The Dummy Load

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

Issue No. 153 Feb. 2015

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)

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

Next Meetings

Second Monday of every month
Preston Arena Boardroom at 8:00pm
Mon Dec 08, 2014
Mon Jan 12, 2015
Mon Feb 09, 2015
Mon Mar 09, 2015
Mon Apr 13, 2015

CLUB NEWS

The meeting began at 20:04 with 10 members and no visitors.

- Minutes read by Bob, VE3MF Accepted by Mike, VA3MP
- Treasurer's report presented by Tom, VE3MAH and accepted by Shawn,VE3PSV and Scott, VE3ANT

Old Business:

- Eric VE3EI will give presentation on Remote HF Stations at February meeting.
- Discussion about club constitution as it applies to the passing of members and their family members. Calvin VA3CBE will document possible changes and forward to members for review. This topic will be covered at the April AGM.

New Business:

- Annual Club banquet discussed for booking venue. Bob VE3MF will call Golf's and Cambridge Golf Course for prices. The target date for the dinner is April 11. Joe VE3JWK will inquire with the Hespeler Eastern Hall for pricing.
- Fraser Cooper winner needs to be discussed by current holder Steve VE3USP and two volunteers, Hugh VE3IHM and Bob VE3MF.
- RAC Winter Contest results were 498 qso for 198198 points.
- Questions were raised with respect to VE3SWA LoTW and access now that Dave VE3BHZ had passed.
- membership cards discussed for proof of membership and payment of dues, cards will continue not to printed or issued.
- Shawn VE3PSV presented use of ARRL Radiogram form as used on directed nets like Ontario Phone Net.

- Year End treasurers report presented by Tom VE3MAH. Error found in report and report will be redone.
- Club Donation went to Shawn VE3PSV of $10.50.

Meeting was closed at 21:27, moved by Gerry, VE3NXV and seconded by Scott,VE3ANT

Present at Meeting-: Members:

VACBE Calvin Benoit	VE3MF Bob Kernohan
VE3IHM Hugh Martin	VE3MAH Tom Franks
VA3MP Mike Pap	VE3NXV Gerry Allen
VE3ANT Scott Buell	VE3JWK Joe Ketchabaw
VE3USP Steve Nyul	VE3PSW Shawn Gartley

Guests:
None

Confirmation by Tom VE3MAH

Based on the title, you might think this article has something to do with religion – but it doesn't.

In late August of last year, I had an interesting e-mail through our web page from a lady whose father was Harry McClelland, VE3ABF before WWII and VE3APR after WWII. She and her husband were sorting through his collection of QSL cards and wondered if our club would be interested in having those from Cambridge. I met with Mr and Mrs Williamson and listened to some of the history she remembered about her dad and amateur radio and was delighted to be able to fill in some of the blanks.

Personally, I view QSL cards somewhat like old family pictures. They are a personal way to look back and remember those special contacts made along with the friendships that may have developed. Why do you collect QSL's?

"QSL ? " Can you acknowledge receipt? "QSL" I am acknowledging receipt.

So which came first? The Q code sent to save characters in CW or the card.

The Q code was initially developed for commercial radiotelegraph communication, and later adopted by other radio services, especially amateur radio. It has been used since about 1909.

The earliest reference to QSL cards I could find is a card sent from 8VX in Buffalo New York to 3TQ in Philadelphia, Pennsylvania in 1919 confirming a contact between the two amateur stations. From Wikipedia "The standardized card with callsign, frequency, date and time etc. may have been developed in 1919 by C.D. Hoffman, 8UX in Akron Ohio."

The first 'QSL' cards I remember seeing were those belonging to my uncle who along with my father received confirmations from a number of US AM broadcasters in response to their reception reports. While these cards are long gone, I do remember cards dated in the late 1920's and early 1930's. The first cards I collected were for signal reports from the BBC and Radio Moscow short wave stations. (Attaching these to a high school assignment got me an A+)

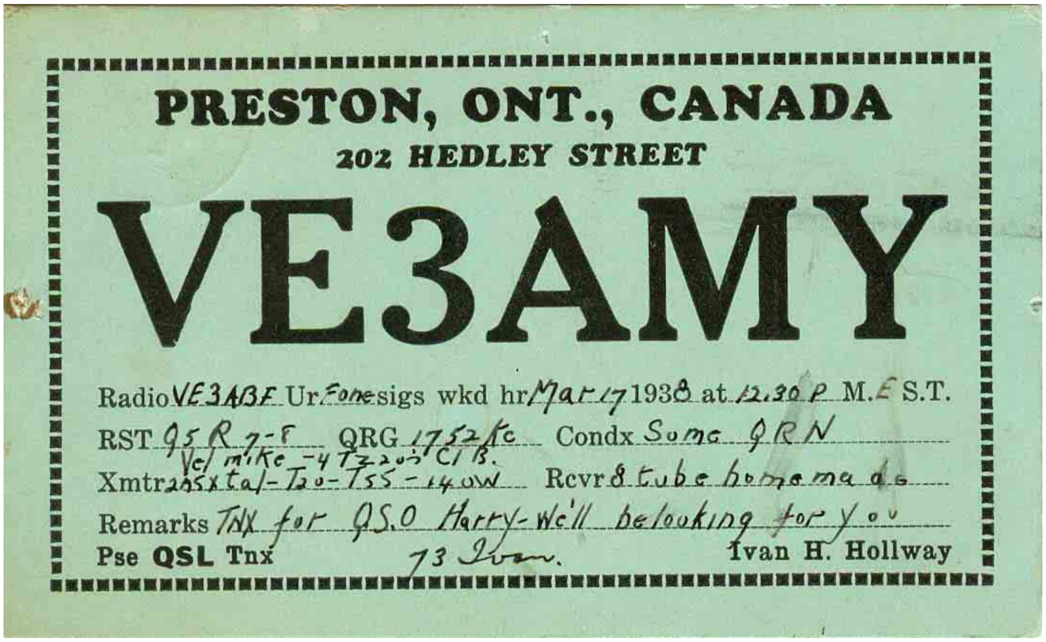
What can we learn from these old cards from someone's collection?

The Preston section of Cambridge appears to have had an active Amateur population in 1938.

For the new amateurs reading this, a quick explanation of some of the information found on these cards.

The frequency of the contact is stated a number of ways. In the "olden days", frequency was expressed as cycles per second (cps) while amateurs shortened this to kc or kc's meaning kilocycles or 1000 cycles per second. In 1960 the General Conference on Weights and Measures (CGPM) adopted the term Hertz (Hz) to represent 1 cycle per second in honour of the German physicist Heinrich Hertz. (KHz, MHz, GHz…) Not all amateurs were or wanted to be up to date and used a variety of methods to write frequency – mc or Mcs or M.C. (mega cycles).

QRG meaning "What is my frequency?" or "Your frequency is ____" has fallen out of use since all modern receivers, transmitters and transceivers have very accurate frequency displays, some capable of displaying frequency to within 0.1 hertz.



An AM phone QSO from March 1938 on 1752 Kc (1.752 MHz) using both a home brew transmitter and receiver. So, with 140 watts (I'm assuming input power) gets a 57/58 signal report in Brantford, a distance of 30 to 40 kilometres. Note that the frequency in use is not within the current Amateur assignments. Sometime after WWII the 160 meter band was set to 1800 KHz to 2000 KHz (1.8 to 2.0 MHz)

The reason I 'assumed' input power is related to the standard method of stating power in a tube transmitter. The DC input power to the final stage is used because the instrumentation on the front panel of the transmitter consisted of the final tube plate voltage and current meters used for tuning the circuit into the antenna load. Outboard watt meters were not readily available to most amateurs. Regulations of the day stated the maximum power allowed as DC input power. (P = V x I example: plate voltage = 800V and plate current is 150mA, DC Input power = 120 watts DC input power) Current RIC-4 states a maximum of 1000 watts DC input (2250 watts PEP) for advanced qualification and 250 watts DC input (560 watts PEP) for a basic qualification.

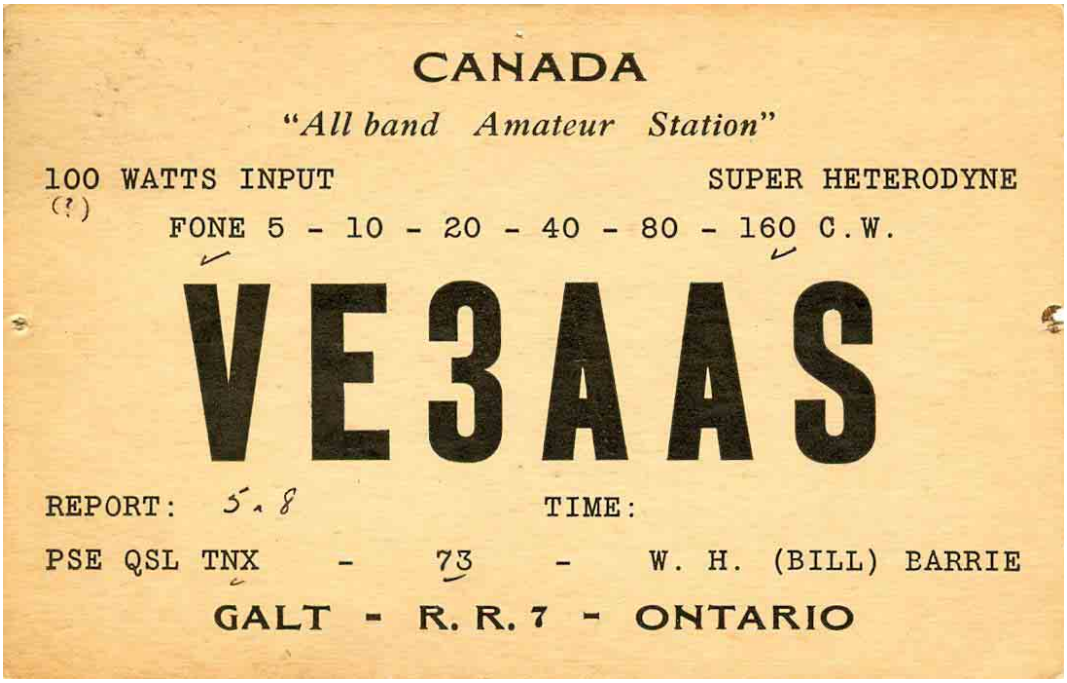
Once again a 160 meter phone QSO in March of 1938 on 1760 KHz with a signal report of 58. It appears that this operator had a 'modern' receiver. While I cannot decipher the make, it is a superhetrodyne type. The transmitter looks like a multi (eight or more) tube home brew.

H.W. Cassel was Harvey Cassel, father of Harvey Paul Cassel VE3AVY/ VE3SY (SK 2012). VE3QS Print was a local QSL printer as can be seen from the advertisement in the December 1948 publication XTAL, the official magazine of the Canadian Amateur Radio Operator's Association (CAROA), the National society from 1935 into the 1950's.

QSL's for discriminating hams. Distinctive! Colorful. Highest quality! $1.50 per 100. Samples 10 cents. Ve3QS Print, 344 Pape Ave., Toronto.

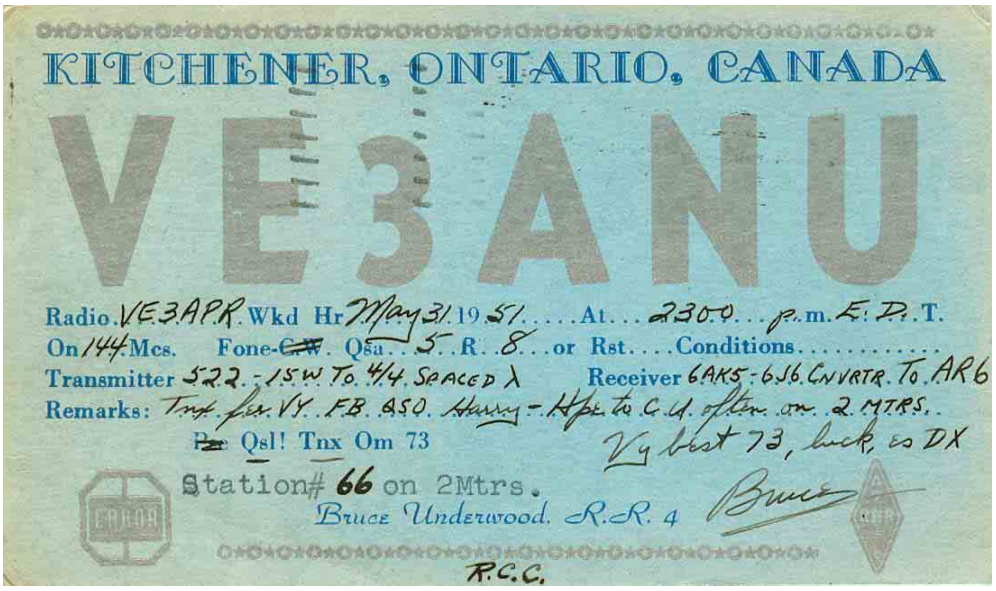

GALT - ONTARIO - CANADA
31 CAMERON STREET
Radio VE3ABF Confirming QSO Apr 29/38 at 6:30 P.M. EST,
Ur Sigs R 6 S 7 T - on 1.76 M.C.
VE3AQN
Xmtr 2A5-59, 53 class B mod. Rcvr S7 TRF, 59 DET, 56-2A5 audio
Rmks Au again soon Harry.
PSE QSL TNX 73 EARL MANN, Opr.

Some of you may remember the holder of this call. Earl Mann (VE3EHM) having left Galt to pursue his engineering career, moved back to Cambridge and became a member of our club in 2006, 2007 and until his passing in 2008. Earl had a distinguished career in communications with both the military and the private sector engineering companies. So, once again 1.76 megacycle 57 report from Brantford using some homebrew and commercial building blocks. I believe a 2A5-59 transmitter was home brew using two 2A5 tubes as the output with a 59 tube as the oscillator and two 53 tubes as the modulator in a class B configuration. Earl's receiver was a one or two tube Tuned Radio Frequency (TRF) receiver, one tube detector and a two tube audio amplifier. Some of you may remember or have played with a TRF receiver. In order to tune in a station, it could be tedious because each stage must be individually tuned to the station's frequency. There were 2, 3 or even 4 stages of RF amplifiers and a detector requiring tuning knobs to be adjusted.


CANADA
"All band Amateur Station"
100 WATTS INPUT (?) SUPER HETERODYNE
FONE 5 - 10 - 20 - 40 - 80 - 160 C.W.
VE3AAS
REPORT: 5.8 TIME:
PSE QSL TNX - 73 - W. H. (BILL) BARRIE
GALT - R. R. 7 - ONTARIO

While there is no date for this contact, the postmark is from June of 1938 and a stamp price of 2 cents. Bill appears to be quite proud of his "All band" station. Operation on 14MHz and up in 1938 would have been quite an accomplishment with the unstable circuitry of the day – unless you had access to equipment designed and built for the military. I can just imagine a CW or phone contact on 60 MHz and trying to decipher code that may be chirping and drifting or having to continually fine tune the voice of your contact.

Fast forward 20 years and we find VE3AIF working the Brantford hop on 3765 KHz / 80 meters. A true 59 signal report makes sense considering the 300 Watt (DC Input) power over this short path. The call VE3AIF is still active by a John Bolt in Tillsonburg with a Basic qualification – presumably a relative (son?) of the licensee of this call from 1957.



From May 1961, this card confirms VE3ANU's 66th 2 meter contact. Once again an approximate 40 Km path and in this case approximately 15 watts (probably AM) gives a respectable 58 report. With the end of the second world war, a large amount of surplus military communications equipment became available to radio amateurs. A '522' transmitter could have been a surplus SCR 522 transmitter originally supplied by the Colonial Radio Corporation to the Allied forces in 1943. These were a 28 VDC transmitter consisting of a transmitter, dynamotor, some interconnecting cables and a 4 channel crystal control box – all consuming about 300 watts to provide an RF output of about 10 watts. The receiver looks like a home brew converter (2 meters to HF) and another military surplus box. An AR6 receiver is identical to the pictured RCA Victor AR2 with the exception of it requiring a 24 volt DC supply rather than a 12 volt supply.

Could you imagine setting up a 2 meter, 4 channel station with this equipment? How about wanting a mobile or portable station? My first 2 meter transceiver, a Syscom Commander II, 5 channels, took up most of the passenger foot space in my Volkswagen beetle and this was a 'modern' 1960's commercial unit.

VE3ANU shows as being still active and belonging to Bruce Underwood in Kitchener.

SCR 522 Transmitter RCA Victor AR2/AR6 Receiver

Photo credit: http://jproc.ca/rrp/sradequ.html and http://jproc.ca/marconi/ar2.html

While viewing and thinking about these cards, the topic of station licenses and call signs came to mind.

Those of us licensed prior to 2000, remember that our station license needed to be renewed prior to April each year. Annual renewal fees in 1999 were $24 per year for each station license we held. If we did not renew, our station license would be recinded and our call sign reissued after one year. If you wanted to continue operating at some later date, you needed to reapply for a station license and call sign. Station licenses and call signs were issued by the local Department of Communications office (prior to 1996), ours locally being located on Duke Street in Kitchener. The DOC is now part of Industry Canada and all station licenses handled from their single office in Ottawa. Under DOC, each local office across the province was issued a block of station call signs which were issued sequentially to amateurs. Choosing your own call sign is a recent development. In 2000, Industry Canada discontinued the annual fee for a station license and made it valid for the lifetime of the holder. Following is an excerpt from Radio Information Circular 9, **RIC-9 — Call Sign Policy and *Special Event Prefixes*** which states how call signs are currently handled.

“Call signs are assigned to individuals for a lifetime. However, there are cases when call signs become available for reassignment. In the case of an amateur requesting a replacement call sign, the unwanted call sign would be returned to the block of available call signs at the time of exchange.

In the case of a deceased amateur, Industry Canada policy allows for a member of the immediate family to apply for the call sign. Immediate family includes father, mother, step-parent, foster parent, guardian, brother, sister, spouse, child, grandchild, stepchild and adopted members of the family.

If no family member has applied for the call sign within one year of the death, it will be returned to the block of available call signs.

All call signs become available for reassignment when the current year equals the certificate holder's birthdate plus 125 years.”

So why 125 years? Unless you cancel your call sign prior to death or your estate cancels your call sign with Industry Canada when you become a silent key, their data base assumes you are alive and well. Final note: if anyone wants these cards for a collection – please ask me, otherwise I’m not sure what to do with them.

MORSE over IP

by Steven Nyul VE3USP

By now most people are familiar with the term 'VIOP', or Voice Over IP. This technology is being widely used in telephony as it is very cost effective; it converts your voice to a digital signal and transfers it over the internet to the party you called. The digital data is then converted back to voice at the other end.

I had a friend at work who had been a HAM radio operator in New Zealand, but after his return to Canada, he had no time for it. He was still a very good CW operator. I wrote a little program that allowed me to send live audio to his computer. All I needed was the IP address of his computer. I surprised him when his call sign, ZL2BCG came from his speakers.

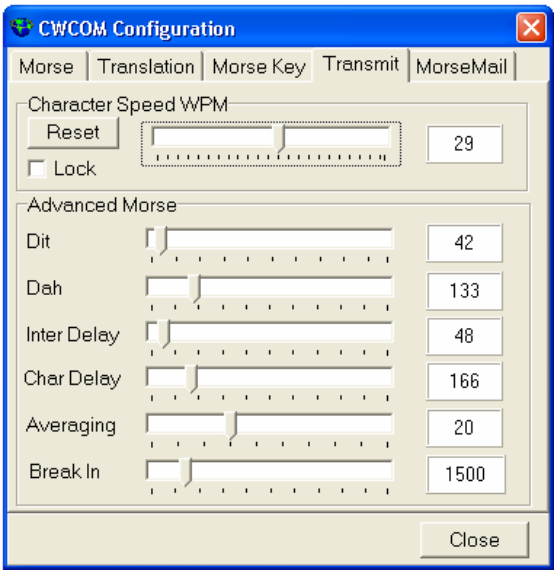
I realized the great potential in this technology and wanted to expand the program, but I did not have the time to do it, nor did I have the expertise to make it a robust, user friendly program that one could just download from the internet and use. Lucky for us, others developed such program and now we have CW Communicator.

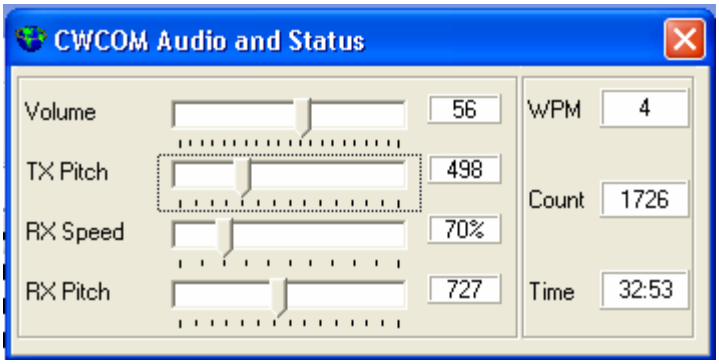
CW Communicator is a free program that allows you to communicate with another computer using your Morse-key. The key is connected to the serial port; that's your 'Transmitter' and your audio card and speakers form your 'Receiver' There is a Server you need to log into to see who is on the 'frequency' The Server would be synonymous with a 'band' or 'frequency' where you can spin your dial to see who is on. There is room for improvement, but there are many advantages this program can offer:

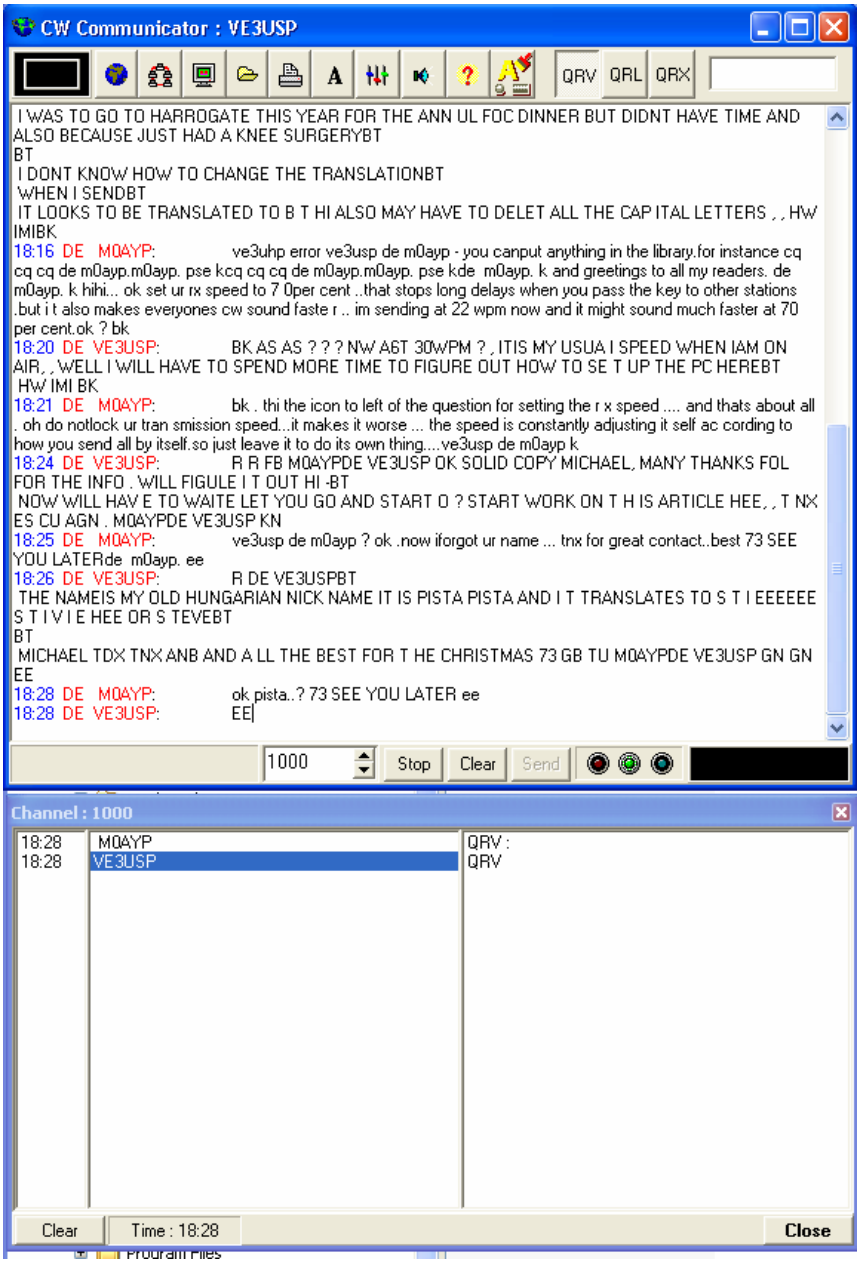
- You do not need a big antenna and you won't interfere with your neighbor's TV reception ☺
- Very simple setup, no need to spend thousands of dollars on equipment
- No HAM license is required (there are active and 'real' shortwave repeaters that allow you to remotely control a physical transmitter, antenna, receiver, etc. They do need a license since they actually transmit live on air)
- It allows you to practice, or brush-up your CW without actually being on air. If you are a bit shy to go on air on CW, this *IS* the program for you!
- No QRM or QRN and the CONDX is always good, no dependency on those unreliable sun spots ☺

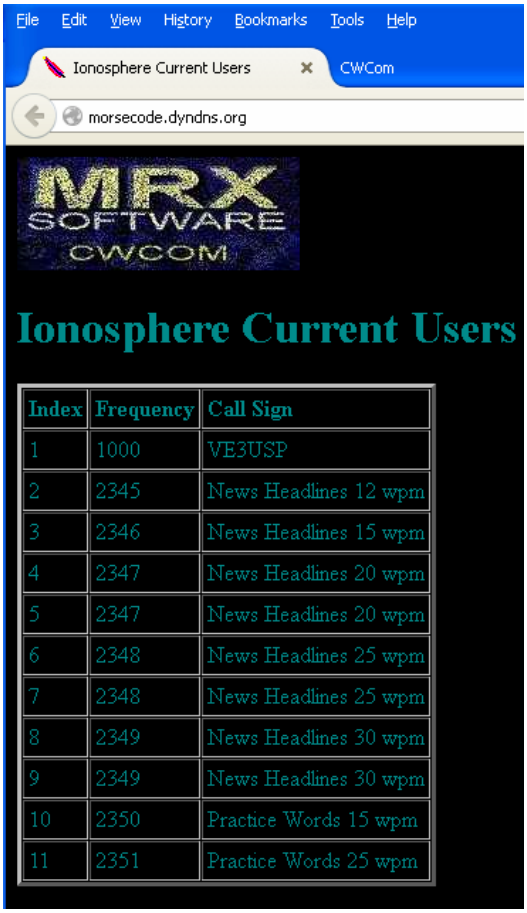
Last October I set up my 'station' and made a 3-way QSO with a Japanese and an American station. The interesting thing about this, is that all 3 of us were working in the Space Industry; small world it is…
I did not capture any screen shot about this QSO. Since I wanted to write this article as early as last November, I launched the program and made another QSO with a station –a real HAM with call sign!- and captured the screen this time.

The program has all the typical Windows-style setup menu-s to adjust the parameters of your CW, or to tell the computer how to handle incoming Morse code. Yes, it can receive Morse code and print the letters on screen…☺.









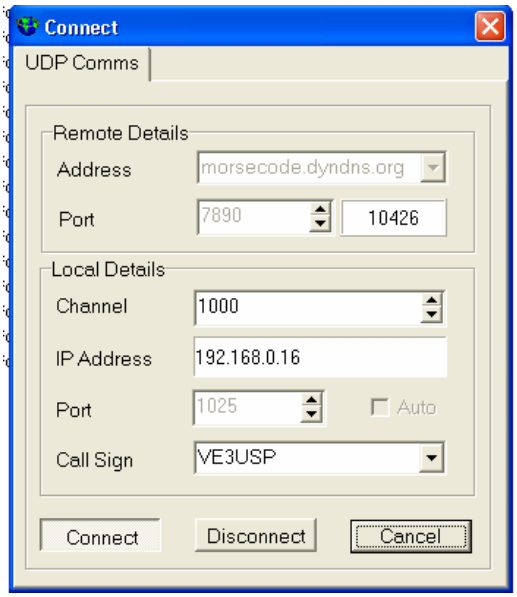
This is the 'Ionosphere' or the 'band'
I am on channel 1000 now...

Above is the screen shot of the QSO I had with M0AYP, Michael.It does not show the whole QSO, but you get the idea… As you see, my PC has not been set up correctly and had some problem with how the character translation is done. The '-…-' was captured as 'B' and 'T' as well as '..- -..' as 'I' 'M' 'I'

This was just a quick setup and needs a bit of reading of the Manual, but I see great potential in this little program; it has lot of advantages as detailed on the previous page. I hope you will be able to setup the program to your liking and that you will give it a good try…
The program can be downloaded from http://www.mrx.com.au/d_cwcom.htm
If I can be of any assistance with my limited knowledge, please send me an e-mail to: webmaster@cambridgeham.ca

Best 73 and see you on Channel 1000!

Steve
VE3USP



'Channel' is the frequency and you tune by changing it.
'Connect' will connect you to the station on the selected channel

Have you worked them? DX news for the month

K1N, Navassa Island:
The K1N Navassa DXpedition is now running and very active. The DX Expedition is running 8 stations on Navassa Island (NA-098, USi OI009S, KFF-131, ARLHS NAV-001, WW Loc. FK28lj). Check their website for updates: http://www.navassadx.com/ (I am pleased to report that we now have K1N, Navassa Islands in our log on 14Mhz CW. I am working to get them on other bands as well)

DL, Germany:
The DARC club in Uslar-Solling (H34) celebrates its 50th anniversary with the special event call DF50USLAR and the special DOK 50H34 until the year's end. QSL via bureau.

F, France:
TM60TAAF calls attention to the 60th anniversary of the French Southern Antarctic Territory on the following days: Feb. 1, 6-8, 13-17, 19-22, and 27-28. The call will be used mostly by Francois, F8DVD, from Macon. The call will also take part in the Antarctic Activity Week (WAP-nr: 255). QSL via F8DVD, LoTW, ClubLog.

H4, Solomon Islands:
Bernhard, DL2GAC, returns once more to Honiara Island (OC-047, WLOTA 0086, WW Loc. RI00AJ). QRV holiday-style from Feb. 1 until April 30 as H44MS on 80-6m on SSB. QSL via DL2GAC

VE, Canada:
CG350F calls attention to the first use of the Maple Leaf Flag 50 years ago. QRV between Feb. 1 and March 1 on HF on all modes. QSL via bureau, VE3RHE (d), LoTW. http://canada-150th.ca/

VP8, South Georgia Island:
Denis, ZL4DB, hopes to get on the air from January 27 on either as VP8DOZ or VP8DOZ/G. QRV with a TS-480 on 20 and 17m on SSB. His activity windows depend on wx conditions. Denis' stay will last until the end of March or beginning of April. QSL via ZL4PW

Pacific Tour by YT1AD:
Hrane, YT1AD, tours the Central and South Pacific according to the following schedule:
* Feb 03 - 08: Fiji as 3D2AD
* Feb 08 - 11: Upolu Island, Samoa as 5W7A
* Feb 11 - 12: American Samoa as KH8/N9YU
* Feb 13 - 14: Hawaii as KH6/N9YU.

QRV on 160-6m on CW and SSB. QSL via YT1AD.
http://www.yt1ad.info/

ZL7, Chatham Island:
Al, F8FUA, is going to get on the air as ZL7/F8FUA from Chatham Island (OC-038, ZLFF-017) between Fe. 7 and 13, running a K3 and Buddipoles on HF on CW, SSB, and RTTY. QSL via h/c, LoTW, ClubLog.