

Newsletter
March
2012

Kingston Amateur Radio Club

2012 Executive



Kingston Amateur News

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<http://www.ve3kbr.com>

VE3KAR Clarendon Stn
147.090 (+) MHz

VE3KER Kingston packet
node
145.010 MHz simplex



VE3KBR Kingston
146.940(-) MHz
151.4Hz Tone
IRLP 2750

VE3UEL Hartington APRS
node
144.390 MHz

NET MANAGER'S REPORT

Thanks to the controllers who kept the net alive in February. Check-ins ranged from 10 to 15 stations and net duration ran from 25 to 42 minutes.

The net control schedule for February to June 2012 is in this newsletter.

I'm always looking for new controllers. Controlling isn't difficult. The script is on the Club website and in this newsletter.

But the most important thing is that you check into the net every Tuesday night at 7:30 because without you, it's pretty lonely.

Steve
VE3KC

MEMBER ARTICLE

RACAL RA6778C Receiver

The RACAL RA6778C is a general coverage receiver that goes from 10 Khz to 30 Mhz. It has AM, CW, FSK, LSB and USB modes. It is all solid state and has digital displays and memory storage for frequencies, modes, antennas, filters, etc. There are lots of buttons, switches and knobs. There are not really drop-down menus like in modern receivers but there are a lot of unusual steps that need to be taken in a specific order to set frequencies, modes and filters. It is awkward at first to figure out how to do things but relatively easy once you get used to it. The steps at least have a nice feel to them compared to drop-down menus on new rigs. The one I have works very well. I use it mainly for shortwave listening and for weather facsimile reception, plus the occasional WWV or CHU time check. The audio is excellent for voice modes, especially AM where it has a rich, full sound. There is a built-in speaker or you can use external speakers or headphones. The photo is my receiver in a 19" rack.



The receiver was used in the US, UK and Canadian military, and probably by many others. According to Wikipedia, Racal Ltd was established in the UK in 1950 and still exists but has been bought by other companies. The receivers are still available from various sources and are advertised on the Internet. Toronto Surplus has one for sale for \$1900 but they are generally available for a lot less than that. Some people are not satisfied to just operate this nice receiver with the buttons and knobs. For example, Chip has an note on the KARC webpage about a remote control program for this receiver which I think he wrote himself. So if you haven't got one, you are missing out on a nice solid rig that is fun to operate. Have a look on the Internet. There are lots of interesting articles and sites with nice looking Racals in nice looking ham shacks.

... Phil VE3HST

GUESTED ARTICLE

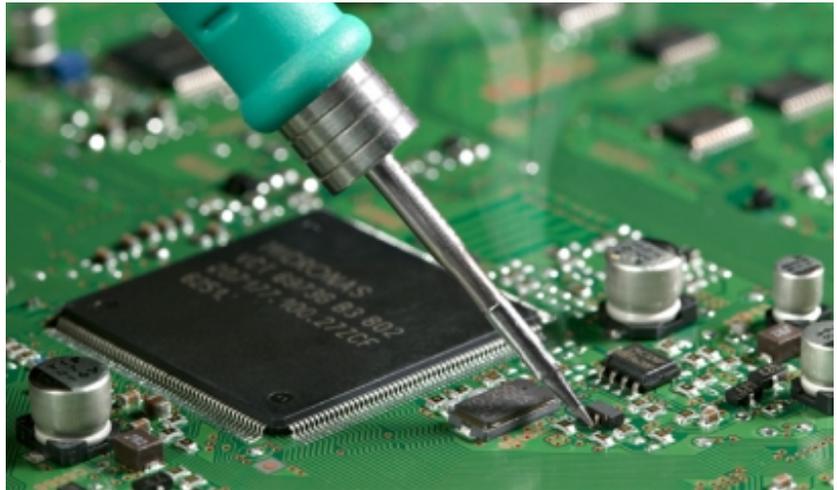
Doug Forman, N7BNT, had purchased an Icom 746 from a German seller on eBay. Unfortunately, he failed to do a page translation into English prior to bidding.

The first portion of his tale was in the February 2012 Newsletter, and now the continuation.. --Ed

...we left off where I was (impatiently) waiting to receive the parts from Icom.

The parts arrived on Thursday afternoon (ordered on Tuesday) along with my credit card receipt for \$11.53. After dinner, I sat down with the box of parts and my 746's main unit circuit board. There were three components completely missing on my main unit board - probably removed by the guy who sold it to me? IC1703 and Q1702 were gone, along with a capacitor that I took off while replacing the traces with wire. Q1701 was intact and looked untouched by the damaging voltage, so I decided to leave it alone for now.

While the solder pads for IC1703 were perfect, the solder pads for Q1702 were completely gone - along with a small black crater in the circuit board where it used to be. I would have to find a creative way of installing a replacement Q1702 (I finally settled on soldering two of it's leads directly to healthy traces, and used wire-wrap wire to fashion a third lead. IC1703 went in without a problem, as did C1738.



I checked most of the surrounding resistors with my DVM and they all seemed fine (I had replacements ready for any that were not...)

What the heck, all missing components were replaced, burnt traces had been replaced with carefully-fashioned wire substitutes. Let's install it and "see what we see..."

Got it installed, applied power, and it lit up for half a second before blowing the internal 5A fuse. Grrrrrr.....

Took the board back out, adjusted the halogen desk light, +3.25 reading glasses AND a lighted magnifying glass, to inspect everything. MAN, those components are SMALL. A lot different than my HeathKit days... I took IC1703 back out, inspected every trace near Q1702 and IC1703, did some cleanup of soldering, Before working on it, I had checked pin 8 of IC1703 for VCC (+5v) and it was okay. Remembering that the unit powered up okay (i.e. didn't blow fuses) BEFORE I started working on it, I logically concluded that I had somehow screwed SOMETHING up! I checked resistance between VCC (IC1703 pin 8) to ground and got 2.4 ohms. That's pretty close to a dead short. Not good.

More inspection (with breaks to rest my eyes) and more cleanup. Checked

VCC resistance again. 15k! Now, we're talking! Reinstalled IC1703, reinstalled the board, powered up.

SUCCESS!!! Well, sort of...

I got a real display (144.000 mhz) and doing a reset actually seemed to work. I also had audio, and the front panel controls appeared to work. I tried dialing up to my club's repeater frequency (147.24). I could get to 146.000 and then it changed to 1.000. What?!? I tried a couple different times, with the same results - I couldn't select any frequency above 146.000. Back to the User Guide (when in doubt, read the instructions!) and noticed the suspicious-looking asterisk next to the frequency ranges listed in the specs. ** Depends on version. Oh no, I'll bet I have a Japanese or European version - remember, I bought this from a guy in Dusseldorf, Germany.

Then I remembered I had seen a freq mod for the 746 on www.mods.dk - I browsed over there, and found the excellent instructions and photo showing how to remove two diodes to increase the frequency range. I removed the two diodes as described, and voila! 147.24 was no problem.



I hooked up an earth ground and both (HF and VHF) antennas, and dialed up WWV at 15.000 - heard it with no problem at all. I buttoned-up the case, set it back on my desk where it will live, and tuned in my local 2m club repeater to listen while I cleaned up the disaster area that used to be my office :-)

While cleaning up, putting parts, schematics, etc. away, I heard a call on the repeater for a signal report. Hey, I can help him. I reached over to the desk, grabbed the mic, hit the PTT button, and got half-way through the other guy's call sign before the 746 went dark. No power, no response to the power button. Oh, no.... will this never end?

Instinctively I knew that the problem had to be that darned 5A fuse on the PA board that had blown before. But why?? I got the screwdriver back out and took the case apart to get to the fuse. Hmmm. It looked okay, checked it with the DVM and it tested okay. Now what? A very dead rig.

Just for curiosity, I checked the in-line fuses in the power leads. Positive was okay, but negative was blown. I knew this was a hi-amp (20A) fuse - so how the heck did I blow THAT? My new Astron SS30 power supply was humming along quietly, oblivious to the trauma being wrought only a few feet away. Out to the garage to see if I had any 20A fuses (fully realizing that replacing the fuse was not going to solve the problem). No 20's but I had a 15A. That would get me listening again

anyway. I put it in, and everything lit up just like I had left it.

Again for curiosity (and a little "hope" thrown in for good measure) I wondered if just "maybe" the 20A fuse that had blown was defective? I got out the bright light and super-power reading glasses. Examining the blown fuse, I noticed something very interesting:

"5A"

Someone had replaced the 20A in-line fuse with a 5A. So, when I keyed the (100W) transmitter, the 5A fuse vaporized. I now suspect someone before me had extra 5A fuses from replacing blown internal fuses, and put one in the power leads after blowing a 20A.

Turning the RF Power control way down (now running with a 15A fuse in the neg lead), I tried again to transmit. No problem! I remember reading in the extended review that QST did that they measured current of almost 22A at full power (which is one reason I bought a 30A PS). I think I will replace the in-line fuses with a pair of 25A unless someone knows why I definitely shouldn't.

So, for now, my IC746 Repair Adventure has ended. Successfully, I think! (hope, hope, hope...) I have certainly learned a lot and had more than my share of luck along the way and I can now say with a certain amount of pride that THIS radio is MINE! We've bonded and I certainly have gained some respect for it :-)

Thanks to the list members who wrote me publicly and privately offering suggestions and encouragement. Now it's time for some QSO's!

73 de N7BNT - Doug

A new activity is coming to Amateur Radio. Beginning March 3, 2012 the Internet Radio Linking Project (IRLP) will host IRLP Topic Channels. Interested in history? Media? DX? There's an IRLP topic channel for you.

Topic Lineup on IRLP

*Join the conversation 24/7
every day. Pick a topic and log
onto an IRLP reflector.*

IRLP Channel	Topic	IRLP Channel	Topic
9093*	IRLP Topic Lounge	9554	Emergency Comm.
9001	DX Channel	9611	The Meaning of Life
9077	History & Current Events	9730**	Election 2012
9204	Sports	9775**	Stamp Collecting
9351	Media	9192**	The Next New Thing

Channel Descriptions

IRLP Lounge – The place to meet and greet – discuss topics not listed

DX Channel – Track rare DX, make schedules, discuss propagation and operating technique

History & Current Events - History and history in the making, yesterday's events and today's news

Sports – Baseball, Football, Soccer, Basketball, Golf, Tennis, any sport, local or international

Media – From the silent screen to Imax, from Milton Berle to Robin Williams, Big Bands to Rap

Emergency Communications – Prepare for the next hurricane, tsunami, tornado or man-made catastrophe

The Meaning of Life – Philosophy, Psychology and Science: what makes us tick, where did we come from and where are we heading

Election 2012 – Politics of the United States respectfully discussed

Stamp Collecting – Gathering philatelist hams from around the world

The Next New Thing – Stay tuned, changes are afoot

*Accessible via Echolink

**FLEX-Channel – Topics subject to change

If your favorite topic isn't listed, go to the IRLP Lounge and start your own topic discussion.

For information on how to access IRLP go to

www.IRLP.net

For up-to-date information on topics and rules go

to www.IRLPtopics.net

Sponsored by O.I.R.G. and reflectors

around the world

With nearly 3000 IRLP nodes worldwide, amateur radio operators can access a nearby IRLP node or repeater. Or, they can build an IRLP node, or even buy a plug-and-play node and join the conversation today. There are nearly thirty reflectors scattered around the world that make it possible for nodes to talk to one another. Each reflector has ten channels and most of these go unused. The owners of these reflectors have contributed more than twenty channels for topic based discussions.

There is an IRLP Topic Lounge that serves as the meeting place for the IRLP Topic Channels. Then there are six channels with topics like DX, sports, movies and media, history and current events, emergency communications, and even the meaning of life itself. Then there are three flex channels that change periodically. These now include election 2012, stamp collecting and "the next new thing" (see attached IRLP Topic Channel chart). The number of channels is expected to increase as interest in new topics develops. The IRLP Topic Channels is the brainchild of Michael Bloom, W7RAT, and is sponsored by the Oregon Radio Internet Group, a radio club established to promote the use of voice of internet combined with actual ham radio. IRLP Topic Channels is supported by reflector owners in the US, Australia, Canada, and Norway. While IRLP is the backbone of the system some topic channels will provide access via Echolink and other VOIPsystems.

The IRLP system was designed in 1998 by David Cameron VE7LTD who has volunteered channels on his own reflectors for this project. For more information on using IRLP visit www.irlp.net. The first group of topics and channels is expected to be published in the April issue of QST Magazine. For the latest list of channels visit www.irlptopics.net for the latest topics or to suggest your own.

Alexia Steffen, KE7UWU

Alexia can be reached at info@irlptopics.net.

2012 KARC MEETING DATES

Wednesday, Feb. 1

Wednesday, Mar. 7

Wednesday, Apr. 4

Wednesday, May 2

Wednesday, June 6

Wednesday, Sept. 5

Wednesday, Oct. 3

Wednesday, Nov. 7

Wednesday, Dec. 5

AGENDA

AGENDA
Kingston Amateur Radio Club, INC.
07 March 2012
At Smitty's Restaurant 07:00 PM

1. Members and Guests introduce themselves.
2. Additions to the Agenda
3. Minutes of the last meeting: errors / omissions / approval (Assaf VA3PCI)
4. Treasurer's Report (David VE3DZE)
5. Business arising from the minutes:
 - a. Club Kit Build – Most interest seemed to be with [Super Tuna II](#) and adding the 10M band module to it ...
 - b. Voice ID on the repeater – VE3KBR
6. New Business:
 - a. VE3UEL Hartington APRS Node – Alleged miss use.
 - b.
 - c.
7. Reports:
 - a. President (Terry VA3KLG)
 - b. Repeaters (John VA3GST)
 - c. RAC
 - d. Net Manager (Steve VE3KC)
 - e. Web Page (Chip VA3KGB)
 - f. KARC Newsletter (Assaf VA3PCI)
 - g. Frontenac EmComm Group (George VE3SIQ)
 - h. Kingston ARES (
 - i. CFARS (Les VE3KFS)
 - j. "Hearts and Flowers"
 - k. Other Reports
8. Date of next meeting: 04 April 2012
9. 50/50 Draw
10. Adjournment

MEETING MINUTES

MINUTES OF MEETING OF THE KINGSTON AMATEUR RADIO CLUB, INC HELD ON Wednesday 1 Feb 2012 At Smitty's

The Kingston Amateur Radio Club meeting was called to order at 7:00 PM by our president Terry VA3KLG.

1. The members present introduced themselves. There were 10 members and 4 guests in attendance.
2. **Additions to the Agenda:** No additions made.
3. **Minutes:** Chip VA3KGB moved, seconded by Les VE3KFS to approve the minutes of the January meeting which were published in the February newsletter. The motion passed.
4. **February Treasurer's Report:** David VE3DZE read the Feb financial report. We had a closing balance of \$4978.15. David moved, seconded by John VE3JCQ, that the Treasurer's Report be adopted as read. Motion carried.
5. **Business Arising from the Minutes:** In answer to a question raised at the January meeting, Terry VA3KLG reported that our IRLP and Echolink nodes are working properly. Steve VE3KC said that it is possible for two or more stations to use our Echolink node simultaneously but we have to test if the two nodes can also be used at the same time.
6. **New Business:** Terry VA3KLG asked for an indication of interest in a Club kit building project. Some interest was expressed.
7. **Reports:**
 - a) **President:** Terry's report is in the newsletter and he hopes everyone has had a chance to read it.
 - b) **Repeaters:** Les VE3KFS reported that both machines are working well. Steve VE3KC wondered whether it's time to restore the voice announcements on VE3KBR for the benefit of those who don't know Morse Code, for promotional purposes and to increase usage. It will be discussed at the next meeting.
 - c) **RAC:** Nothing to report. See RAC bulletins via the Free List.
 - d) **Net Manager:** Steve VE3KC thanked everyone who controlled the net in December and January. Check-ins ranged from 7 to 15 both months with net duration running from 25 to 44 minutes in December and 13 to 51 minutes in January. He reminded every one to check-in "as it is lonely without you." The net control script and controllers list is on the web page.
 - e) **Web Page:** Chip VA3KGB had nothing new to report.
 - f) **Newsletter:** In Assaf VA3PCI's absence, Terry VA3KLG reminded everyone that articles for the newsletter should be sent to news@ve3kbr.com a week before the monthly meeting.
 - g) **FCARES:** David VE3DZE reported on Winter Field Day Jan. 29th. A portable station was set up in the dark in Rotary Park. They made contact with 11 countries: Canada, USA, France, Poland, Ukraine, Netherlands, Yugoslavia, Russia, Belgium, Bulgaria, and Iceland. They made 43 HF contacts, 2 VHF contacts, and 2 PSK31 contacts. All contacts were made using battery power.
 - h) **Kingston ARES** Roy VE3VJF reported on KARES activities. Kingston Red Cross and the KARES station are moving but mould issues in the new location may delay the move until March. KARES needs some tower for the new location as their current one is too rusted to move. Terry VA3KLG offered KARC's help.
 - h) **CFARS:** Les VE3KFS reported that 18 military personnel have just started a course for their amateur licenses which will increase the number of Kingston Hams. There will be a CFARS exercise from Yellowknife on their Pactor gateways Feb. 5-8.

i) **'Hearts and Flowers'**: Steve VE3KC reported that Michael VE3PRW has moved to Trillium Ridge and welcomes visitors. George VE3GWS's voice is coming back after his cancer surgery without the need for an additional medical procedure.

8. **Date of next meeting:** Mar 7th, 2012.

9. No fifty/fifty draw.

10. **Adjournment:** Roy VE3VJF, seconded by Chip VA3KGB, Moved to adjourn. Motion carried.

Speaker: Pat VE3RNH gave us an update on RAC'S campaign to seek a permanent exemption from Ontario's 'distracted driving' legislation (Bill 118) and explained the ongoing RAC Field Service Organization restructuring.

David Sellick VE3DZE
Acting Secretary
Kingston Amateur Radio Club Inc.

NET CONTROL SCHEDULE

Month	Date	Controller
March	6	VE3CAK John
March	13	VE3DZE David
March	20	VE3JPW Warren
March	27	VE3KC Steve
April	3	VE3NFU Bill
April	10	VA3PCI Assaf
April	17	VE3VJF Roy
April	24	VE3CAK John
May	1	VE3DZE David
May	8	VE3JPW Warren
May	15	VE3NFU Bill
May	22	VE3KC Steve
May	29	VA3PCI Assaf
June	5	VE3VJF Roy
June	12	VE3CAK John
June	19	VE3DZE David
June	26	VE3JPW Warren

NET CONTROL SCRIPT

KARC Tuesday night net Control Script

Revised March 7, 2011

Good evening. This is [callsign], net control station for the Kingston Amateur Radio Club's Tuesday night net. My name is ----.

The Kingston Amateur Radio Club Tuesday night net is an informal net that meets at 1930 hours every Tuesday evening on the Kingston repeater, VE3KBR, 146.940 MHz, with a 151.4 Hz tone required on the input, 146.340 MHz. We welcome participation by all amateurs.

Before continuing, is there any emergency or priority traffic? Please call now.

The purpose of the net is to take check-ins; to inform you of KARC activities; to provide news from other radio clubs and news of interest to Radio Amateurs. Information about KARC may be found on the web site (www.ve3kbr.com) or by contacting any of our club executive members.

I will take check-ins giving priority to mobiles, portables and stations checking in via EchoLink or IRLP. When checking in, please give your call sign phonetically, your name and location, and indicate whether you have any traffic or announcements for the net.

Are there any stations using EchoLink or IRLP wishing to check in? Please call now.

Are there any mobiles wishing to check in? Please call now.

Are there any portables wishing to check in? Please call now.

Are there any base stations wishing to check in? Please call now.

Trivia Time

Here's tonight's trivia question(s).

Swap Shop

Are there any items for the swap shop?

Closing

Are there any additional check-ins or announcements before I end the net?

That concludes this evening's Kingston Amateur Radio Club Tuesday night net. Thank you for participating. We had [number] check-ins this evening. 73. This is [callsign] returning the repeater to normal amateur use.