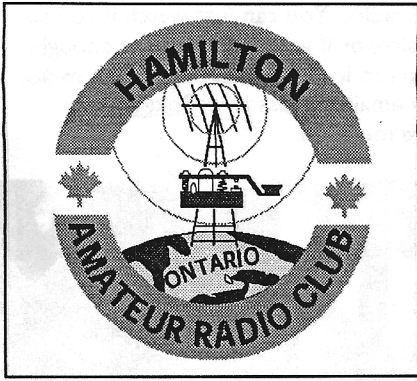


VE3BK



Vol. 72, No 6 — March 2005

[Http://www.hwcn.org/link/harc/](http://www.hwcn.org/link/harc/)

In this Issue

1	Deep Roots
2	Next Meeting
2	Contest Group – Ontario QSO Party
3	Dis & Dat – Early Memories of an Old HAM.
3	The HARC Executive
4	Important Points
4	Great Ride & Stride on the Linc. – Looking for Volunteers
4	Minutes of the February 16 th General Meeting
5	List of Chairs
5	Notes on Steve Kavanagh's Microwave Presentation
6	Announcements
6	Pictorial

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 - 73 Years of Amateur Radio 1932-2005

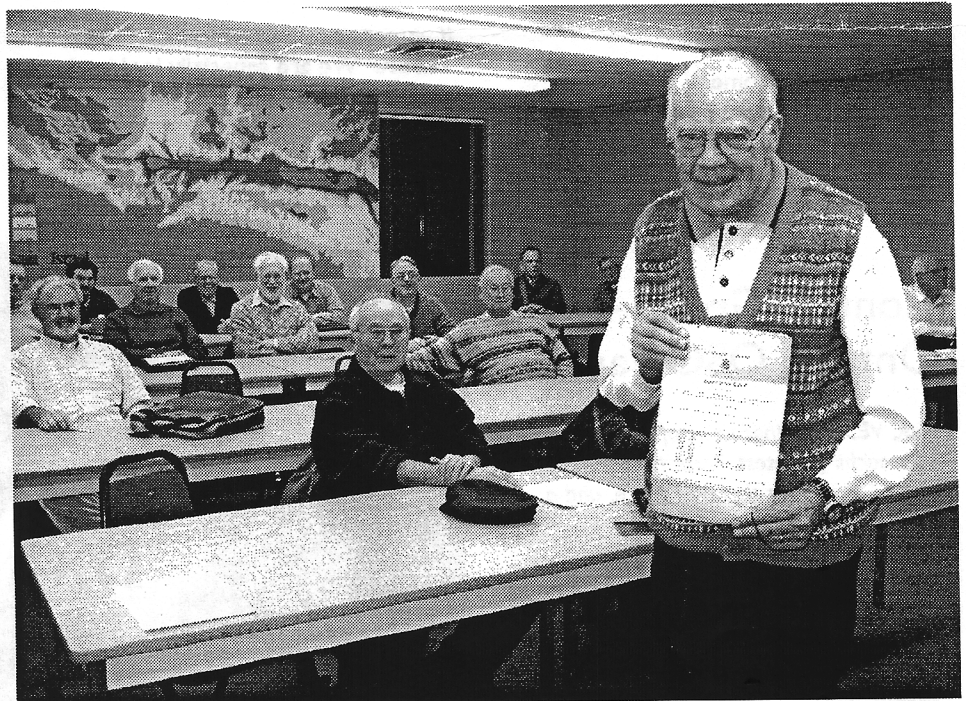
Deep Roots

by Mardy, VE3QEE

A glance at the header above will show that our Club has been operating for a notable length of time. When Don Graziano, VE3VZ, was making his presentation about antenna tuning, it impressed me that several of the guys in our midst, long-timers who have been operating since the '50s or '60s, put up their hands, and told us real practical, simple, and effective techniques for determining when that antenna was tuned and getting out. They had crossed all these bridges long ago – forgotten more than some of us will ever know – and that made me think there is a tremendous resource

sitting next to you and me at these meetings. Later, when Gord Barber was showing us his Amateur Radio Operator's certificate from the Department of Marine, dated April 1 1932, and showing us his original Log Book, reporting his initial contacts - that was impressive, too. The heritage of our Club is rich indeed, and if newer members get to know our long-timers, it will surely add enjoyment to the Amateur Radio.hobby.

And stories, - there are some great stories! At the Burlington Flea Market, John Kassay, VE3FDK and Jim Traves VE3FMT, were recalling how they used to produce the Hamilton Amateur, (our Club newsletter), all fifteen pages,



Club meetings – 3rd Wednesday each month (except July and August) – 8 pm
in the Hamilton District Christian High School, 92 Glancaster Road at the
corner of Rymal Road (Hwy. #53) and Glancaster Road. Parking on location.
Complimentary refreshments.

duplicated on a hand-cranked Gestetner machine and collated by volunteers from pages laid out on someone's ping-pong table.

Later in this newsletter we have reprinted a story told by one of our early members, a story that Bernie Granby found on a sheet of paper, yellow with age, a story that was published in the Hamilton Amateur some years ago, when it was being duplicated on Gestetner. It is called "Early Memories of an Old Ham". Hope you enjoy it.

Next Club Meeting

Wednesday March 16th our guest speaker will be Allan McGuirl Jr. He will be explaining about how the non profit organization he works for, designs, builds, distributes and installs solar powered radios for mission work around the world using many different frequencies and modes. Some of these are AM FM HF and now digital. This Hamilton based company has sent out 32,996 radios in 2004 alone!!

Visitors are welcome. If you know someone who might be interested in attending a HARC meeting, or if you live near someone who might benefit from a ride, please call them.

Contest Group – the Ontario QSO Party

Rick, VE3BK, brings news of an approaching contest. Participate with the VE3DC group for the experience, and a few hours of excitement.

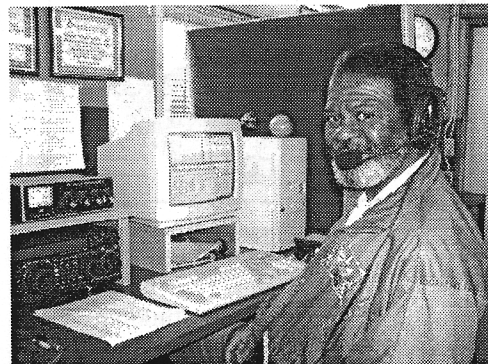
The Ontario QSO Party Contest is coming. It starts on Saturday April 16 at 18:00 UTC (or 2pm) and runs till Sunday April 17 at 18:00 UTC (2pm local). This is a fun contest that VE3DC will be running where Ontario stations contact everyone and everyone contacts as many Ontario stations as they can. The exchange for us in Ontario is: 59 (599) and the county you

are in. For those of you in Hamilton, it will be 59 HAM. For the DC Contest Group, we run from a farm location in the HNO or Haldimond Norfolk County. Extra points are made for working the official RAC station VA3RAC or the Ontario DX Association's (sponsor of this contest) VE3ODX.

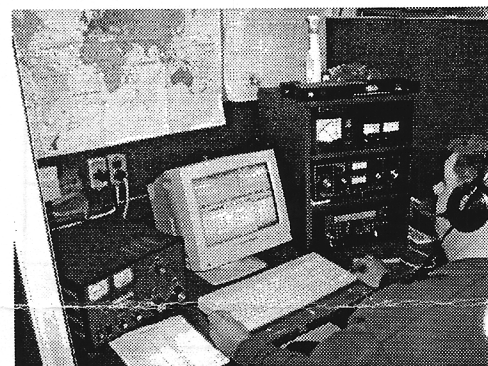
This contest only runs 24 hours and as I said before, we have fun doing it. The VE3DC Contest Group is looking for operators to help us with our Multi-multi effort. We usually run high power (amplifiers) with our many antenna arrays. We have won this contest every year for the county we are in, and about 6 years as the overall winner. If you help us, we will order you a button to commemorate your participation, and you will be able to order a T-shirt as well, in your size (they have been \$15 dollars in the past), and we get them from the ODXA group who sponsor the Ontario QSO Party. Rules and information about the contest can be found at <http://www.odxa.on.ca/oqphome.html>

if you want to help us, contact Rick VE3BK. We are especially looking for anyone working on their advance license or anyone new to the hobby

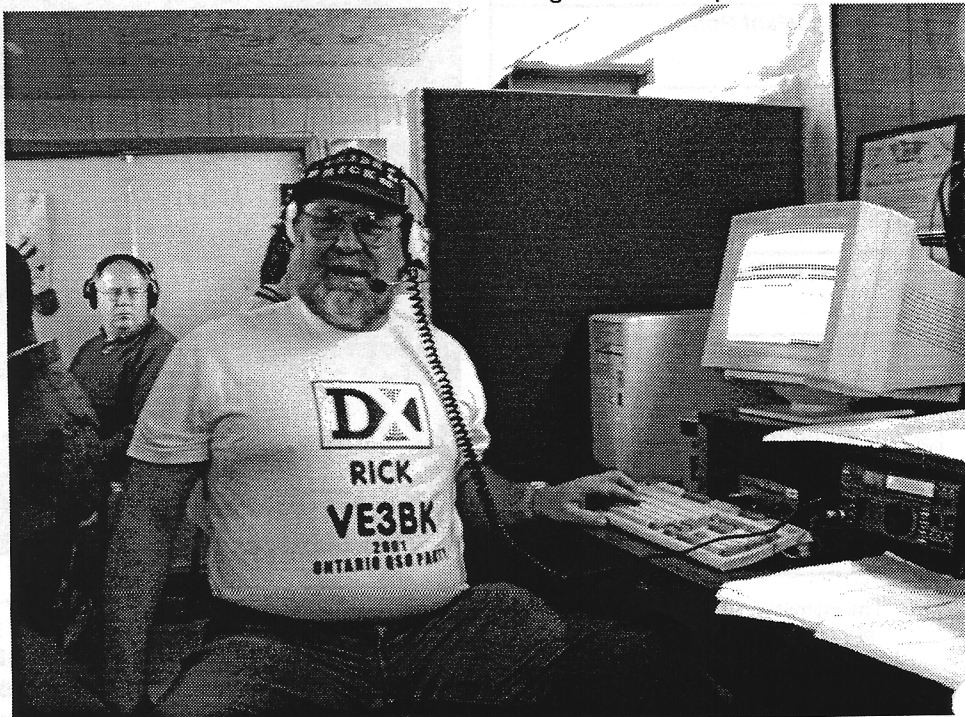
that would like to get their feet wet on HF radio. You can just watch if you so desire, or if you feel confident enough, you can log or actually operate a radio. My email address is ve3bk@rac.ca give me a call.



Emesley, VE3JAI, manning one of the stations at the VE3DC contest site.



Dan, VA3DJ, getting through a pile-up to log another multiplier.



Dis & Dat

by Bernie Granby, VE3EKY, VA3XJ

The following article turned up in some old files. I passed it on thinking you might enjoy reading the story.

EARLY MEMORIES OF AN OLD HAM by LES. SHARMAN, VE3KTT

In the early part of 1920, we were living some 15 miles to the west of Hamilton in the village of Lynden. On the 9th of February of that year I had my eleventh birthday and this is very firmly fixed in my mind for, just a few short weeks prior to this, our family had arrived from a large city in the midlands of England. On arriving in the village, we were the objects of considerable curiosity for we were the only family, at that time, to settle in the village from an overseas country. The transition of an English Public School boy to a rural Canadian two-room school makes quite a story in itself: however, by the end of that first summer, we had made friends with a number of families and were more or less accepted by the village generally.

The population of Lynden today is much the same as it was when we arrived. However, its character is entirely different. In those days, the village served as both a business and social centre, not only for the villagers but also for the surrounding farming area. Seldom would anyone have occasion to go to Brantford or Hamilton unless it was for a medical operation or some complex legal matter. The only exception to this were the students traveling to Brantford by train to further their education. They would catch an early morning train at 7:30 a.m. and return about 5:30 p.m. each school day. The popularity of the automobile was a far cry from what it is today: the horse and buggy probably outnumbering the automobile by more than twenty to one.

HARC 2004-2005 Executive

President

Mardy Eedson VE3QEE
905-648-0187
meedson@cogeco.ca

First Vice President

Michael Krebs VA3WXS
905-523-9005
mkrebs@sympatico.ca

Second Vice President

Ron Ouwehand VA3OUW
905-692-4684
ron.ouwehand@sympatico.ca

Secretary

Roger Pimm VE3UFZ
905-560-2628
rpimm@cogeco.ca

Treasurer

Fred Robinson VE3GCP
575-5197
FredRobinson@MountainCable.net

Repeater Chairman

John Vandenberg VE3DVV
905-692-3802
JVandenberg@mountaincable.net

Membership Chairman

Emsley Mitchell VE3JAI
905-627-0333
eamitch@mcmaster.cis.mcmaster.ca

Lynden is on the main-line of the railroad running between Toronto and the U.S. border at Windsor-Detroit. In those days this was known as the Grand Trunk Railway. Enhancing the importance of the village was the fact that a railway junction was located there with a spur line leading to Galt and more northerly routes. This junction necessitated the use of a switching station, known as the "Tower", to control traffic from or to the main line from the spur to the north. The operation of the "Tower" required the shift work of four men whose only means of communication

were by battery operated telegraph.

After some time, my family became friendly with that of Mr. Chester Sampson who was employed as an operator at the "Tower". "Ches" as he was called, took a considerable interest in me and soon had me supplied with an old key and sounder, learning the railroad code with what seems to me its complicated spaces between dots and dashes in a single letter.

It didn't take too long to discover that Mr. Sampson had a keen interest in radio and that a different code was used for that means of communication, and so a buzzer replaced the railroad sounder and I had learned to send and receive with a reasonable degree of efficiency after some months of practice. I then started, with help from Mr. Sampson, to build my first crystal receiver. We worked for hours and hours building tuners, loose-couplers, etc. It may be of interest that most of the parts were purchased from the F. W. Woolworth Co. in either Brantford or Hamilton. It was surprising the stock that they carried; magnet wire for winding coils, antenna wire, insulators, binding posts and so on. One could even purchase rotor and stator plates with separators and construct your own variable condensers. It was several weeks before anything was heard and, when we did, it proved to be from a local Ham. This was my very first contact with amateur radio.

This local Ham was Mr. Homer Houser who had replaced one of the telegraph operators at the railroad switching "Tower" previously mentioned. I must have made a nuisance of myself pestering Mr. Sampson to introduce me to him. Finally it was arranged and we paid him a visit, after dark, one summer evening. To say that I was amazed and impressed is to put it very mildly indeed. He was using a motor-driven D.C. generator for his transmitting power with a rotary spark gap. When he depressed the key to transmit, the sparks flying around that rather dimly lighted room was a very impressive sight. Also, wonder of wonders, he had a regenerative receiver, using what we

called honeycomb coils and two stages of amplification using the new UV201A vacuum tubes. This was something *beyond my wildest dreams*. After that first visit, I was at his home whenever my Mother or Father would permit and sometimes without their permission.

One summer evening in August of that year, I was in front of the old hotel with two of my new friends, Ken Hammel and Vincent Van Sickle. We were busily engaged in one of our favourite pastimes of trying to put out the street light on the main corner in front of the hotel. There was, perhaps, a total of ten street lights in the whole of the village. Electricity to the area was comparatively new and no more than half of the homes were wired for this modern convenience. As I say, we were pea-shooting our fool heads off when I noticed a very regular dimming and then brightening of the light. I asked the two friends to stop their shooting and I began to realize that this regular pattern was in the form of Morse code. They did not believe me. I then gave them the baseball scores of several teams that had played in the American League that afternoon and suggested that they check the Brantford Expositor the next day. My code reading proved to be correct with one exception, I had the Yankees with a score of three and it proved to be four to one over the Washington Senators.

The following day Mr. Houser confirmed that he was transmitting at that time and he was indeed relaying the baseball scores from one amateur to another. There was no question but that his dots and dashes brought about a sufficient voltage drop that was readable on that particular street light. And so - these are a few of our early memories; the change in pitch of the steam whistle on the Maple Leaf Express as it neared and then receded from the little railway station; the large ice-cream sundae that cost ten cents; and would I ever, in my whole life, have \$12.00 to buy a UV201A vacuum tube!

Important points

Executive Meetings

HARC Executive committee meets each month, except July and August, at Mohawk College in room E031B. All members are invited to attend and participate. The meetings are on the Tuesday following the club General Meeting each month.

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, except July and August, at 7:30pm. HARC "swap net" follows at 8pm. The ARES net is held on Thursdays at 8:00pm. All contacts are welcome.

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 \$5.

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 Mardy, VE3QEE < ve3qee@rac.ca >

Announcing: Great Ride & Stride for Cancer on the Linc.

On Sunday May 29th 2005 from 9:00 AM until 12:00 noon. CFF Specialty Metals is sponsoring the Great Ride & Stride for Cancer on the Linc. Once again, we have been asked to arrange for Amateur Radio mobile stations to monitor the route in the interests of public safety. In the past we have been able to have a mobile unit under each bridge crossing the Linc. When things are going well there is not much to do except observe the procession from your vehicle parked at the roadside beneath an overpass. Last year there were 1000 participants being sponsored and following the walk, ride, or rollerblade routes. If you would like to be one of the mobile units for this year's event, please get in touch with Mardy by e-mail, phone or in person and your name will be added to the list.

Minutes of the General Meeting for February 16, 2005

by secretary, Roger Pimm, VE3UFZ

The meeting was convened at 8:00pm sharp by President Mardy VE3QEE. Mardy introduced John Hudak, a recent graduate from the Basic Course. Congratulations John. We look forward to seeing you at future meetings and events.

Our guest speaker Steve Kavanagh, VE3SMA, was introduced by Ron Ouwehand VA3OUW. Steve was well prepared to talk on his favourite subject, Amateur Microwave. His presentation was very professional utilizing excellent slides on a computer driven projector. There were also several hands on exhibits of microwave transceivers, antennas and test equipment, most of it home-brew. At the conclusion of Steve's presentation there was an audio presentation of

several "real life" contacts via microwave.

The following is a valiant attempt by your humble Secretary to capture the main points of John's presentation. Please forgive any errors in technical data as the scribbles I make during our meetings are difficult even for me to read. So here goes...

An Introduction to Amateur Radio Microwave

By: Steve Kavanagh VE3SMA

Microwave was very difficult to explore in the past due to the absence of equipment manufactured for amateur use, and the absence of any commercial surplus equipment. Today it is much easier to enter this field of experimentation since transverter kits and junked commercial equipment is readily available at flea markets and surplus vendors.

What is microwave, as it applies to amateurs? Basically, microwave is any frequency above 1GHz. From our basic course we learned that: Super High Frequency (SHF) is 3 – 30 GHz Extra High Frequency (EHF) is 30 – 300 GHz

Ham bands can be found by checking into www.rac.ca/service/bandplans.htm. Many of the microwave activities that amateurs can get involved in are identical to HF/VHF activities. DX'ing (in the old sense of the phrase, "How far can you get?") and contesting are very popular within this small dedicated group of amateurs. Portable operation is the mainstream method for DX'ing and moonbounce seems to be the winner. Amateur television utilizes microwave and there is lots of bandwidth available at 902 MHz, 1.2, 2.3 and 10 GHz. Satellite communications are available to amateurs for experimentation. At present high speed data is the subject of some experimentation. Line of sight is the principle mode of propagation and like VHF and UHF is subject to

solid objects in the path. There are other less successful modes such as:

- Reflector paths (bouncing a signal off a building or large structure)
- Tropospheric scatter
- Tropospheric ducting
- Rain and snow scatter
- Moon bounce

Equipment is commercially available from Kenwood (Kenwood TS2000X), Icom (IC-910H with optional module for microwave). For Amateur TV, PC Electronics makes TV transceivers for 902MHz and 1.2GHz. Transverters are the fun way to go and are available from Down East Microwave Inc. (New Jersey) and Kuhne Electronics (Germany). Home brew and surplus equipment is available for converting your HAM HF transceiver to the microwave bands.

Antennas are available from Comet. Home brew varieties include Helix (circular polarization), Loop Yagis and Horn antennas (for 3.3GHz and up). 10 and 24GHz antennas are available from Advanced Receiver Research. Consensus is that they are smaller than VHF antennas and are easy to make. Dish antennas are the choice for higher gain and are useful from 1.2GHz up.

A brief summary of the bands and their characteristics:

902MHz – shared with cordless phones, QRM is a reality. There are SSB/CW stations in this band. Propagation is similar to the 70cm (430MHz) band.

1.2GHz – shared with Radar (QRM). SSB/CW are popular on this band.

2.3GHz – (13cm band) Shared with all sorts of stuff. There are at least 70 stations across Canada in this band.

3.4GHz & 5.7GHz – (9cm & 6cm) There is currently not much activity on these bands.

10GHz – (3cm) Lots of activity in this band. This is one of the most popular ands. A few dozen Ontario HAMS have been active for the past 20 years on Wide Band FM, SSB and CW.

24GHz – This band is shared with various services but no QRM problems have been observed.

47GHz – This is the highest frequency for which commercial equipment is available.

76GHz & up – This band requires home brew only since there is no commercial equipment available. There has been no activity in Canada yet. This is a new band which is shared with Radio Astronomy.

Simple wide band FM gear can be built by using Intruder Alarm modules. These modules are cheap and are available as "surplus". A "Gunplexer" at 10 or 24GHz could be utilized or a Gunn diode oscillator serves for both RX and TX on these frequencies.

Awards for various contests are available for each of VHF, UHF and microwave bands working specific numbers of grid squares. Some of the contests involving microwave are: ARRL VHF Sweepstakes (January), Ontario QSO Party (April), SBMS 2GHz & Up contest (April), 902MHz & Up Sprints (May/Oct), ARRL VHF QSO Party (June/Sept), ARRL UHF contest (August), ARRL 10GHz & Up (August/September).

Internet Discussion Groups:

\ WA1MBA (includes link to Microwave Email Reflector): www.walmba.org and The Ontario VHF Association Email Reflector: http://groups.yahoo.com/group/OntVHFAssoc_reflector/ Microwave operators are a fairly small but helpful group. Help is always available to get started. Check into the web sites if you are interested.

Club Announcements

Dave Bruton informed us that Gerald VA3GMJ is in hospital with respiratory problems.

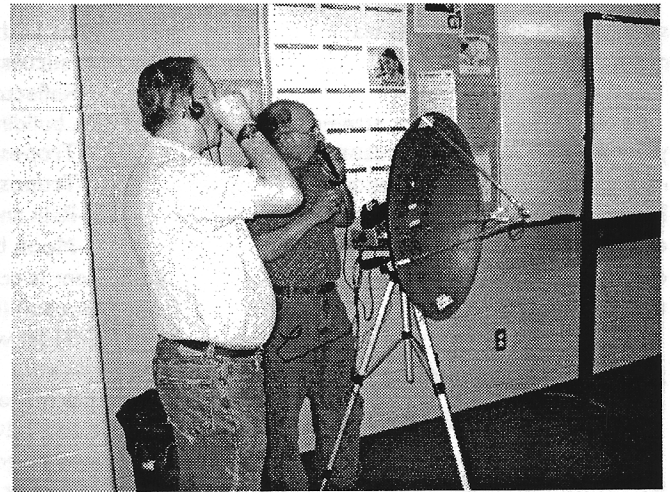
Garry Notto VE3TTO is requesting volunteers for the annual Hamilton to Ancaster bike race. If you are interested please contact Gary directly.

Adjournment: 10:00 PM.

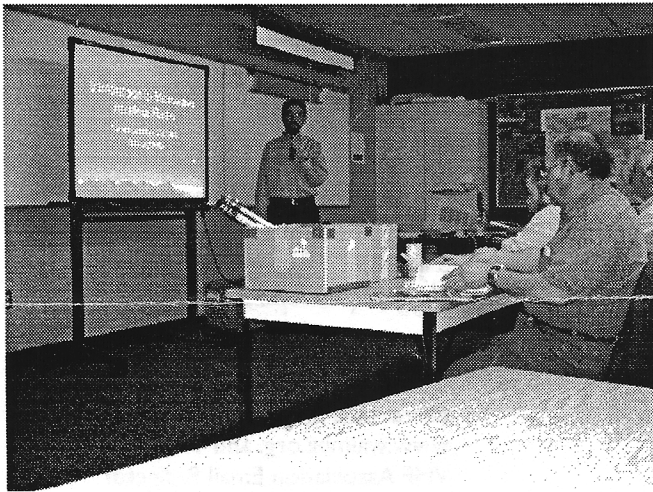
Apr. 17, 2005



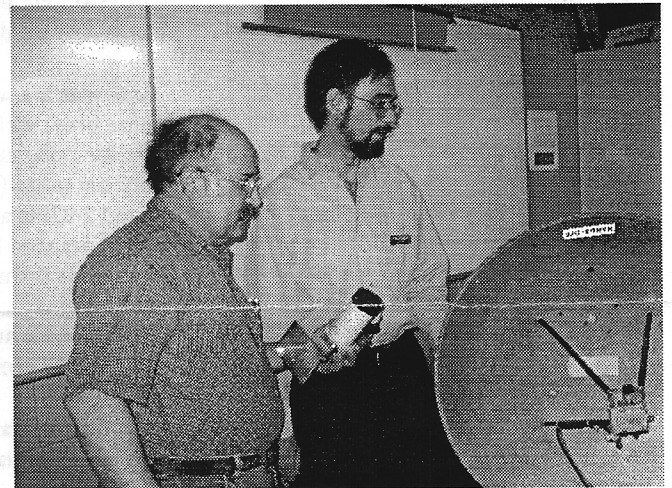
Welcoming the new Basic Course Graduates – Fall 2004 Class. Left to right: Jim Sawadski, VE3EEZ, Jocelyn Escalderon, VE3BXZ, John Hudak, VE3CXB ✓



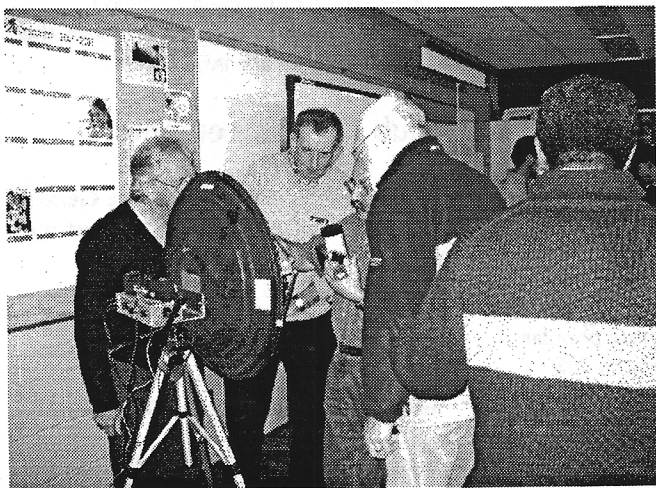
Can you hear me? Yeah, we can hear you without the microphone. Don and Ron try bouncing a signal off the cupboard at the back of the room.



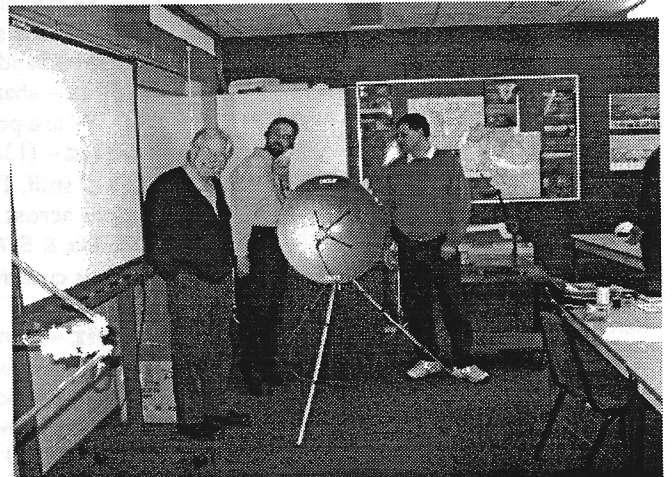
Steve Kavanagh, VE3SMA, treated us to a great multi-media presentation about the microwave activity on the HAM bands



Don and Steve adjusting the frequency of the second transmitter.



Casey and Don get a lesson on setting the frequency.



Yes, we are hearing you just fine. The second transceiver picks up transmissions from the first transceiver in what may be logged as the evening's shortest distance contact.