Kingston Amateur Radio Club
2012 Executive

Kingston Amateur News

President: Terry Barrett, VA3KLG
pres at ve3kbr.com

Vice-Pres:Steve Cutway, VE3KC
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Secretary: Assaf Shool, VA3PCI
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Past-Pres: Steve Cutway, VE3KC
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2012 COMMITTEE CHAIRS:
Two Metre Net Manager:
VE3KC Steve Cutway
netmanager at ve3kbr.com

Newsletter Editor:
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VE3JCQ, John Wood
john686 at sympatico.ca

VE3MNE, Don Gilroy
dgilroy at cogeco.ca

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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-1 Hartington APRS
node
144.390 MHz

Arduino Microprocessor WiFi and TV Closed Captions
by Phil VE3HST

The Arduino microprocessor has taken the electronic hobbyist community by storm, mainly due to its low cost and ease of use. The cost is about $30. for the assembled Arduino. The software is free and easy to use. You connect the microprocessor to your computer with a USB cable which provides the power, the upload path, and the two-way communications path for applications. Here is the main Arduino web page:

http://www.arduino.cc/

To fully enjoy the Arduino, you need to use it in a project. After initially using the main board to turn on and off LEDs, and measure temperature, I decided to get a WiFi add-on board, called a shield. The Copperhead WiFi Shield costs about $57. but provides a complete 802.11b WiFi capability to Arduino, including full WEP and WPA encryption. The WiFi board stacks right on top of the Arduino, and you can stack additional shields on top of the WiFi board. The software for the Arduino is entered into the integrated development environment (IDE) on your PC, edited with your local WiFi information, such as IP address and encryption. Then it is uploaded to the Arduino. It begins to run immediately.

It takes a few seconds for the WiFi to connect to your network, and then the red connection LED comes on. I used a very small Java program to communicate from another computer via the WiFi network to the Arduino. You can change the programs on the Arduino. For example, I set up a small web page which I can connect to via the network. Here is the Internet web page for this WiFi project:

http://www.gadgetnate.com/2011/07/03/control-leds-over-the-wireless-network-using-arduino-and-wishield
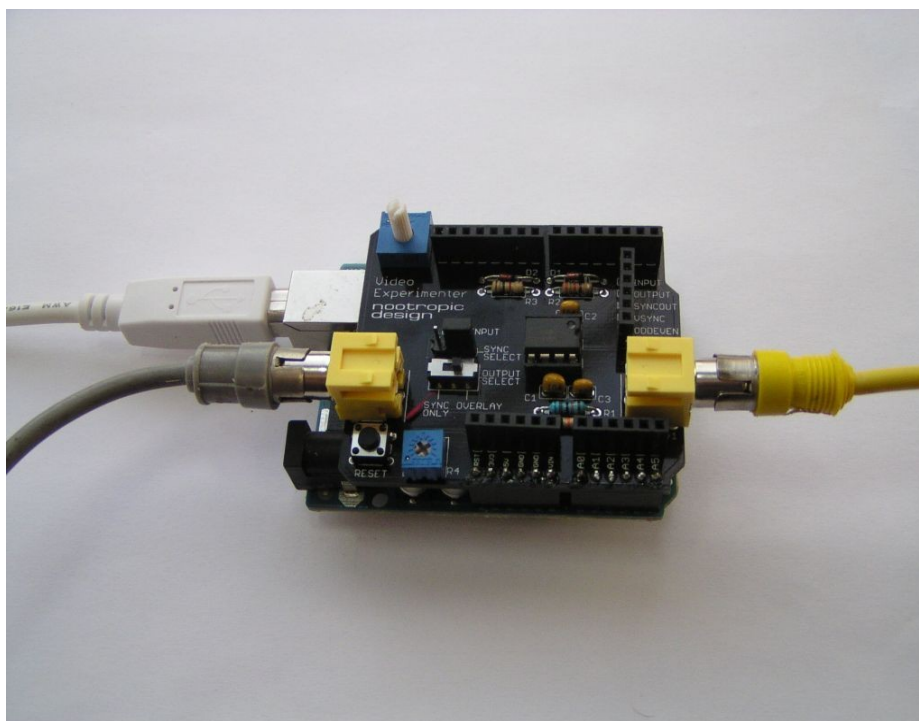
The Arduino/Wifi can operate via a separate 12V battery so you can unplug the USB cable, and now the Arduino/WiFi is totally independent. I connected a solar panel to charge the small sealed lead-acid battery. I put everything in a small prototype-type case so it can be moved anywhere within the WiFi coverage. As a demo, I brought a wireless router, laptop and the Arduino WiFi to ham radio breakfast and operated the web page demo.

Here is a photo of the complete system:

My second Arduino project was a television closed caption system using a Video Experimenter Shield kit which costs about $26. The project web page is here: http://nootropicdesign.com/projectlab/2011/03/20/decoding-closed-captioning/

Unlike the Arduino, this shield is available as a kit so it requires a bit of assembly and soldering, but it is very easy. I used a second Arduino and plugged the shield into it. The video board has a composite video input and output. The program is uploaded via the USB cable, as per normal. It immediately runs and captures the closed captions from the TV signal and makes them available via a COM port. The Arduino IDE provides a Serial Monitor which you can use to see the text being captured from the TV signal. I also used a separate Java program to read the closed captions directly from the COM port. The only problem I am having is with accented letters for closed captions from French-language TV programs, but I hope to be able to solve that issue and use the captions together with recorded video/audio to improve my French. Here is a photo of the shield on top of the Arduino, connected to the composite video and the USB cable:

So Arduino is fun. The projects are virtually unlimited. An excellent and very fast source of Arduinos and shields in Canada is RobotShop at:

http://www.robotshop.com/ca/home.html

Join the fun. Enjoy your new Arduino projects!

NET REPORT

Thanks to the controllers who kept the net alive over the summer. Check-ins ranged from 5 to 21 and net duration ran from 22 to 61 minutes, quite a range!

The net control schedule for September to December 2012 is in the September newsletter.

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

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.

MINUTES OF MEETING OF

THE KINGSTON AMATEUR RADIO CLUB, INC

HELD ON SATURDAY, 6 JUNE 2012

AT THE COMMUNICATIONS & ELECTRONICS MUSEUM

The Kingston Amateur Radio Club meeting was called to order at 11:00 AM by our president Terry VA3KGC.

1. The members present introduced themselves. There were 11 members and 3 guests in attendance.

2. **Additions to the Agenda:** None.

3. **Minutes:** No additions to the minutes.

4. **May Treasurer's Report:** In the minutes.

5. **Business Arising from the Minutes:**

a) **Voice ID on Repeater:** A 30 day trial was giving, and we need to decide whether to keep them or not. Members indicated they are satisfied with the Voice ID, but announcements should be kept limited in frequency. There was also discussion regarding technical compliance.

Les, VE3KFS, motioned to keep the voice ID, seconded by Doug VE3FFR. The motion was carried. CW ID will continue as normal.

6. **New Business:**

a) **Hamfest:** Doug, VE3FFR, has volunteered to chair the committee. Received club approval to do so.

7. **Reports:**

a) **President:** In the newsletter.

b) **Repeaters:** Chip says all repeaters are working normally.

c) **RAC:** Changes may be coming in the foreseeable future.

d) **Net Manager:** See the newsletter for report. Tuesday nets have been going on as normal.

e) **Web Page:** Chip VA3KGB has been making regular updates to it. Members wishing to send file attachments may use the built-in forum.

f) **Newsletter:** Assaf VA3PCI reminded everyone that articles for the newsletter should be sent to news@ve3kbr.com a week before the monthly meeting and thanks everyone for articles that have been submitted.

g) **Frontenac EMCOMM:** Les, VE3KFS, reported that they will be supporting a bike race on June 9 and June 10 and they may be using both the VE3FRG and Clarington repeaters.

h) **Kingston ARES:** No reports for this month.

i) **CFARS:** CFARS has grown to 112 callsigns and continuing to grow. There will soon be a final signing on documentation to change the official name for the CF Auxillary System to the CF Affilate System. Net check-in volume is normal including U.S. MARS check ins.

8. **Date of next meeting:** Sept 5, 2012, 7PM at Smitty's.

9. There was no 50/50 draw.

Presentation: Annette, VA3VAI, gave an interesting and informative tour of the museum.

Assaf VA3PCI

Secretary

Kingston Amateur Radio Club Inc.

<u>AGENDA - 5 SEPT 2012</u>

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.
        b.

6.   New Business:
        a.
        b.

7.   Reports:
        a.   President   (Terry VA3KLG)
        b.   Repeaters   (Chip VA3KGB)
        c.   RAC   (See RAC bulletins via the Free List.)
        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: 03 October 2012

9.   50 / 50 Draw

10.   Adjournment

Kingston Amateur Radio Club
Financial Statement
August 27, 2012

Income

Membership   0.00

Total Income   0.00

Expenses

                                          0.00

Total Expenses   0.00

Overall Total   0.00

Bank Balance
Co-Operation Plus Account $4848.84
Dividend Savings $23.07
Equity Shares $216.44

NET CONTROL SCHEDUALE

Month	Date	Controller
September	4	VA3PCI Assaf
September	11	VE3VJF Roy
September	18	VE3CAK John
September	25	VE3DZE David
October	2	VE3JPW Warren
October	9	VE3KC Steve
October	16	VE3NFU Bill
October	23	VA3PCI Assaf
October	30	VE3VJF Roy
November	6	VE3CAK John
November	13	VE3DZE David
November	20	VE3JPW Warren
November	27	VE3KC Steve
December	4	VE3NFU Bill
December	11	VA3PCI Assaf
December	18	VE3VJF Roy

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.