

Newsletter  
March  
2015

# Kingston Amateur Radio Club

## 2015 Executive



Kingston Amateur News

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pres at ve3kbr.com

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**Treasurer: Douglas Richards, VE3FFR**  
treas at ve3kbr.com

**Secretary: Larissa Reise, VE3KGC**  
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**Past-Pres: Assaf Shool, VA3PCI**  
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**2015 COMMITTEE CHAIRS:**  
**Two Metre Net Manager:**  
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**Newsletter Editor: Assaf Shool, VA3PCI**  
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168 McMichael Street  
Kingston, Ontario K7M 1N6 Canada  
<http://www.ve3kbr.com>

VE3KAR Clarendon Stn  
147.090 (+) Mhz  
(non operational)

VE3KER Kingston packet  
node  
145.070 MHz simplex



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

VE3UEL Hartington APRS  
node  
144.390 MHz

## FROM THE PRESIDENT

This month, Les Lindstrom – VE3KFS and his team of instructors initiated the 2015 ham radio course. Kudos to Les and the team for attracting nearly 40 participants and for successfully negotiating with the base commander for classroom space to conduct the course. It's exciting and very heartening to realize that there are so many people in the Kingston community who are interested in this wonderful hobby. I'd also like to thank the club members who responded to Les' request on the Freelist regarding the club authorizing paying the rental fee for the class. The club bylaws require a club meeting authorize expenditures over \$200. There wasn't time to do this if the class were to go ahead on schedule. Your support and thoughtful comments via the Freelist gave the executive the feedback they needed to go ahead with confidence and 'pre-authorize' the expenditure.

I'd also like to thank those of you who've responded to the KARC online membership survey. Carlyle – VE3WIO will give us an overview of your responses at the March KARC meeting.

The March meeting will also give us a chance to look ahead to future KARC events including operating the ARRL Field Day and perhaps organizing a club picnic or other club social for the summertime.

You'll also notice that I am writing a monthly DX column for the newsletter. I'd like to invite others of you to consider writing a short monthly column on the other areas of interest for club members to enjoy.

I look forward to seeing you all at the meeting Wednesday evening March fourth. The program this month will be a presentation by Carlyle – VE3WIO on remotely operating your station over the Internet. This is a topic that is both technically intriguing and of increasing practical importance for those of us who are dealing with the antenna restrictions and perhaps apartment living. Carlyle is planning to do a demonstration and perhaps even make a contact using his home station. Amazing!

vy 73s

de Paul VA3LX

President, Kingston Amateur Radio Club

## **DX News for March 2015**

### **February DX recap**

In the February newsletter, I highlighted two upcoming DXpeditions of note: Navassa Island - K1N and the expedition to TI9-Cocos Island. Let's begin this month with a review of these two completed operations.

The K-1 in expedition is one for the history books! As you'll recall from the February column, Navassa Island was number 2 out of 340 on the DXCC most wanted list. It took 15 years to gain permission, plan and execute the DXpedition.

The operation logged 140,000 QSOs and over 30,000 unique callsigns. They ran the operation for two weeks and had 14 active operators, 7 HF radios, 5 small amplifiers and 4 small beams and a lot of wire. Many of the QSOs were made barefoot and with dipoles hanging very high on the lighthouse on Navassa. The logistics were also amazing. All of the operators and equipment had to be helicoptered in (and out) from Haiti.

The expedition organizers also did something that I have never seen before that I was very impressed with. On the last day of their operation; they focused their attention on the allowing stations who've never worked Navassa before to make a contact for what the DX community calls an "all time new one" or ATNO. BRAVO, very well done!

K1N made the 'top 10' list of all time 'mega DXpeditions': [gdx.de/megadxpeditions](http://gdx.de/megadxpeditions)

This is the site for the German DX foundation. When you're at the site, click on the link for the "honour roll".

The other expedition described in the February column was the expedition to Cocos Island – TI9/3Z5DX. This one was the complete opposite to K1N. The Navassa team had a budget of nearly \$500,000. This was a low-budget expedition with four operators only two of whom were experienced DXers. They operated valiantly for six days through tropical downpours and long overland hikes to a favourable operating position for European contacts. No word just yet on the total number of contacts. They certainly did a brilliant job putting this rare DXCC entity into many DXers logbooks. I was very impressed with this group because of their intimate knowledge of propagation and making sure that they made time to exclusively work stations at the far end of short openings.

### **What's ahead for March**

The SEISA/Foundation for Global Children announced it's next activity as "Eritrea Project 2015". As part of this project, they will conduct an amateur radio DXpedition from Asmara **Eritrea**, from March 6th to 17th, 2015. There will be a multinational team of nine operators that will man six stations and operate to on all the HF bands from 160 m to 10 m.

**Robinson Crusoe Island** – 3G0ZC: February 24 to March 4. This is another mega operation with 23 operators from seven countries. They will operate 160 through 6 meters. Here is the link to their website: [juanfernandez2015.com](http://juanfernandez2015.com)

**St Pierre & Miquelon** Eric, KV1J will be QRV as FP/KV1J from February 26 until March 10. Operation from 160 to 10 meters using mainly SSB and RTTY. QSL via homecall, direct or bureau, LoTW.

<http://www.kv1j.com/fp/Feb15.html/>

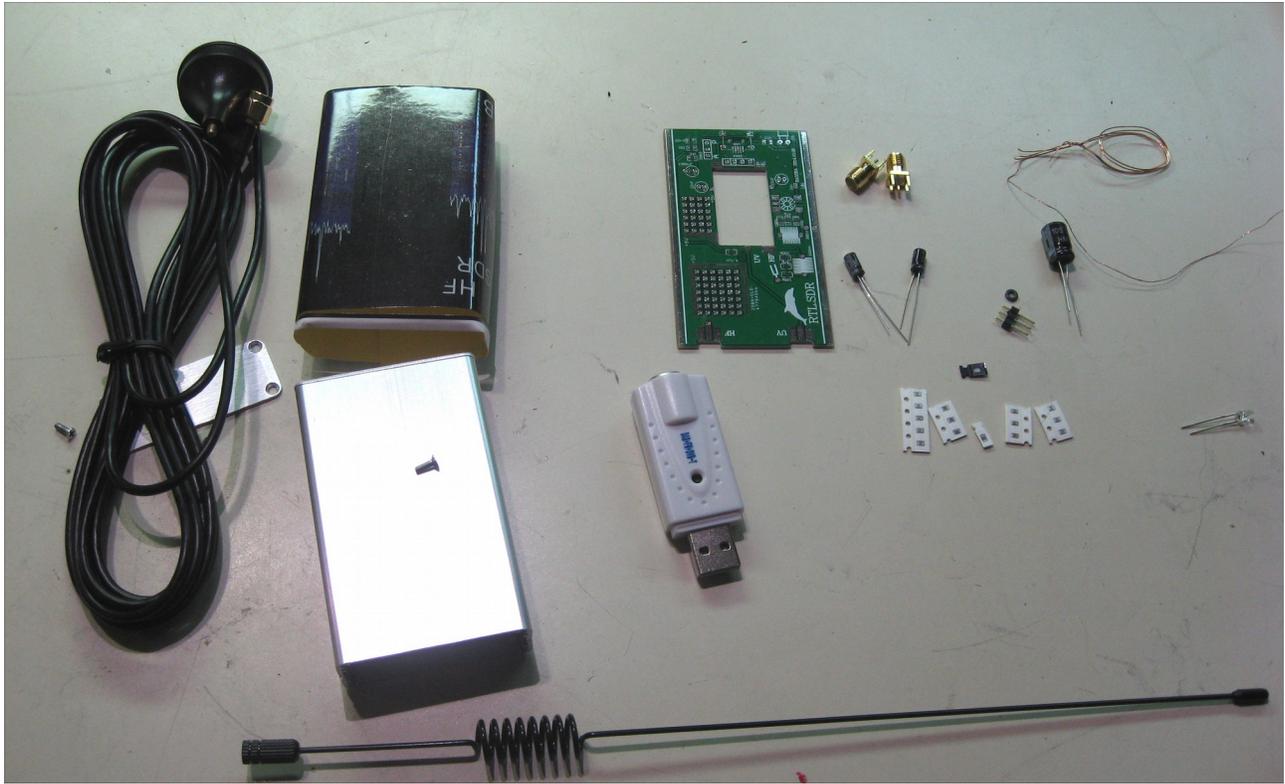
To complete this months column I'd like to direct you to the plan for an exceptional DXpedition to **Bouvet Island 3Y/B**. You'll recall that Navassa Island was number two on the DXCC most wanted list. Bouvet Island is number three. It is also known as "the most remote place on Earth". Mark, ON4WW is planning to conduct a 1-man expedition for 3 months to Bouvet Island during the Spring of 2016. Mark aims to make 100,000 QSO's. He will be QRV using SSB, CW and RTTY on HF. Why; you might ask? To celebrate his 50<sup>th</sup> birthday and to give something back to the DX community. Mark is clearly a man who does not shrink from a challenge! Here's the link to Mark's website: [www.on4ww.be/bouvet2016.html](http://www.on4ww.be/bouvet2016.html)

Happy DXing

de Paul VA3LX

## Chinese HF RTL-SDR Kit

During January's meeting, Chip VA3KGB and Andy VE3FYA demonstrated an inexpensive HF SDR receiver. I thought this quite interesting and decided to purchase one of my own. Being the unapologetic cheapskate ham that I am ofcourse, I opted to save some money and get the unassembled version. What follows isn't meant as a how-to guide to assemble the unit, but just a description of my experiences doing so.



It arrived 3 weeks later as a collection of loose parts. Those included a VHF/UHF antenna with a SMA-terminated cable, a case, a sticker for the case, a USB dongle, a bare PCB, and a handful of passive components.

The inductors that needed to be assembled just came as raw wire, you'll need to wind them up yourself. Even the balun was just a tiny toroid (see if you could find it in the picture) and some loose magnetic wire. That USB stick you see above? That is the actual tuner. The stick needs to be disassembled, USB connector and antenna connectors desoldered before actual construction begins.

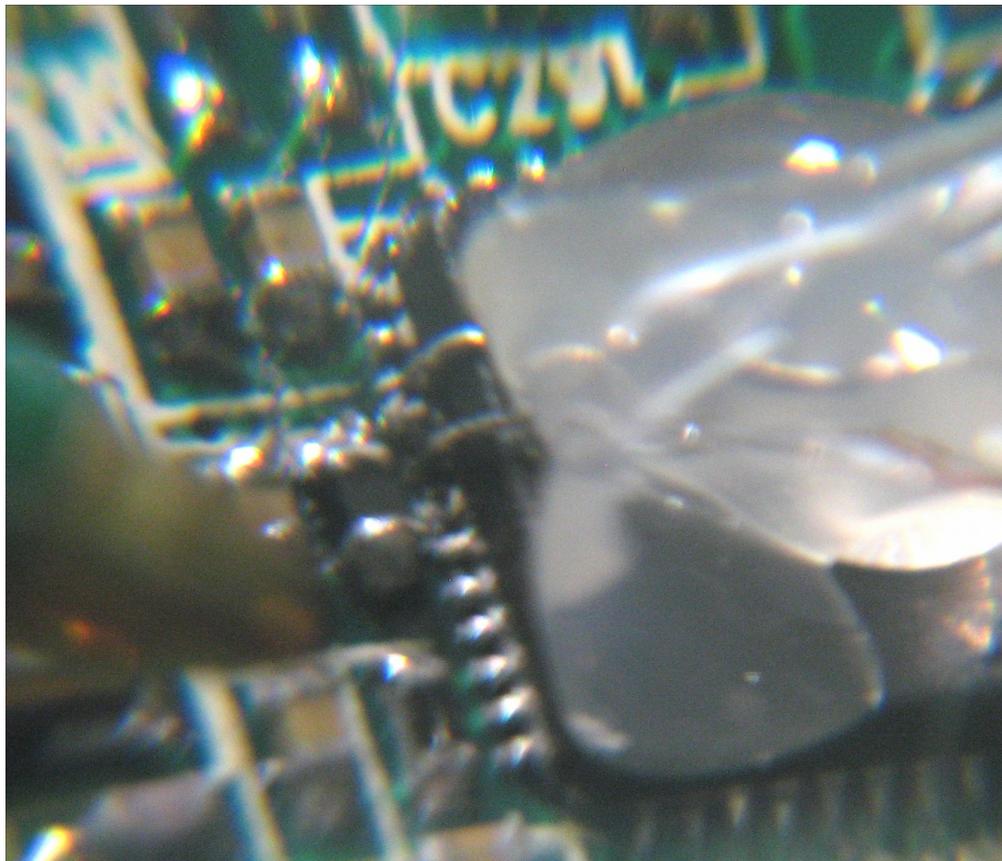
This kit is not like your typical kit that is designed for easy assembly by the novice. There are no instructions available and lots of SMD devices that need to be soldered on. To the seller's credit, you do get a couple more SMD parts than you need, should you lose one.

I mounted the components, wound up the inductors, wound up the balun, and went on with the USB board and various other connections. I also soldered on a couple of back-to-back diodes on the HF input side to protect the input from overload.



Not to imply that there are instructions to tell you to do this, but to get the HF side to work, pins 4 and 5 of the RTL2823 chip need to be soldered directly to the balun/toroid transformer secondary side. These pins represent the Q-/Q+ signal inputs and are unused on the stock board. I got the best results by using a 4:1 ratio and not grounding the centre tap on the secondary, but YMMV.

This is where things got a bit challenging. The chip comes in what is referred to as a 48-Pin QFN (Quad Flat Pack No Leads) package. The entire chip is only 6x6mm in size, and each pin is 1/4 of a mm. You'll need good eyesight, a steady hand, and some magnifying equipment.



You can see in the image above the two wires now soldered to the chip, and a pen tip is shown for scale. Hot glue was applied to help stabilize the wires.

### **Performance on HF**

HF tuning is accomplished by using "direct sampling". That is, there is no mixer and IF stage as within a conventional radio, but rather than signal comes from the antenna, through a LPF, and more or less directly into the chip. The Rtl2832 samples at 28.8MHz so the highest frequency in the HF range will just barely cover the 10M band.

Since this device has no RF front end to speak of, it is not going to be anywhere as good as a proper HF radio. It's prone to overload, imaging, has a high noise floor and marginal sensitivity. However, given the price point and compact size, performance is good enough for listening to stronger stations and the diminutive size means you can easily pack it and take it with you along with your laptop. The VHF/UHF side works quite well minus a few issues with overload.

Would I recommend this? Sure, it's a great toy SDR. I wouldn't count it on replacing a proper HF radio anytime soon however, and also, do yourself a favour and get the preassembled version.

Link to the kit version:

[Ebay](#)

## MEETING MINUTES

**MINUTES OF MEETING OF  
THE KINGSTON AMATEUR RADIO CLUB, INC  
HELD ON WEDNESDAY, 4 FEB 2015  
AT SMITTY'S**

**The Kingston Amateur Radio Club meeting** was called to order at 7:00PM by our president Carlyle VE3WIO.

1. The members present introduced themselves. There were 20 persons in attendance.

**2. Additions to the Agenda:**

a) VE3SJAM Station: Chip VA3KGB says it really went well and thanks all who had participated. When he gets all the logs in, he will make them available online for anyone who wants to look.

3. **Treasurer's Report:** See the newsletter.

4. **Meeting Minutes:** Chip VA3KGB motioned that the minutes be accepted as published in the newsletter. Motion carried.

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

a) **Survey:** Carlyle VE3WIO says we are doing a survey online and encourages everyone to participate. The intent is to find out the interests of clubmembers, and there is a link in the newsletter for it. It takes 2-3 minutes and is fully anonymous.

b) **Archive Project:** Assaf VA3PCI is looking for some volunteers to help scan in a large collection of KARC photographs and other documents dating back to the 1940's. Several volunteers came forward to help.

**6. New Business:**

a) **Field Day 2015:** Carlyle VE3WIO is looking for some people who want to come forward to organize it. Les VE3KFS encouraged the 21 EW members to get involved to apply many of their newly learned skills in the ham course. Carlyle says this will continue with the next meeting, to avoid having to make last minute plans during June. Les suggested that a note be put out on the freelist about field day. Carlyle says it should be brought up on the Tuesday night net as well.

**7. Reports:**

a) **Net Manager:** Carlyle VE3WIO says we had 9 people on at last night's net. (Larissa VE3KGC is away)

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

c) **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.

d) **CFARS:** Two gateways have been deployed, and a third will soon go out to Thunder Bay. Edmonton and Yellowknife are also set to receive PACTOR gateways as well. An HF conference is being held on Feb 17/18/19 and CFARS will be doing a conference there. It will probably be at the Officer's Mess on base.

e) **Community Acknowledgements:** Carlyle VE3WIO would like to recognize Chip VA3KGB for his work on the VE3SJAM special event station.

8. **Date of next meeting:** March 4, 2015, 7PM at Smitty's.

9. Les VE3KFS motioned that the meeting be adjourned, seconded by Andy VE3FYA. Motion carried.

10. Les VE3KFS gave an interesting and informative presentation on RMSExpress and sending emails over packet radio.

Assaf VA3PCI

Kingston Amateur Radio Club Inc.

PICTURES FROM LAST MEETING



## AGENDA - 4 MARCH 2015

1. Members and guests introduce themselves
  
2. Additions to the agenda
  
3. Minutes of the February meeting: errors/omissions/approval (Assaf -VA3PCI)
  
4. Treasurer's Report (Doug VE3FFR)
  
5. Business arising from the minutes:
  - a. Final update on the VG3SJAM Special Event Station (Chip VA3KGB)
  - b. Club member survey – preliminary report (Carlyle VE3WIO/ Larissa VE3KGC)
  - c. Offer of free one year KARC membership to Ham Course graduates (Paul VA3LX / Carlyle VE3WIO)
  - d. Update on archives project (Assaf VE3PCI / Les VE3KFS)
  - e. Field Day 2015 planning
  
6. New Business:
  - a. Summer club social event
  - b. other
  
6. Reports:
  - a. Net Manager (Larissa VE3KGC)
  - b. Repeater committee (Ron VE3GO)
  - c. CFARS (Les VE3KFS)
  - d. "Hearts and Flowers"
  - e. Community acknowledgements
  - d. Other Reports
  
7. Date of next meeting: April 1, 2015
  
8. 50 / 50 Draw
  
9. Adjournment
  
10. Presentation:

An explanation of remote control of a rig over the Internet and demonstration of a remote controlled Flex3000 by Carlyle – VE3WIO

FINANCIAL REPORT

**KARC FINANCIAL REPORT - January 2015/CORRECTED**

January 24, 2015

**Opening Balance**

Cooperation Plus	6,792.81
Dividend Savings	9.66
Equity Shares	261.62
Total Balance	7,064.09

**Income**

Memberships (7)	200.00
Interest (estimate)	.12
Total Income	200.12

**Closing Balance**

Cooperation Plus	6,992.93
Dividend Savings	9.66
Equity Shares	261.62
Total Balance	7,264.09

**KARC FINANCIAL REPORT – February 2015**

February 24, 2015

**Opening Balance**

Cooperation Plus	6,992.93
Course 2015	450.00
Dividend Savings	9.66
Equity Shares	261.62
Total Balance	7,714.21

**Income**

Memberships (7)	25.00
Interest (estimate)	.06
Total Income	25.06

**Expenditures**

Quicken Software	56.49
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**Closing Balance**

Cooperation Plus	6,961.50
Course 2015	450.00
Dividend Savings	9.66
Equity Shares	261.62
Total Balance	7,682.78

## NET CONTROL SCHEDULE

<b><u>Date</u></b>	<b><u>Controller</u></b>
March 3	VA3PCI Assaf
March 10	VE3WIO Carlyle
March 17	VE3CAK John
March 24	VE3DZE David
March 31	VE3JPW Warren
April 7	VE3KC Steve
April 14	VE3KGC Larissa
April 21	VA3MHB Matthew
April 28	VA3PCI Assaf
May 5	VE3WIO Carlyle
May 12	VE3CAK John
May 19	VE3DZE David
May 26	VE3JPW Warren
June 2	VE3KC Steve
June 9	VE3KGC Larissa
June 16	VA3MHB Matthew
June 23	VA3PCI Assaf
June 30	VE3WIO Carlyle
July 7	VE3CAK John
July 14	VE3DZE David
July 21	VE3JPW Warren
July 28	VE3KC Steve
August 4	VE3KGC Larissa
August 11	VA3MHB Matthew
August 18	VA3PCI Assaf
August 25	VE3WIO Carlyle
September 1	VE3CAK John
September 8	VE3DZE David
September 15	VE3JPW Warren
September 22	VE3KC Steve
September 29	VE3KGC Larissa
October 6	VA3MHB Matthew
October 13	VA3PCI Assaf
October 20	VE3WIO Carlyle
October 27	VE3CAK John
November 3	VE3DZE David
November 10	VE3JPW Warren

## NET CONTROL SCRIPT

### **KARC Tuesday Night Net Control Script**

Revised April 16, 2013

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

The Kingston Amateur Radio Club Tuesday Night Net is an informal net that meets at 1930 hours every Tuesday evening on the KARC repeater, VE3KBR. 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; and to provide news of interest to Radio Amateurs. Information about KARC may be found on the web site ([www.ve3kbr.com](http://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 or 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 *[name and callsign]* returning the repeater to normal amateur use.