

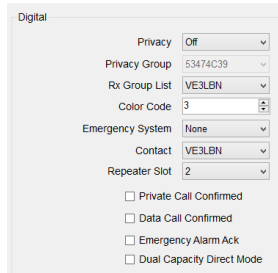
# Monthly Update

## March 2018

### March Club Meeting

When: Tuesday, Mar 20, 7:00pm  
Where: White Cliffe Terrace Retirement Centre, Courtice

**Basics of DMR Radio** – tonight we will take a look at these great little radios that we have been getting and showing you some of the behind-the-scenes setup that you need to understand if you want to get in and modify and create your own code plugs. This will be a very basic presentation as even the presenter is new at this. Hopefully you will gain a bit more understanding as to how DMR works and get you started with modifying and building your own code plugs.



### Hamfest Update

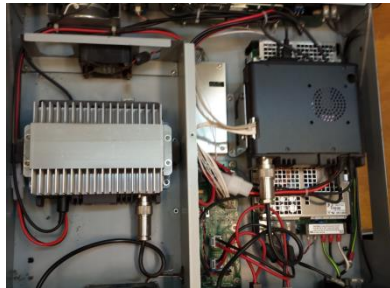
The 42<sup>nd</sup> Annual Durham Hamfest will take place on Saturday, April 28, 2018. Hamfest is fast approaching and it looks like everything is falling into place quite nicely. Below is what we have so far as volunteers go.



- Chair** – Alison VE3GRL
- Security** – Lex VE3LEX, Steve VE3SBQ, Bill VA3WTB, Vic VA3JAR, AI & Karen
- Parking** – Joe VE3VGJ, Doug VA3DCE, Alex VA3AMP
- Vendor Tables** – Steve VA3TPS
- Vendor Sign In** – Larry VA3FHG
- Refreshments** – Jeffrey VA3RTV, Jackie VA3BTQ, Colleen SWL
- Treasurer** – Glenn VA3GAR, Ralph VE3CRK
- Admissions** – Randy VE3JPU and Kent VE3KUT

If we have missed anyone please let **Laird VE3LKS** know. **Joe VE3VGJ** is looking for one more person to help with parking and **Laird VE3LKS** could use one more person on security. So if you are going to be around that weekend please consider joining the Hamfest team. Don't forget to bring a reflective vest if you have one.

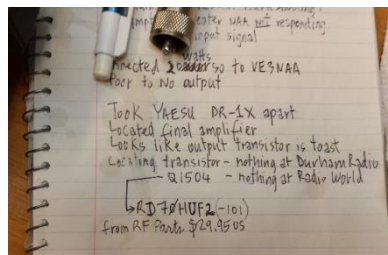
### VE3NAA Out of Service



As you may already know, the VE3NAA repeater went silent this week. Members of the Repeater Committee, and some other interested parties whom we should probably convince to join the Repeater Committee, sprung into action and it looks like a diagnosis has been made and the needed parts ordered. **Lex VE3LEX, Jeffrey**

**VA3RTV, Jimmy VE3SOI** and **Dave VA3RLP** made the trip to the hill to for the exploratory procedure while **Bob VE3HIX** remained at his QTH to give signal reports.

As reported by **Jimmy VE3SOI** - A hefty wattage high-grade power meter was connected to the VE3NAA final and ZERO (or next to nothing) wattage output observed. The Yaesu DR-1X Repeater was then removed from its location and placed on table nearby and went under the knife.



Thank you gentlemen for your work in getting the VE3NAA Yaesu Fusion DR-1X back on the road to recovery.

Website – [ve3osh.com](http://ve3osh.com)

### DMR Notes

Last month we got started with some basics of programming a digital radio and explained what a **Code Plug** was. Now we will start to explain some of the various components of a **Code Plug**.

**Talk Group – aka Digital Contact** – with digital radio you use RF to communicate with your radio to a repeater or hot spot. Your transmission is then dispersed onto the internet and any other Amateur in the world, who has a digital radio, can communicate with you if they have a hot spot or digital repeater in their area. For our discussion we will focus on the Brandmeister system as that is what we have.

Now, you would not want everyone getting on and just have one massive pile up while people tried to talk to each other so there is something called **Talk Groups**. Basically, a **Talk Group (TG)** is like a chat room where only people who want to be in that chat can talk to each other. Ie, there is a World Wide (TG 1), North America (TG 3), USA (TG 3100), Canada (TG 302), Ontario (TG 3023) and even our own VE3LBN (TG 302340). There are literally hundreds of **Talk Groups** but these are some of the more common ones that we use locally. Anyone can access any of the **Talk Groups** but this layout gives it some order so that no one **Talk Group** is overloaded. For instance, let's say you want to get hold of **Dave VA3RLP** when he is in California. You could start by putting out a call to him on TG 3106 which is a **Talk Group** for California. On our Tuesday night rag chews it is not uncommon to have Steve VA3TPS or Mike VA3MCX join us on VE3LBN aka TG 302340. There are websites that have complete lists of Talk Groups.

So, when building your code plug you should start by creating the Talk Groups (Digital Contacts) that you are going to want to activate on the various repeaters.

**RX Group List** – for each Talk Group that you create you will need to set up a RX Group List that has the corresponding Talk Group listed in it. To be honest I am not sure why it works this way. Logic would dictate that the radio would use the same info from the Talk Group for the RX Group List. But, as will be repeated ad nauseam, DMR radio was not created with Amateurs in mind. We are simply trying to bend it to fit our hobby.

**Channels** – now we will get into an area that will be a bit more familiar to you especially if you have used software, such as Chirp, to program an analog radio. The Channel is where we instruct the radio what input and output that the repeater uses, what power output you want to use on your radio, set a timeout timer, and some uniquely digital info that we will discuss later. So, let's say you want to be able to talk to Dave VA3RLP when he is in California on our local VE3LBN DMR repeater. You can name it whatever you want but I called it LBN-USA-CA. You have to create a channel for each Talk Group for each repeater you want to access it on so you will want a good naming convention. LBN indicates that this is for the VE3LBN repeater. USA tells me that it is for a Talk Group in the USA and CA tells me that it is California. Other examples would be LBN-Canada (Canada wide) and LBN-ON (Ontario wide). Now, if I wanted to be able to use these Talk Groups on SPARC's DMR repeater (VE3SBX) I would have to build different channels. So, to keep it consistent, I would use SBX-USA-CA, SBX-Canada and SBX-ON.

There are some unique DMR settings that you need to add to each channel. You will need to populate which Talk Group, RX Group List and a Scan List which we will look at in next month's issue. As well, you will need to indicate which Color Code number the repeater uses and which Time Slot. A color code is basically what we would call a tone on a regular analog repeater. Each DMR repeater has a Color Code that is used so we need to put it in the Channel setup to gain access to the repeater. The Time Slot is a bit more complex. Digital radio allows two conversations to go on at the same time on the same frequency. It does this by breaking up transmissions into 30ms chunks. So, when you are transmitting it is not a constant signal like analog but 30ms on and 30ms off. So if your Channel is on Time Slot 1 then someone can carry on a conversation using a Channel on Time Slot 2.

Email – [info@ve3osh.com](mailto:info@ve3osh.com)

## Tuesday Night Rag Chew



Several of our members have started a Tuesday night informal rag chew on VE3OSH. The discussion starts at around 7pm when people start to show up on the repeater. Sometimes we slide over to the VE3LBN digital repeater where we can also chat with guys like **Mike VA3MCX** up in Kapuskasing or **Steve VA3TPS** in Fenelon

Falls. Topics change by the minute and we make every effort to make sure that everyone gets to have their say in an orderly fashion. Even if you just want to listen in we encourage you to at least break in and let us know that you are there.

## Wednesday Night Face-to-Face

As well as the Tuesday night rag chew on the repeaters there is quite a crew that meet at the Tim Horton's at King and Wilson at about 8pm every Wednesday. It actually gets quite crazy as we discuss all things radio, update our digital radios with the latest code plugs, discuss hobby issues, and generally have a good time. Some come a bit early to secure our seating area and a lot of times we don't get away until 10pm. Others can only pop in for a little bit but everyone is welcome no matter. We are even getting some local Amateurs who are not club members but come to enjoy the fellowship. If you are in the area on Wednesday night and have a few minutes to spare we would definitely enjoy your company.



Clockwise from bottom – Dave VA3RLP, Scott VE3RPN, Pete VE3PWJ, Fred VE3JWD, Joe VA3CIP, Bob VE3IRB, Jimmy VE3SOI, Jeffrey VA3RTV, unknown (sorry), Vic VA3JAR, Gary VE3RYI, Lex VE3LEX, Bob VE3HIX and Peter VE3PLM. With a face made to be located behind the camera is Laird VE3LKS.

## Saturday Breakfast

If you are not tired of chatting or meeting up with club members during the week then you will be interested to know that there is a group that meets on Saturday morning for breakfast at Johnny's Original Eatery. The restaurant is located in the plaza on the northwest corner of King and Thornton. Members and families usually start to arrive at about 8:30am.



## Saturday Coffee Break

One more social event to promote here. The Whitby ARC hosts a coffee break every Saturday afternoon. They meet at the Blue Sea Fish and Chips located at 836 Brock St. N in Whitby from 2pm to 4pm. All Amateurs are welcome.

## Note of Thanks

A note of thanks to Lee McMurter VA3LHM for his presentation on digital TV at our February meeting. I am familiar with how networking packets work but this digital TV is mind-boggling. This presentation gave me some good insight as to what I need to do to improve my digital TV setup.

## 7.272 Ragchew Net

During the cold winter months is usually when I play on HF. I came across a net recently that is more than just your usual "Hi, what's your callsign, txn for checking in" type net. The 7.272 Ragchew Net is actually quite fun to listen to and they have some very colourful net controllers. My personal favorite is Art N2BJL. The net runs daily from 0900 – 1200 and on the weekends 0815 to 1200. Their website is [www.72chew.net](http://www.72chew.net). Drop by some time, listen to some fun conversation, and key up and get in their log.



N2BJL-Art

## QRM from the Shack



We have two new members in our club as of the February meeting. Please join me in welcoming **Fred Wright VE3JWD** and **Mike Veit VE3BWW**. As well as these new members, **Joe VA3CIP** has been joining us for various get-togethers. Welcome to the North Shore ARC!

At our upcoming Hamfest the club will, once again, have a table on which members can place any items that they would like to sell. Please mark your asking price on the item and also provide the table caretaker your lowest acceptable offer. We encourage you to drop by and help out at the table if you have items there.

I sure hope no one went hungry or lacked any companionship last weekend. I know I had two invites for breakfast, one to Johnny's Eatery with the regular reprobrates and one to another great establishment with a couple of Amateurs and friends. However, I had to respectfully decline both as I needed to make a run up to the repeater site to work on the APRS iGate system. As is our tradition, when I have to go up there, **Doug VA3DCE** and **Joe VE3VGJ** joined me at White Feather Farms and we partook in some food and conversation. **Vic VE3JAR** had invited me to Johnny's but when I told him about the plans to dine at White Feather he joined us as well. Then, on the way up to the site, **Joe VA3CIP** was chatting with us on the repeater and decided to join us there as well. Yes, North Shore members may not all be electronic wizards but we sure do food well!



We did our first Radioddity DMR net this past Tuesday night on VE3LBN. We had lots of local guys checking in, including the self-proclaimed president of the MD-380 Club, Scott VE3RPN. ☺ We had one long distance check in from Mike VA3MCX who was in North Bay on his way back up north. We did not have any international check ins but I think we will give it a shot again in April and try to make it a monthly event. I will put more advertising out on the Radioddity Facebook pages.

Some upcoming events that we will detail in next months Update but will touch on here. CANWARN is coming up in May. There will be the usual large gathering in Toronto on May 5, 9am at the Environment and Climate Change Canada Headquarters, 4905 Dufferin St. They are trying to schedule one here in Durham on May 2 or 3 but nothing has been confirmed yet. As well, the 21st Annual Ontario QSO Party will be held on the third full weekend of April. It runs from 1800Z April 21 to 0500Z April 22, 2018 and 1200Z to 1800Z April 22, 2018.



I hope to see everyone out at our monthly club meeting this coming Tuesday evening. Hopefully the Repeater Committee can give us an update and maybe a short presentation on what they are doing to repair and improve the VE3NAA machine.

73 de Laird VE3LKS