

# KINGSTON AMATEUR RADIO CLUB NEWSLETTER

Founded in 1947

March 2018

## *Executive Committee*

### **President**

Larissa Reise, VE3KGC  
pres@ve3kbr.com

### **Vice President**

Brian Hopkins, VA3BAH  
vicepres@ve3kbr.com

### **Treasurer**

Douglas Richards, VE3FFR  
treas@ve3kbr.com

### **Secretary**

Chip Chapman, VA3KGB  
sec@ve3kbr.com

## **KARC Repeaters**

VE3KBR  
146.940(-) MHz  
151.4Hz Tone, IRLP Node #2750

VE3UEL Hartington APRS Node  
144.390 MHz

VE3KER Kingston Packet Node  
145.070 MHz Simplex

## *Committee Chair Members*

VHF Net Manager  
Steve Cutway, VE3KC  
netmanager@ve3kbr.com

HF Net Manager  
David Wendt, VE3EAC

Membership Manager  
Steve Cutway, VE3KC

<http://www.ve3kbr.com>



## FROM THE PRESIDENT

It seems as though spring is just around the corner now. The creeks are flowing, the geese are flying in formation overhead, and the snow has melted exposing loose coaxial cable and the radials from my ground plane antenna which fell off sometime over winter. Hopefully everyone's shacks have survived the winter, and the hams are stirring and about to emerge from winter hibernation.

With spring comes the anticipation of various ham fests, and plans for antenna work (once the honey-do lists are tackled, of course). Hopefully the bands will be kinder now than they have been, with very quiet solar weather and a near-complete lack of propagation. Since things can't really get much quieter than that, it can only mean that things are improving!

As for me, I've already started planning my antics for the ARRL June VHF QSO Party contest. I was quite pleased to see my callsign featured in the scoring section in the latest ARRL newsletter, and I've been approached by another relatively new ham who thoroughly enjoyed her sink-or-swim introduction to VHF contesting last year, and who's eager to have another stab at it this year!

I'm anticipating a relatively uneventful summer sticking fairly close to home after my adventure last year. Thankfully, although my home QTH experienced an unprecedented rainfall that resulted in about an inch or two of water flooding our basement, it looks like my radios and computers survived unscathed (the same can't be said for the drywall walls of my shack!). Now that the flooring has been replaced, the walls will be next, and then I can begin moving the equipment back into place. Until then, I'll be getting on the air via the multi-mode Icom 706 on my kitchen table (with mag-mount antenna stuck to cookie sheet) and the Yaesu FT100D in my Jeep. I can't find the Baofeng's charger base, and I'm still looking for the TNC-X's radio cable, which seems to have wandered out of my go box. Oh well, I needed to construct a second cable anyway.

As the weather continues to improve, hope you're able to emerge and enjoy it. Remember, antennas only work well when erected or repaired in nasty weather, and there'll be plenty of storms later on. For now, take the time to enjoy some spring-like weather, and start dusting off those rigs!

See you on-air sometime!

73 de VE3KGC Larissa

KARC President

## MEMBER ARTICLE

### **Utilizing The VE3KBR HF Remote Station For Troubleshooting Digital Transmissions**

**By CJ 'Chip' Chapman, VA3KGB, 24 February 2018**

My Kenwood TS-450S transceiver had developed an audio problem where the receive audio output would drop out intermittently. Playing with the microphone connector would fix the audio. I was also receiving reports of RF getting into my audio and I figured that it might be the way the station was wired up. Changing wire runs, equipment locations etc., didn't help. The auto-tuner had also quit working, which I bypassed and used an external tuner. The radio was repaired and put back in service but the audio was still getting RF into it, so I took it out of service. The radio was repaired, put back into service and requested audio reports confirmed no RF on the audio. (Local Amateur did the repairs for me – Thank You!)

While the 450 was down for repairs, I had been using the Yaseu FT-897 and Signalink SL1+ combination, (my portable HF station). With this combination I had WSJT-X working locally at the radio with the Signalink and using Ham Radio Deluxe/Rem Audio/WSJT-X remotely using WiFi access. The Signalink is an audio interface with connections to a sound card on the computer and accessory port on the radio.

When I put the 450 back into service the RigExpert Standard interface was put back into service also. The RigExpert Standard uses a USB connection to the computer and connects to the radio through CAT, Data and CW Key connections. The Setup software also creates 4 serial ports and audio on the USB side. It took a few minutes to have HRD working with the 450, but it was it took several attempts to get the RigExpert Standard to key up the transceiver. Using WSJT-X to directly control the radio, I could not get the 450 into transmit mode although WSJT-X was decoding FT8 reception.

Solution was to use HRD as the radio configuration in WSJT-X which required tweaking the settings in HRD and WSJT-X. Using WSJT-X through HRD would control the radio and I could see the radio switching between receive and transmit, however, I was not making any contacts!

I wasn't sure what the problem was as the Power reading on the 450 wasn't moving with only 5 watts power out. Was it the interface, software settings, wiring problems, or what? Unlike the FT-897 where you can set the power out using a menu setting, the 450 uses a volume knob control. I added my 3-range analog power meter (10/100/1000 Watts) into the circuit to monitor the power out on transmit. It has been a while since I have used this meter and was usually used on the 100 Watt setting. Since I was using rough 5 watts, I selected the 10 Watt setting.

My first test was to use the Tune test function under WSJT-X settings. This will switch the radio to transmit but there will be no power out as no modulation is applied.



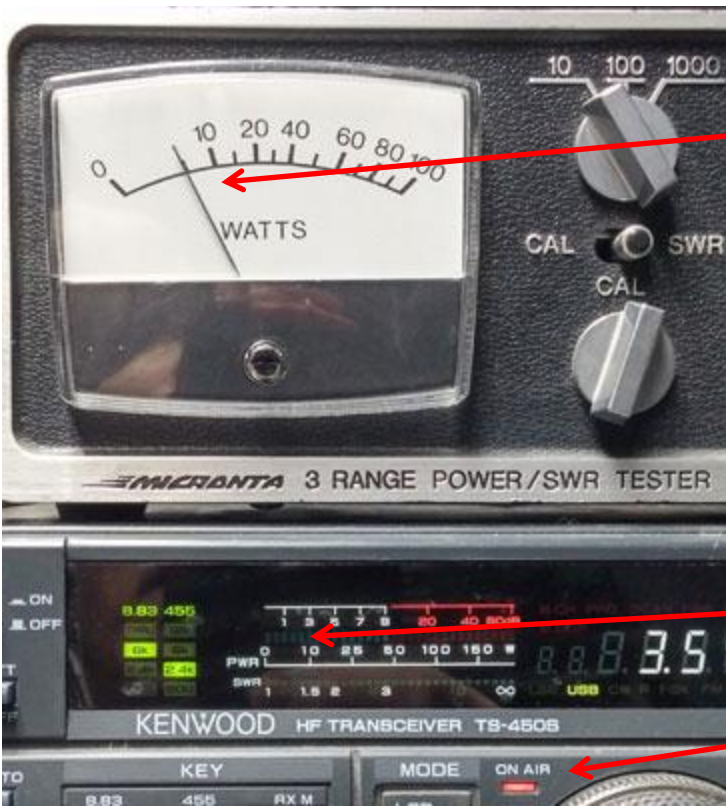
With the Tune activated in the WSJT-X Radio settings, the watt meter does not move indicating 0 (zero Watts).

The Transmit indicator (ON AIR) on the TS-450S turns on (Red) indicating the transceiver has switched transmit mode.

Turning off the Tune in WSJT-X returned the transceiver back to receive mode and turned off the ON AIR indicator.

So far so good with the next step to transmit a FT8 packet and see what happens. However I wanted visual confirmation that I was actually transmitting a readable transmission. I grabbed the laptop, and connected to the VE3KBR HF Remote Station and launched WSJT-X. I set the call sign to VE3KBR and started monitoring. I used VE3KBR as I wanted to see my VA3KGB FT8 transmissions from my station. If I had left the call as VA3KGB on the laptop's WSJT-X, I figured it may not see my transmissions as the call would be the same and be rejected. I selected the same frequency as I was on at my station and turned on the Attenuator (ATT) on the TS-570.

At my station, I watched for a CQ call and double-clicked on it to enable transmit on WSJT-X. The 450 switched to transmit mode and I adjusted the Out control on the RigExpert to 5 watts on the power meter.

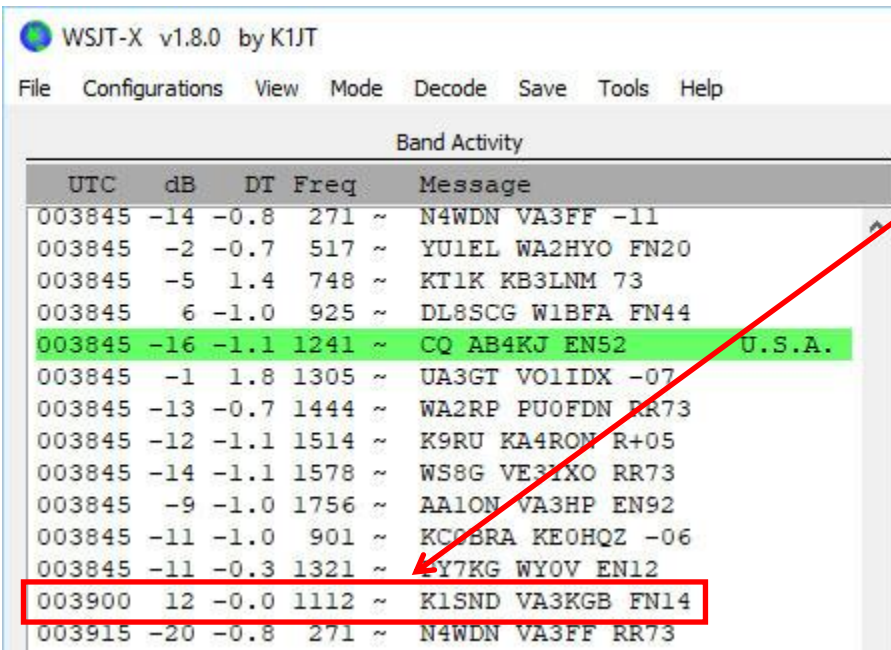


Power out indicted

PWR scale has no indication in the bar graph

ON AIR indicates transmit mode

Checking the WSJT-X Band Activity screen on Remote Station shows it was decoding my transmissions.



This screen indicates that I was sending from VA3KGB to K1SND and that the VE3KBR HF Remote Station was receiving VA3KGB FT8 transmission at +12 db.

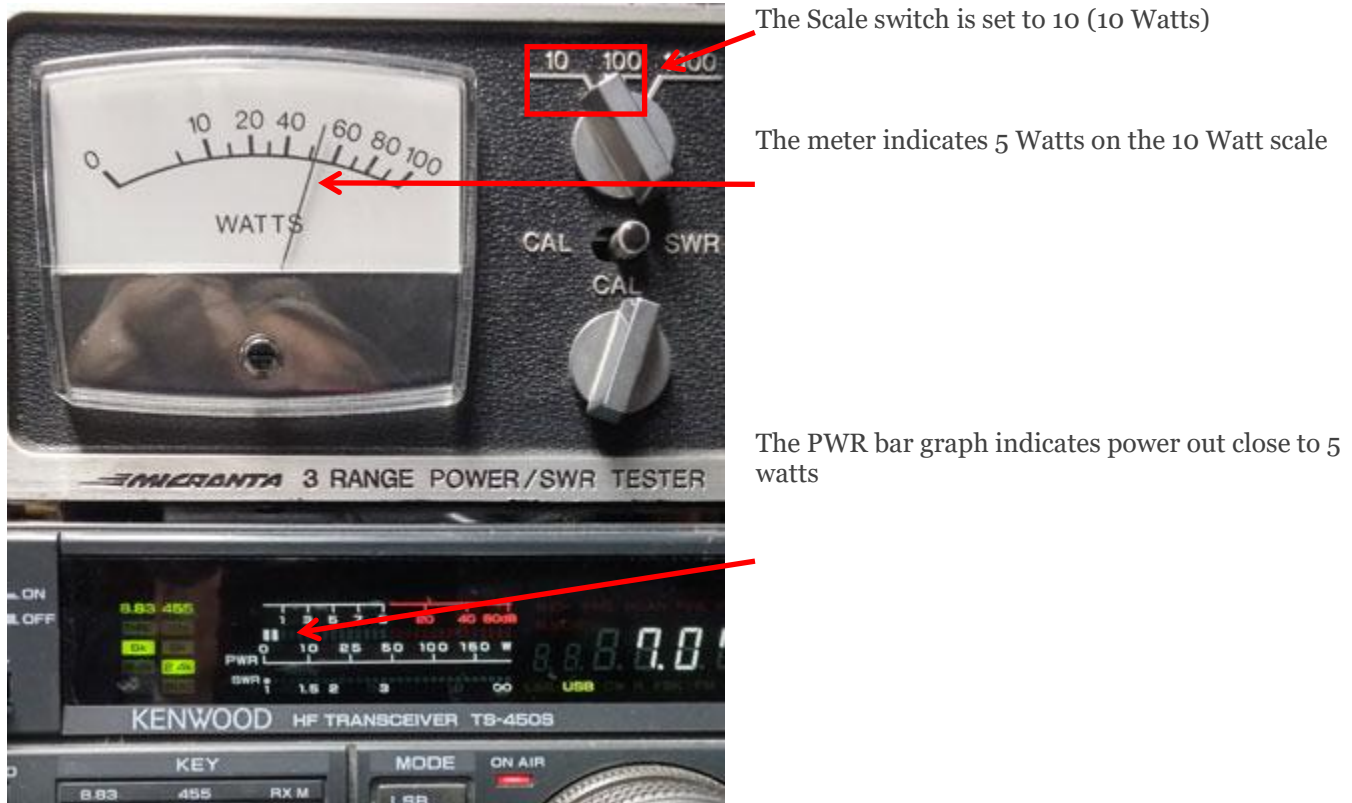
Note: The two antenna systems are parallel to each other with a distance of about 2 metres apart at the feed point, hence the Attenuator turned on above.

I tried a few calls and finally completed a two way exchange with a station in England, but stations from grids nearby were not answering my calls to them.

Take another look at the Power Meter above the WSJT-X Band Activity screen shot.

Okay, now for those who got it, you may now quit laughing. For those who didn't catch what I did, here is the explanation. As I mentioned above the meter has mainly been used using the 100 Watt scale and I switched it to indicate 10 Watts maximum power out. I was describing the my troubleshooting steps to a couple of my co-workers when it dawned on me as I was drawing the meter scale what I had done. The scale reads 0 to 100 which on the 10 Watt scale reads 0 to 10.0 Watts (decimal before the last 0 of each) but my eyes and brain read it as 0 to 100 and I had set the power to the mark between 0 and 10 which would be 5 Watts on the 100 scale but is only 1/2 Watt on the 10 Watt scale! My FT8 contact with England was on 1/2 Watt from my location.

Back at the station I adjusted the power out to 5 Watts and made a FT8 QSO while monitoring the decodes using the VE3KBR HF Remote Station. Success! Below are the resultant power output readings.



The screen capture below shows a completed two way QSO with CU3EM using 5 Watts. You can see that the complete exchange was achieved with no repeat transmissions by either station.

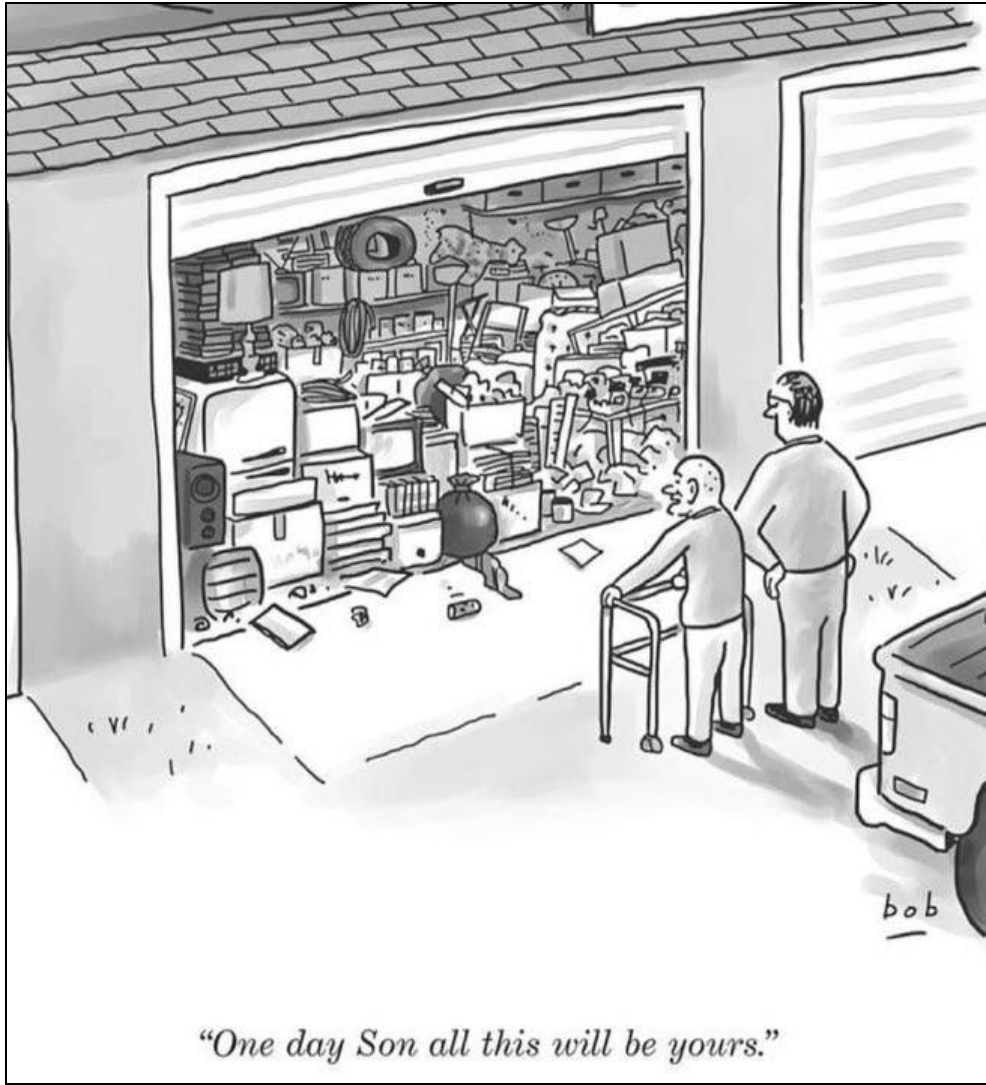
WSJT-X v1.8.0 by K1JT

File Configurations View Mode Decode Save Tools Help

Band Activity				Rx Frequency					
UTC	dB	DI	Freq	Message	UTC	dB	DI	Freq	Message
194315	-7	0.9	696	K5NDI W2RT -03	194115	-5	1.0	1456	CQ AF7EL DM33
194315	-21	1.1	834	PJ2/DL9NBJ W8ATE	194136	Tx		1456	AF7EL VA3KGB FN14
194315	-20	0.8	1365	KA1ERL N7RO CN88	194145	-5	1.0	1456	CQ AF7EL DM33
194345	1	0.9	1425	VA3KGB CU3EM -05	194200	Tx		1456	AF7EL VA3KGB FN14
194345	-4	0.9	646	K5MDI W2RT -03	194215	-7	1.0	1456	CQ AF7EL DM33
194345	0	0.7	679	N8MOE CT4RC -11	194230	Tx		1456	AF7EL VA3KGB FN14
194345	-12	1.0	939	OO DK CT18MU IN59 Portugal	194245	-3	1.0	1456	CQ AF7EL DM33
194345	9	0.9	1025	EA1CGG KITO -22	194300	Tx		1456	AF7EL VA3KGB FN14
194345	-12	0.9	1173	CQ K2MOB EM60 -U.S.A.	194330	Tx		1456	AF7EL VA3KGB FN14
194345	-2	1.0	1246	NB7AEI NOOC R-18	194315	0	1.0	1425	CQ AF7EL DM33
194345	2	1.0	1643	CQ NB2REM EL97 -U.S.A.	194315	1	0.9	1425	CQ CU3EM DM68
194345	-14	1.3	1866	NK8P EA1CCM R-16	194332	Tx		1425	CU3EM VA3KGB FN14
194345	-11	1.0	1457	CQ AF7EL DM33 -U.S.A.	194345	1	0.9	1425	VA3KGB CU3EM -05
194415	1	0.9	1425	VA3KGB CU3EM RRR	194400	Tx		1425	CU3EM VA3KGB R+01
194415	-3	0.9	646	K5MDI W2RT RRR	194415	1	0.9	1425	VA3KGB CU3EM RRR
194415	0	0.7	680	N8MOE CT4RC -11	194430	Tx		1425	CU3EM VA3KGB 73
194415	10	0.9	1025	EA1CGG KITO -22	194445	0	0.9	1425	VA3KGB CU3EM 73
194415	-12	0.9	1173	CQ K2MOB EM60 -U.S.A.	194500	15	1.1	1425	W8OBT A360L 73
194415	-7	0.9	1245	NB7AEI NOOC R-18	194515	-1	0.9	1424	W4DOW CU3EM R-03
194415	3	0.9	1641	VE3SXA W0TK DM79	194545	4	0.9	1425	W4DOW CU3EM R-03
194415	-15	0.7	1764	FR4PF X04WPR EL88					
194415	-7	1.7	1866	NK8P EA1CCM R-16					
194415	-2	1.0	1457	CQ AF7EL DM33 -U.S.A.					
194445	0	0.9	1425	VA3KGB CU3EM 73					
194445	3	0.7	680	N8MOE CT4RC -11					
194445	11	0.9	1025	EA1CGG KITO -22					

Using the VE3KBR HF Remote Station allowed me to verify that my station was in fact transmitting decodable FT8 packets without having to arrange for another Amateur to try and monitor my transmissions which might be problematic depending on distance and groundwave propagation. In my location I also have to be careful of power levels due to the very close proximity of the two stations' antenna systems. Using a remote station for troubleshooting problems at your station becomes a valuable tool as you can monitor your station's transmissions and decode your own digital packets.

Now as long as I remember to change power scales when switching modes and power levels. I may create a 3 scale background in different colours for the power meter to make it easier to interpret the power out readings.



*"One day Son all this will be yours."*



## MEETING MINUTES

Kingston Amateur Radio Club

Minutes of the Meeting

6 February 2018

Held at Smitty's Restaurant

Kingston, Ontario

1. The meeting was called to order at 7:00pm by the President Larissa, VE3KGC.
2. There were 19 members and guests present.
3. Minutes of the Previous Meeting:
  - a. It was moved by Chip, VA3KGB, and seconded by Steve, VE3KC, that the minutes of the December meeting be approved as posted in the February Newsletter.
  - b. Carried
4. Treasurer's Report:
  - a. It was moved by Doug, VE3FFR, and seconded by Les, VE3KFS, that the Financial Report be approved as posted in the February Newsletter.
  - b. Carried.
5. Old Business:
  - a. KARC Logo Items :
    - i. Brian, VA3BAH, informed the members that the company which had done our hats still has our file if there was interest .
6. New Business:
  - i. Nil.
7. Reports:
  - a. 2 Metre Net:
    - i. Steve, VE3KC, reported there were an average of 11-12 check ins lasting 26-46 minutes. Ron, VE3GO is running a successful swap net as part of the net.
  - b. CFARS:
    - i. Les, VE3KFS, reported that CFARS will be under 7 Comm Group and the CJOC J6. CFARS was called out for the BC tsunami and closed down when not required.
  - c. HF Remote Station:
    - i. Chip, VA3KGB, reported the station is available for use by Advanced Amateurs.
  - d. Hearts and Flowers:
    - i. Nil Report.
  - e. KAREX:
    - i. Kingston Amateur Radio Experimenters Group meets Saturdays at the 560 Legion on Montreal St. at 8am.
8. Date of Next Meeting: 6 March 2018.
9. 50/50 Draw:
  - a. A total of \$21.00 with Brian, VA3BAH, and the Club splitting the winnings (\$10.50 each).
  - b. Brian donated the winnings back to the Club.
10. Adjournment:
  - a. It was moved by Eric, VE2PEF, and seconded by Les, VE3KFS, that the meeting be adjourned.
  - b. Carried
11. Presentation:
  - a. Les, VE3KFS, gave a presentation on the latest version of RMS Express and the WinLink system.

Clifford ('Chip') Chapman, VA3KGB  
Secretary  
Kingston Amateur Radio Club

## MEETING AGENDA

1. Members and Guests introduce themselves
2. Additions to the Agenda
3. Minutes of the last Meeting: errors / omissions / approval (Chip VA3KGB)
4. Treasurer's Report
5. Old Business:
6. New Business:
7. Reports:
  - a. Net Manager (Steve VE3KC)
  - b. CFARS
  - c. "Hearts and Flowers"
  - d. Other Reports
8. 50/50 Draw
9. Presentation: TBD
10. Date of next meeting: 03 April 2018
10. Adjournment

**FINANCIAL REPORT**

**KARC FINANCIAL REPORT – Feb 2018**

**February 27, 2018**

**Opening Balance**

<b>Cooperation Plus</b>	<b>5593.90</b>
<b>Dividends Share</b>	<b>282.51</b>
<b>Equity Shares</b>	<b>25.00</b>
<b>Total</b>	<b>5901.41</b>

**Income**

<b>Int</b>	<b>.10</b>
<b>50 50 Draw</b>	<b>10.50</b>
<b>Donation</b>	<b>10.50</b>
<b>Membership</b>	<b>60.00</b>
<b>Total</b>	<b>81.05</b>

**Expenditures**

**Closing Balance**

<b>Cooperation Plus</b>	<b>5674.95</b>
<b>Dividends Share</b>	<b>282.51</b>
<b>Equity Shares</b>	<b>25.00</b>
<b>Total</b>	<b>5982.46</b>

## NET CONTROL SCHEDULE

March 13 VE3POA Peter  
March 20 VE3WIO Carlyle  
March 27 VE3KC Steve  
April 10 VA3BAH Brian  
April 17 VA3PCI Assaf  
April 24 VE3CAK John  
May 8 VE3KC Steve  
May 15 VE3KGC Larissa  
May 22 VE3NXE Pieter  
May 29 VE3POA Peter  
June 12 VE3WIO Carlyle  
June 19 VA3BAH Brian  
June 26 VA3PCI Assaf  
July 3 VE3CAK John  
July 10 VE3KC Steve  
July 17 VE3KGC Larissa  
July 24 VE3NXE Pieter  
July 31 VE3POA Peter  
August 7 VE3WIO Carlyle  
August 14 VA3BAH Brian  
August 21 VA3PCI Assaf  
August 28 VE3CAK John  
September 11 VE3KC Steve  
September 18 VE3KGC Larissa  
September 25 VE3NXE Pieter  
October 9 VE3POA Peter  
October 16 VE3WIO Carlyle  
October 23 VA3BAH Brian  
October 30 VA3PCI Assaf  
November 13 VE3CAK John  
November 20 VE3KC Steve  
November 27 VE3KGC Larissa  
December 11 VE3NXE Pieter  
  
December 18 VE3POA Peter

## **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.