

# Northwest Indiana DX CLUB

Volume 3, Issue 3

March 2015

## President's Corner

K1N Dxpediton was an outstanding one after the disaster of the Iran Dxpediton. They made 125,000 plus QSOs. I especially liked what they did on the last two days and that was making the stations on two bands for working those that still needed Navassa Island for a first time contact.

**DQRM** (Deliberate **QRM**) is a new process used by the K1N team to pinpoint those who cause interference. See more on page two.

We will hold the next meeting on **March 14th** at the Viking Chili Bowl in Valparaiso. **Time 12:00 Noon CST.**

73  
John, W3ML

*Don't Forget*

## DXCC CARD CHECKING

**Doctor Richard Lochner, K9CIV has been appointed an Official ARRL DXCC Card Checker. Contact Rich to schedule an appointment for card checking.**

**You may email him at [k9civ@arrl.net](mailto:k9civ@arrl.net) for details on how to mail your cards to him, if you desire to go that route.**



## INSIDE THIS ISSUE

- 1 President Speaks
- 2- Member News/DX News

**NWI DX Club Website**

<http://nwidxclub.weebly.com/>

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## Member News

**If you have any news to tell, please send it to me so I can send it to the group.**

### **The DQRM Tracking Project**

Recently, the amount and intensity of **DQRM (Deliberate QRM)** has been growing logarithmically, targeting DXpeditions all over the world. DQRMs attempt to spoil communications and disrupt the joy of chasing DX -- both for those who need to contact the entity, and for the teams who, at considerable expense, activate stations to share contacts with fellow hams worldwide.

Without going into the motivation of DQRMs, the DX Community is taking steps to eliminate this practice.

The KP1-5 Project, which is producing the 2015 K1N Navassa DXpedition, has been working with telecommunications agencies around the world. The objective is to identify stations who are acting as DQRMs and use legal means to stop this behavior. The technology is in hand to solve this problem and, with your assistance, we can stop this blight that is hurting hams worldwide.

#### **How it Works**

Locating the stations engaging in DQRM is a matter of triangulation. When the DQRMer is 60db over S9 at your location, you can be pretty sure that station is nearby. If you fill out the form below, our software will collect and analyze the data to produce a reasonably accurate map of the DQRMer's location. This data will allow a close-in search in the DQRMer's area and, using local transmitter hunting devices, the offender will be identified.

This is a real-time system that's been in development for several years; its first major test will be the 2015 K1N Navassa DXpedition.

#### **What You Do**

Fill out the form below with as much information as you can provide. All information will remain confidential. The form will go into a database and our DQRM Project software will do the rest. We can stop DQRM -- and you can help!

<http://www.navassadx.com/>

# **RFI REVISITED**

By  
Jerry Hess, W9KTP

Since my last article on RFI, I have discovered that I was causing our internet connection to fail. Our internet provider doesn't need any help in that regard and most often the failures occurred when I wasn't on the air. A few times, I apparently was the guilty party. I wasn't sure what caused the problem. Was it getting through the house AC lines? Was it coming through the telephone lines? Or was it some quirky problem with ground loops. I tried using a homebrew RF Ammeter (see QST 2/99, page 34) to isolate the problem but that just confused me more. I still don't really know (or care) what the problems was. I just wanted it to go away. Nuke time for me.

Initially I only planned to add a few more toroids to my station until I spent some time with Palomar's website. I recommend all hams take a look at their articles and various solution kits. What I finally did was order (5) FT240-43 toroids, (10) 1/2" snap on split beads and a 1" snap on split bead. I also utilized four Radio Shack "Snap on Chokes" (part #273-104) that I had on hand. You probably will have to substitute a Palomar equivalent like the 1/2" snap on beads since Radio Shack is 'Kaput'.

## **Ground Loops**

I attacked this part of the problem in two ways. First, I added a FT240-43 toroid with 10 turns of #12 wire (#14 is easier to work with) to the ground lead of the amplifier, phasing unit for my verticals, parallel tuner and the 'T' match. See Picture 1. The transceiver already had one. All these units have a common ground point on a copper buss bar. I figured there was always a possibility that current could flow back through the common ground to another unit.

Second, I put a 1/2" snap on split bead on each of antenna coax leads (except VHF) and each of the interconnecting leads between units. This used up nine of the beads. See Picture 2-3. If I have current flowing in the shield of a piece of coax, that should slow it down. Palomar recommends more than one bead per cable. In effect I got the cumulative effect by putting them on antennas and the subsequent interconnecting cables.

## **AC Lines**

The big snap on split bead went on the amplifier AC line. I was able to get two turns of the power cable through it. See Picture 4. I put the tenth 1/2" snap on split bead on the AC line for the transceiver.

## **Internet Connections**

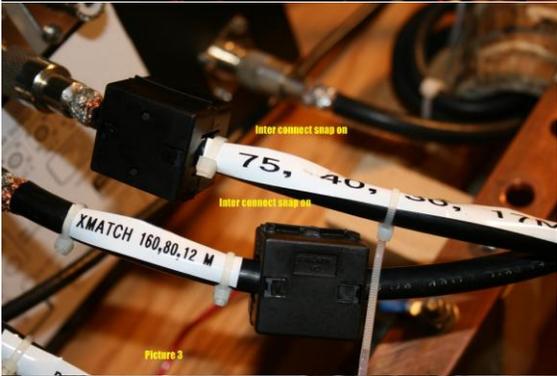
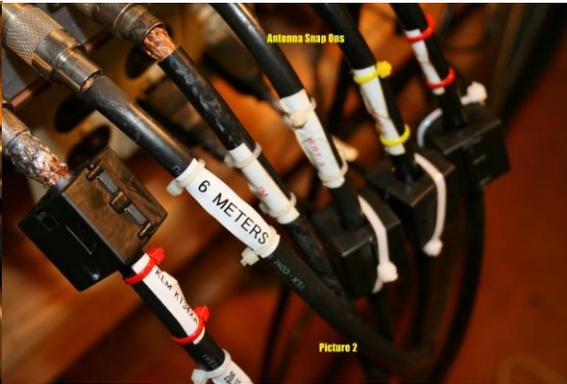
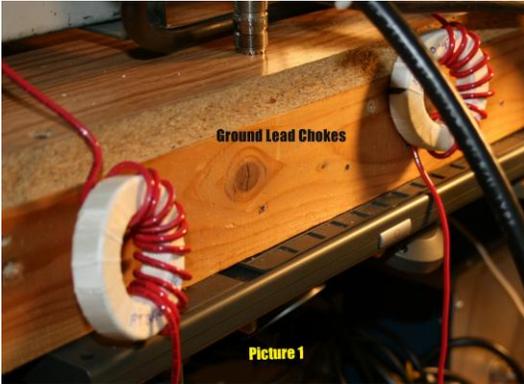
I had already changed my internet connection for the shack computer to wireless to eliminate the possibility of RF flowing back through a wired connection. This time, I grounded the cabinet to the shack ground buss and added chokes to the AC line, the mouse and keyboard leads. Could the interruption have come from the shack computer? I don't know. See Picture 5.

One thing I hadn't considered was that a telephone line in the upstairs bedroom was located only three feet above the shack. Telephone lines are nice unshielded antennas that run all over our house and one connects to the internet modem. After much head scratching over where to put suppression, I decided to add an R/S choke at the modem. See Picture 6. I had previously added a choke to the DC lead to the modem.

## **Conclusion**

So far, things have been great. High power on all bands has not caused a problem. If I had to guess, the big bead on the amplifier AC and the choke on the telephone wire at the modem were the most important. Time will tell.

Editor Note: Pictures on the next page.



## **K1N FINAL PRESS RELEASE [edited]. Dated February 21, 2015, from the KP1-5 Project --**

The K1N DXpedition team has only been home a few days, but we are slowly recovering from what was a difficult project. It was over too soon considering that it took 15 years to gain permission, plan and execute the DXpedition. The DX world is very complimentary of our results...140,000 QSOs and over 30,000 uniques. This is especially impressive when you consider that we had only had 14 active operators, 7 HF radios, 5 small amplifiers and only 4 small beams. Many of our QSOs were made barefoot and with dipoles hanging very high on the lighthouse on Navassa. This is what we called a MVC (Minimum Viable Configuration) necessitated by the use of helicopters for primary transport.

We have many to thank. The USFWS for allowing our operation after 22 years off-the-air. The terrific team of USFWS officers and biologists who accompanied us and became part of our team. Our sponsors, both equipment and financial, our team of radio pilots, our helicopter crew of Danilo, Nelson and JC, the staff of Moxon's Beach Club, the staff at Ian Fleming Intl. Airport and our new friends, the Haitian fisherman at Navassa. When we departed, they received gifts from us of gasoline, clean water, clothing, food and other items. Hopefully, this will help them in their difficult and dangerous existence.

Lastly, we want to recognize and thank a group of 1543 DXers. These people heard and responded to our plea for financial support prior to our DXpedition as this when the majority of our considerable expenses occurred. Last night, these special and generous people had their QSOs with K1N uploaded to LoTW (logbook of the world). This service was NOT a condition of their contribution, but comes as a completed surprise.

Thanks to you all for a memorable experience!

73, The KP1-5 Project  
Bob-K4UEE- President  
Glenn-W0GJ-Vice President  
Mike-NA5U-Secretary  
<[www.navassadx.com](http://www.navassadx.com)>



# Eritrea Project 2015

The SEISA/Foundation for Global Children is pleased to announce our next activity as “Eritrea Project 2015”. As part of this project, we will conduct an amateur radio DXpedition from Asmara Eritrea, from March 6th to 17th, 2015.

A multi-national team of nine operators, consisting of:

Zorro – JH1AJT Team Leader

Paul – N6PSE Co-Leader

Franz – DJ9ZB

Jay – JA1TRC

Yuki – JH1NBN

Kazu – JH1OGX

Thomas – NQ7R

David – WD5COV

Dmitri – RA9USU

We are very excited about this announcement as it has taken many months of careful planning and negotiations to bring about this amateur radio event. Our DXpedition call sign will be assigned to us upon our arrival in the capitol of Asmara.

We will use four transceivers consisting of two Elecraft K3 radios with the KPA500 amplifiers and two Kenwood TS590 transceivers with the ACOM 1010 amplifiers.

We will use beam antennas for the high bands (10-20 meters) and four verticals for the low bands (30-160 meters) We will try to work every area as much as possible.

Our QSL Manager is Tim – M0URX.

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An article on RFI with Garage Door Openers written by Jim, K6JRF offers some suggestions.

[http://www.k6jrf.com/FT2k\\_GDO\\_Fix.html](http://www.k6jrf.com/FT2k_GDO_Fix.html)

## Rules for DXing

<http://qrz.com/db/3z9dx>

Rules at bottom of the page.

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**“THE NEW DXER’S HANDBOOK” ©**

**SECOND EDITION**

**Written by: BRYCE K. ANDERSON, K7UA**

**January 10, 2015**

Author’s Comments

Every accomplished DXer was a beginner at one time.

In 2010 I wrote the first edition of this handbook for new members of the Utah DX Association. It was intended to give them something that would be easy to understand yet would quickly teach them the basic skills of successful DXing that took me years to discover on my own. Now in hindsight it all seems so simple.

DXing can become a lifelong passion and is a lot of fun! It offers opportunities for personal growth in a wide variety of areas: geography, engineering, science, language skills and many more. It also offers a competitive outlet for those who are so inclined. And best of all, through DXing I have made many new friends all over the world!

To my pleasant surprise this primer has gained an international readership and is now available in six languages! The first edition has become somewhat outdated and was never written for a broad audience. I have attempted to remedy both of those issues here in the second edition. I am honored by the recognition that I have been given. Wherever you are, I hope that you will enjoy this handbook and that it will help you gain some new skills. I truly hope that it will give a running start to those new to our ranks. Nothing would please me more than to learn that I have helped a new generation of young DXers get started.

Please feel to email me your feedback or questions. My email address is listed on QRZ.com.

Best regards, Bryce Anderson, K7UA

## CHAPTER - 1

### **Listening – The key to successful DXing: What is the single most important thing in DXing? Listening! Always listen!**

**Listen? Why? Listen for what?** In the most literal sense an accomplished DXer is truly a hunter. Great hunters know what they are hunting, what it looks like, what it sounds like, and where it is likely to be found. They don't just tromp through the woods hoping that their prize will just stand in front of them saying "Hey, shoot me!" They know when and where to look to improve their odds and they keep a keen eye open to find the big game before someone else does.

**That is why we listen.** We are scouting the band for stations that just came on the air. The weak ones from far away that no one else has noticed yet. If you are the first to find a great DX station, you will probably get him. You will have no competition. Also, some openings to the most remote places on Earth are only a few minutes long. You have to be there at just the right time. Sometimes propagation can be very selective in who can contact who. You might just be the only one hearing that rare DX station.

Oh! I don't need to do that! I'll just wait for him to come up on the DX Cluster system. OK. If you are the "**Tyrannosaurus Rex**" of 20M this might work out fine. You have the power to destroy your competition and slam through any pile up. However, for the rest of us, once a rare DX station is spotted the competition skyrockets. And by not listening, you will miss out on those weak ones that no one else ever hears or bothers to spot. Using DX Clusters is a terrific tool, but it isn't the only means to becoming a successful DXer. We will discuss DX Clusters in a later chapter.

Now back to **listening - the key to successful DXing.** The concept of listening is very simple. Start on one end of the band and slowly tune up or down the band looking for DX. You should especially check out the DX portion of that band. The DX portion is usually the lower end of each sub-band (phone & CW). While you are slowly tuning, stop on each station that you hear for a few seconds and figure out if they are DX, working DX, or of no interest to a DXer. Pick out call letters. They are the obvious way to determine if a station is DX or not. The subject that they are discussing can also be a clue. A rag chew discussing something mundane can be skipped over. A station ripping off QSOs as fast as they can go is something to be checked out further. Pay special attention to weak signals, phone operators speaking with accents or in a foreign language, and to signals that just sound "funny." By funny I mean having a "fluttery" sound, an echo, or a poor CW note. Signals that travel over the poles are impacted by the aurora that is always present. It gives both phone and CW signals the fluttery sound. It is called "arctic flutter." Once you have heard it, you will never forget it. Echoes come from signals arriving at your location from multiple paths. The difference in those path lengths creates the echo. Sometimes nearby stations sound this way from "backscatter," but some DX stations from very far away may be arriving via multiple paths and also have an echo. Poor CW notes may be caused by echoes or from technical issues at the DX station. A poor power source or equipment that was not constructed to modern standards may tip you off to a DX station. Commercial power is very poor in many parts of the world and good equipment may be very hard to obtain. Of course when you tune upon a huge pileup you know that something of interest is on!

The best way to listen is by wearing headphones. Having a nice speaker to use with rag chews, waiting for your turn on the net roster, or other casual operating is fine. For DXing you need headphones.

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allow you to reduce the noise around you and to use the minimum of AF gain (volume). You can concentrate better without distractions. **You will hear a weak signal better with headphones.** Trust me on that.

Not just any headphones will do. First they have to be **comfortable** so that you can wear them for extended periods. Another factor to consider is the **frequency response** of the headset. High fidelity headsets designed for music have a very wide frequency response. Typically from 50 to 20,000 hertz. Communications only uses a range from about 300 to 3,000 hertz. You don't want those super highs because in a communications situation they are just noise. The chest thumping bass response is also useless. You are better off with a headset designed for communications. Various manufacturers make them. Many DXers use headsets made by Heil Sound <http://www.heilsound.com/> . They are the standard for ham radio and difficult to beat. Noise cancelling phones can be very useful if you have something like an amplifier blower making a constant sound that can be blocked out. The final choice of a headset is very personal, just like picking out a pair of shoes.

As you gain experience in listening you will get greater and greater rewards. There is no doubt that an experienced DXer will pick out many more DX stations than a less experienced operator. You too can gain that skill through practice. After a while you will be able to "sniff out" DX that many others won't even notice.

**Editor Note: I will run a chapter a month.**

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<http://www.smartchargelight.com/>

SmartCharge™ LED energy efficient light bulb supplies 4 hours of battery backup during a power outage. It works like a normal light bulb, and fits a standard fixture, but works during power outages. It has a built in battery back-up that charges during normal use.

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## **FT4TA STORY AND BOOK. Sebastien, F5UFX, reports --**

Dear friends, Our emissions from Tromelin stopped a few months ago. Since, we have been very busy by many subjects. You undoubtedly read the news of our QSL cards (in progress), our equipment boxes are on the way back, we have been able to debrief on several occasions with the TAAF.

We are happy to show you today the complete report of our expedition.

For each operation, stories are very often quite similar. It is difficult in a few lines not to be limited to the banalities of the antenna setup, the conditions of propagation, and some statistics. We choose to write a report which would tell in details all that one would like to know in connection with such adventure: the « behind the scenes" of FT4TA! In these days with of DQRM, anonymous and nasty comments, it does not exist a better answer than explaining, and try to sensitize, show the work done for a so ambitious project.

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For the others, a large majority, organizers of expeditions themselves, those who would like to start a project, or DX lovers, let us hope that our story will make you dream.

Please follow the link bellow to consult the online book of FT4TA:

French version: <http://blur.by/1KGFCIT>

English version <http://blur.by/1LziqfS>

It is also possible to order the « printed » version. This communication will probably be one of the last for this project. Thanks again for your support and see you soon for new adventures.....

FT4TA TEAM

## NORTHWEST INDIANA DX CLUB

**W9NWI**

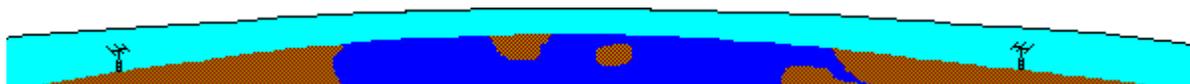
Northwest Indiana DX Club  
 c/o Steve Mollman KD9HL  
 698E - 900N  
 Westville, IN 46391 USA

Radio	Confirming QSO				PSE QSL <input type="checkbox"/> TNX QSL <input type="checkbox"/>		
	DAY	MONTH	YEAR	UTC	RST	MHz	MODE

[www.cheapqsls.com](http://www.cheapqsls.com)

I want to thank those that have been sending in articles for the newsletter. All items are appreciated.

Don't forget to send in any information you would like to share with the Club members.



Until Next Time,

73

*John*

W3ML

