mhz every Wednesday at 2100R (9PM local)

Issue No. 143 Feb. 2014



**VE3SWA
DXCC HONOR ROLL
(335/335)
WAZ, WAC, WAS.**

Next Meetings

Second Monday of every month
Preston Arena Boardroom at
8:00pm

Mon December 9th 2013

Mon January 13, 2014

Mon February 10, 2014

Mon March 10, 2014

Mon April 14, 2014

CLUB NEWS

The meeting began at 20:01 with 12 members and 4 visitors present.

- Minutes read by Bob VE3MF and accepted by Shawn VE3PSV and seconded by Brian VE3ESW.
- Walter Griffatong raised question re web site.
- Treasurer's report presented by

Tom VE3MAH. The bank balance is \$1,554.87. \$170.85 paid to Host Papa for new web site. Report accepted by Scott VE3ANT and seconded by Gerry VE3NXV.

Old Business:-

- Internet- Club web site moved to Host Papa as new provider. Transition still taking place. Different directory structure. New 3 year contract. All present web site info will be transferred.
- RAC Winter Contest- Club did well. There were issues in tabulating the scores. Club will have to ensure that all participants use same version of software. Club has access to software.
- Club Anniversary- Discussion re special call sign and use by the club. Tom VE3MAH volunteered to call IC re the call sign.
- Annual Club Banquet- Tony's restaurant to be approached by Hugh VE3IHM.
- Volunteer Examiner- Mike VA3MP as volunteer examiner is expiring later this year. Steve VE3USP has applied for examiner status.
- RAC affiliation was discussed. Cost is \$30. There seemed to be no advantage to move forward on this item.

New Business-:

- Tom VE3MAH moved that \$10 be sent to WNYSORC for annual renewal. Seconded by Gerry VE3NXV.
- Tom VE3MAH presented 2013 club financial statement. After review by members, accepted by Scott VE3ANT and seconded by Jeff VA3WIF.

Club donation went to Steve VE3USP \$18.00

Meeting was closed at 21:06. Motion by Gerry VE3NXV, seconded by Brian VE3ESW

Present at Meeting-: Members:

VACBE Calvin Benoit
VE3NXV Gerry Allen
VE3IHM Hugh Martin
VE3MF Bob Kernohan
VE3USP Steve Nyul
VE3ESW Brian Lowery

VA3WIF Jeff Rombough
VE3MAH Tom Franks
VA3MP Mike Papp
VA3YK Ken Meihm
VE3PSV Shawn Gartley
VE3ANT Scott Buell

Guests:

John Fitzgerald Sr.
VE3JWK Joe Ketchabaw

VE3ABU John Fitzgerald Jr.
Walter Griffatong



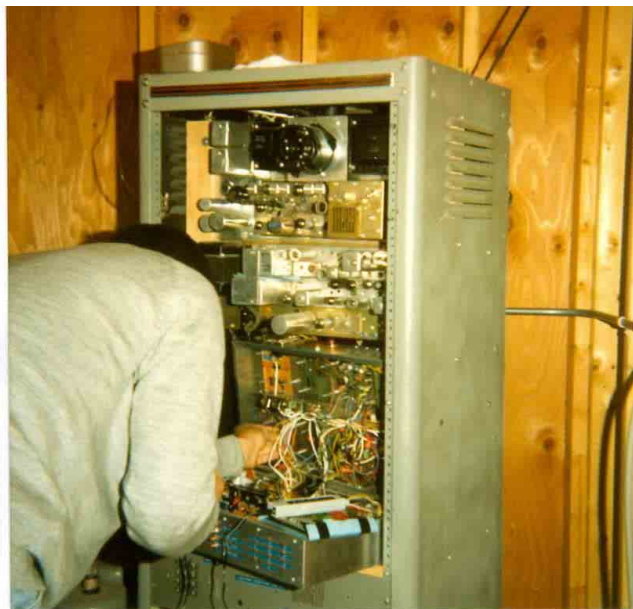
The History Column

by Tom VE3MAH

Part 4 more from the 1980's – so many activities – To repeat or not to repeat – that could have been the question in 1984

Two meter repeaters were not a new mode of communication used by amateurs. We were lucky in this area to have several available. The most active at the time and the one with the best coverage was VE3KSR owned and operated by the Kitchener- Stratford FM Society. In December of 1981 there was an urgent plea for memberships to be purchased by the Kitchener- Stratford FM Society to help cover the costs to repair and replace the failing equipment at VE3KSR. SWARC responded with a small donation from the club funds.

The other local repeater was VE3XRX located in our front yard on Eagle Street. This machine was owned and operated by several employees of Xerox in Kitchener including Paul Modray VE3CHM. Through the generosity of Koch Transport and with the help of Paul Cassell VE3SY who worked for the communications company that operated the site for Koch, a small space was made available in the radio shack at the bottom of the tower and an appropriate filter (multicoupler) was installed to allow VE3XRX to connect to the same antenna used by Koch Transport communications. In the spring of 1983, VE3XRX was suffering similar problems to those of a few years ago at VE3KSR. Equipment was old and failing. The VE3XRX group made a proposal to SWARC and others that a plan was in place to purchase new equipment and a controller capable of connecting to the telephone system so the new setup would also include a phone patch for local use. After some discussion at the March 1983 meeting, SWARC donated \$50 towards the project. Individual club members, realising the costs associated with running a repeater, took up a collection and added an additional \$25 to the donation. As reported by Paul VE3CHM in April, the new equipment was almost ready to go. And so we waited in anticipation of being able to use this new and updated repeater.



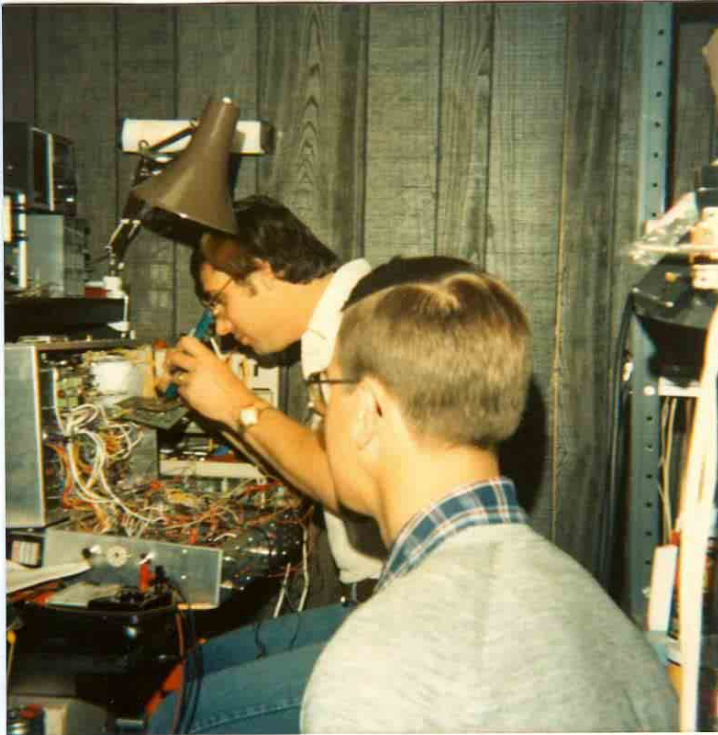
VE3XRX as purchased

At the September 1984 meeting Paul Modray VE3CHM was our guest, who gave us a rundown on the current condition of VE3XRX and to offer it for sale. Unfortunately the upgrades were not done as planned and so the machine was not in the best of health. All members present were in favour of proceeding with the purchase, subject to a full report by a committee of SWARC members who were to inventory the included hardware; to map out the future of this repeater and report on their findings at a future meeting. The committee, consisting of Ron Reyn VE3IVJ, Roger Hildesheim VE3LPQ, Fraser Cooper VE3IZB and Tom Franks VE3MAH met with owner Paul at the repeater site and surveyed the site and hardware. The hardware consisted of GE Prog-line tube type TX and RX, a home brew controller containing several circuit boards with no present function, a weather receiver (162.550MHz), a solid state receiver strip, a collection of spare parts and a cabinet to house it all. A memo to the club from Fraser Cooper VE3IZB recommended the purchase. An

interesting note in this memo was to the effect that if SWARC for some reason did not purchase VE3XRX, Fraser and Tom would pool their resources and take over ownership. Along with the

recommendation, Roger Hildesheim VE3LPQ applied for and obtained the call sign VE3SWR. So—at the October meeting, for the sum of \$200 (2/3rds of the club bank account), we were the proud owners of VE3XRX – soon to be VE3SWR.

In order to administer our new machine, both a technical team and a management team were set up. The management team, consisting of Bob Kernohan VE3MF, Werner Hildesheim VE3LPR and Cec Hayward VE3MVO, were charged with the task of plotting the future of the repeater and how to fund future repairs and new hardware. The tech team consisted of Roger Hidesheim VE3LPP, Ron Reyn VE3IVJ, Fraser Cooper VE3IZB and Tom Franks VE3MAH. A separate bank account was put into place to cover the repeater costs with the original \$200 outlay to be paid back to the club. Any and all donations to the repeater fund would be greatly appreciated.



Roger, VE3LPQ and Tom VE3MAH attempting a CPR on the controller

With ownership come the good and the bad – the operating machine and the inoperable machine. Three days into ownership the transmitter failed, then the controller, then the receiver, then the transmitter again.... For the remainder of 1984, about 180 man hours were spent by the tech team repairing and rebuilding the transmitter strip, re-tubing and aligning the receiver and repairing it, rebuilding the controller and eventually borrowing a control board from John Riddell VE3AMZ to temporarily install into the control package. Over the next couple of years the tech team continued to piece together VE3SWR with 2 new (to us) solid state receiver strips and several home brew controller circuits. In 1993 the repeater account had enough funds in it to be able to purchase a commercially made controller board. Fraser Cooper, now VE3FC and Tom Franks VE3MAH built this into a new control package and named it RC1000. While the control package performed very well, the ailing transmitter and receiver strips did not.

Our first attempt at building a controller



Tom and Fraser installed the newly built controller now sending the call





Through the efforts of Bob Kernohan VE3MF we received a donation of some surplus Motorola Micor paging equipment from Eric Meth VE3EI. Walter Fuhr VE3NQM put Tom Franks VE3MAH in contact with Don Michalak VE3DWM and procured some additional Micor repeater equipment. Over the first several months of 1999, a new repeater was constructed using the donated Motorola Micor equipment and the RC1000 controller. VE3SWR remained relatively fault free for the next 8 years. In May of 2007, our 1970's vintage equipment was showing its age and parts were becoming difficult to find. At this time, the tech team lowered the power of the transmitter from 60 watts to 25 watts to see what effect on the pattern may be. Interestingly enough, no one commented on any change to coverage.

Pictured is Dave VE3BHZ, then president of SWARC with the 'new' Motorola Micor repeater.

From the top: 100 watt continuous duty power amp (adjusted for 60 watts output); transmitter (exciter); receiver; RC1000M controller built by the tech team; weather receiver at 162.550 MHz; power supply.

In January of 2007, a committee consisting of Earl Mann VE3EHM, Fraser Cooper VE3FC and Tom Franks VE3MAH was struck to investigate the possibility of an Ontario Trillium Grant to be used to replace the equipment at VE3SWR. The premise being that SWARC sponsored an ARES group and that the new equipment was required in times of need by the municipality, Fire Department and others. The AREAS group would be using VE3SWR for training exercises on a regular basis.



Over the following months, the committee met with our local MP Gerry Martiniuk, Wendy of the Kitchener Trillium Foundation office and others to determine the feasibility of applying for a grant. Replacement equipment lists and pricing were put together and in June of 2007 a proposal and application was sent to the Ontario Trillium Foundation. Several interviews and letters of reference later, SWARC received verbal confirmation that our grant request had been approved for \$10,500. The official announcement from the Trillium foundation was made in November and a cheque received and presented to treasurer Fraser Cooper VE3FC.



New TeraGo tower in the foreground with the old tower behind.

VE3SWR shared the 4 dipoles on the top of the old tower with Koch Transport.

The new antenna being installed is a Sinclair 4 dipole antenna with 6 dBd gain in this configuration.

While it doesn't look like it – the new antenna is between 50 and 75 feet lower than the old.

Now the real work begins – putting a complete new repeater together along with redundant system and stay within budget. At about this time we learned that the site a Koch transport had been leased to another company and that the tower was to be replaced. This meant that we would need to procure a new lease agreement with TeraGo Networks, the lessee of the site and replace the antenna and feed line that was not included in the original Trillium Grant. Since the site was being outfitted by TeraGo Networks to provide high speed networking and broadband data systems for the business community, tower height was being reduced and this would significantly affect the coverage of VE3SWR. On one hand, local dead spots within Cambridge may be covered better; however there would be a less than perfect 360 degree pattern with dips to the North West (Kitchener) and due south. Of the other sites offered by TeraGo Networks for our use, this remained the better choice. Finally on November 1st, 2008, the new and improved VE3SWR went on the air. While there have been some hardware issues, all remains functional and the 5 year commitment made to the Trillium Foundation is as of this writing date complete. The 5 year value of this agreement with the Trillium Foundation and TeraGo Networks was \$30,000 with an additional \$5000 per year for as long as the lease with TeraGo Systems is in place.

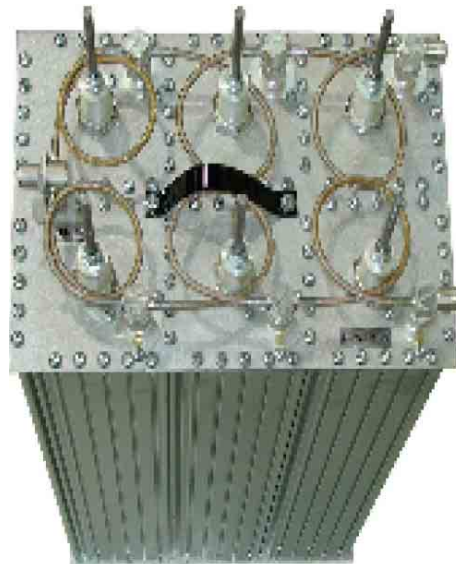
Along with SWARC's 50th anniversary; we 'celebrate' 30 years of repeater ownership and operation this fall as well.



Club members decided that a very basic repeater system should be installed including power backup and a second setup that could be swapped in as required.

From the top down – local speaker panel; Backup repeater constructed by Tom VE3MAH 3 watts adjustable to 85 watts; Commercial Hamtronics REP 200 30watts; Astron power supply (2nd Astron now in place donated by Tom VE3MAH); 1800 watt UPS and battery (automatic switching and lasts about 18 hours)

Seen in the background (both cabinet doors are removed) and below is the Sinclair 6 cavity duplexer.



From the last column –

Fraser Cooper was licensed as VE3EOS while still a teenager in the late 1960's, but due to family and work commitments let this call drop.

I met Fraser in late 1973. He had moved into the house 2 doors down from my parent's home in mid 1972. I was out washing my brand new 1973 German made sports car when this fellow appeared behind me with some questions about my new acquisition and about the 3 element beam I had on a tower next to the house. I did recognise him as the neighbour down the street and learned that he was a British car guy.

In the fall of 1974 I started working for Conestoga College and to my surprise; one of the faculty members I was to support in the electronics lab was Fraser; that guy from down the street. We became good friends and colleagues with similar interests in cars and radio.

About 1976 Fraser became interested in Amateur radio once again and acquired the call VE3IZB and upgraded his advanced standing to include the new digital endorsement. At the same time he sponsored a club station at Conestoga College with the call VE3TCC (Telecom Club Conestoga) and joined SWARC.

While Fraser was not looking to change his call sign, a telephone call in 1985 from a past graduate who was now working in the DOC office in Kitchener, had noted that VE3FC had come available and offered it to him. VE3IZB was immediately cancelled and Fraser became VE3FC.

After nine years as secretary, he became the "holder of the coins". Our accounts were in good hands for more than 10 years.



Always active in club activities, he is responsible for me getting a 'proper' radio license as well as many new recruits through the theory classes he taught. While he was not an avid field day operator, he could be found helping with setup and barbeque chef or helper.

Fraser operating my field day station (his old transceiver) on 20 meter phone in 1983.

As repeater tech team member, there was no detail that was overlooked in the repair, adjustment or acquisition of the new hardware.

For those who did not know Fraser, he became a silent key in March 2011.



Fraser Cooper's MGA.



VA3MGA (1958 MGA) and VA3MGB (1967 MGBGT)

Fraser and Jill VA3JRD enjoyed many hours travelling in these unique automobiles.

Do You Remember – This guy couldn't get enough of field day.



Have you worked them? DX news for the month

A5, Bhutan:

A Brazilian ham family (Sergio, PP5JR, Eduardo, PU5FJR (15 years old), and Bia, PU5BIA (17 y.o.)) will team up with Zorro, JH1AJT, to operate as A52JR from January 31 until February 4. The activity is coupled with one of Zorro's Foundation for Global Children programmes. QRV on 80-10m in SSB. QSL via PP5VB.

<http://www.fgc.or.jp/english/>

DL, Germany:

Emil Kostadinov, DL8JJ, announces an overnight activation of the Schneefenerkopf mountain (SOTA DL/WS-003) for February 1/2, pitching his tent at 2875m height. QRV on 40-10m in CW. QSL via bureau, LoTW. <http://www.dl8jj.darc.de/>

S9, Sao Tome and Principe:

John, IK5BCM, Beppe, IK5CBE, and John, IK5CRH, plan to activate Principe (AF-044, WLOTA 2000, WW Loc. JO3lrq) from February 1 to 12 as S9TF. QRV with 3 stations on 80-10m. Logsearch @ClubLog, QSL via IK5CRH, LoTW, eQSL. <http://gmiross.wix.com/principe-is-2014>

UR, Ukraine:

For those amateurs worldwide wishing to support the Ukrainian struggle towards Europe, there is an award available called "Ukraine is Europe!". It is available free of charge, manager is Ihor Sokorchuk, UR3LCM, <ur3lcm[at]ukr.net>.

<http://radon.doolru.org.ua/index.php?>

[option=com_content&view=article&id=4470&catid=38&Itemid=60](http://radon.doolru.org.ua/index.php?option=com_content&view=article&id=4470&catid=38&Itemid=60)

<http://www.qrz.com/db/UR3LCM>

V7, Marshall Islands:

Bill, N6MW, plans to get on the air as V73MW from Majuro Atoll (OC-029) February 4 to 14. QRV mainly on 160, 80, and 30m in CW, and on 20m in RTTY (focus on Europe). He brings an assortment of vertical and wire antennas together with a high-power rig. Log will be uploaded to ClubLog. QSL via M0URX (OQRS), LoTW.

<http://n6mw.jimdo.com/v7-dxpedition> <http://m0urx.com/oqrs/>

VE, Canada:

Canadian hams have been assigned five channels (5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz, and 5405 kHz) in the 60m band. Operations are to take place on a non-interference principle in USB, Data, RTTY, and CW, with a maximum bandwidth of 2.8kHz and 100W ERP.

Technical details of this decision can be found here: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10623.html>