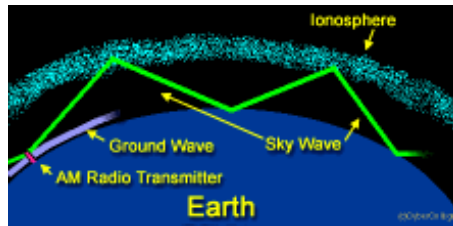


# The Hertzian Herald



February 2018 • Volume 42, Issue 2 • Monroe, Michigan, U.S.A. • [www.mcrcra.org](http://www.mcrcra.org)

## N8DXR's Ground Waves



For those who have not heard the long-awaited Bouvet Island Expedition has come to an unexpected end. While lying at anchor in sight of the island waiting for the weather and sea conditions to improve one of the ships engines developed serious problems and was taken out of service. For safety reasons the captain of the ship terminated the expedition. The ship is now heading for Cape Town South Africa which is closer to Bouvet Island than Punta Arenas, Chile where the expedition began its voyage.

While Bouvet Island, number two on the DXCC most wanted entity list, is not going to be activated in the foreseeable future a new entity has been added. The Republic of Kosovo, Z60A, was added to the current list of entities January 21<sup>st</sup> and now is number four on the most wanted list. Kosovo's 10<sup>th</sup> anniversary of its independence is on February 17<sup>th</sup> and coincides with the ARRL DX Contest - CW. In addition, two weeks later the ARRL DX Contest - SSB take place. It's a sure bet that there will be many chances for QSO's with the new entity in the following weeks.

On the 18<sup>th</sup> of last month we had our first meeting of the MCRCRA back at the Red Cross Building. While we do not have the spacious meeting room we had before the renovations, the new meeting room proved more than adequate. There were suggestions on how to improve the use of the room that will be implemented so that it is more functional and more comfortable for those at the meetings. During the meeting Tom, KG8P, gave a great presentation on the widely popular FT8 mode. Not only were the modes explained in detail but a video showed it in operation. FT8 has become extremely popular due to its weak signal capabilities in poor band conditions. Because of this Joe Taylor, K1JT and his associates have created a version for expeditions to use to speed up there number of completed digital QSOs. If you haven't tried FT8 now is a great time to explore its capabilities. FT8 is included in the WSJT-X program and it's free from Princeton Physics (<https://physics.princeton.edu/pulsar/k1jt/>) and there is a great user guide on the site. Also, there are a countless number of YouTube videos explaining all the facets of WSJT-X and FT8. This month's meeting will again have a presentation by Tom, KG8P titled "Vertzilla"

I would like to finish this month with a word about the Monroe County Amateur Radio Public Service Corp (MARPSC). While not a part of the MCRCRA the MCARPSC is a close affiliate. While the majority of participants are members of the MCRCRA, participation is not limited to only MCRCRA members. Participation in the MCARPSC gives the amateur radio operator the chance to gain the knowledge and skills to be able to be an asset during non-emergency and emergency events by providing needed radio communications. Part 97 of the FCC Amateur Radio Service defines one of the purposes of amateur radio as the "Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications." If you are interested in learning more about the MCARPSC and public service amateur radio communication you can visit a meeting of the MCARPSC held at 7:00 pm on the first Thursday of each month at the Monroe County Communications Center located at 987 S. Raisinville Rd. Monroe, Michigan 48161.

Hope to see you at our meetings and on the air. 73 John - N8DXR

### Club Officers

#### PRESIDENT

John Copeland N8DXR  
[jcn8dxr@gmail.com](mailto:jcn8dxr@gmail.com)

#### VICE PRESIDENT

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#### SECRETARY

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[rodhaddix@hotmail.com](mailto:rodhaddix@hotmail.com)

#### DIRECTOR STATION TRUSTEE

Wes Busdiecker KC8SKP  
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## MCRCA Minutes:

January 18, 2018

Meeting called to order at 7:30 pm, by John Copeland N8DXR

Pledge of Allegiance

Introductions: No new members, or upgrades and one guest, Jim Guyer.

PROGRAM: Elections and Tom Jenkins FT8 Program

BREAK

DOOR PRIZE DRAWING: Jim Guyer, Gary W8GPR, and John N8DXR

50/50: Rodney KD8ZNZ donated winnings to scholarship.

MINUTES: Motion by Wes KC8SKP, supported by Sandra KD8HYS, to approve as written in the Herald. Approved.

TREASURER REPORT: Motion by Sandra KD8HYS, supported by Sandra KE8CQW, to approve the treasurer's report as passed out to the membership. Approved.

DX REPORT: Bouvet Isl. number two wanted DX entity coming up end of January. \$ 1 million-dollar dxpedition.

TESTING: Next session - Sat. February 17, 2018. At the Red Cross and using W5YI testing material.

ARPSC: Mike N8KUF ARPSC meeting at EMD Thursday Feb 1<sup>st</sup>. Mike is doing a program on the structure of ARPSC. Feb 3<sup>rd</sup> will be the annual 5k Muskrat Run at the State Park. Lance is officially the new Monroe County EC.

RRRA: Mike N8KUF there are a few issues with intermod so they may put a pl on the output.

OLD BUSINESS: None

NEW BUSINESS:

ELECTIONS: Paul W8PI made a motion to accept the slate of officers which is the same as last year, seconded by Sandra KE8CQW. Motion passed

President	John Copeland N8DXR
V-President	Glen Ohlemacher K8GO
Secretary	Fred VanDaele KA8EBI
Treasurer	Brenda VanDaele KB8KQC
Trustee	Wes Busdiecker KC8SKP - station trustee
Trustee	Paul Trouten W8PI
Trustee	Rodney Haddix KD8ZNZ

ANOUNCEMENTS: Hazel Park Swap Jan. 8 and Livonia Swap Feb. 18.

ADJOURNED: 8:42 pm

### Monroe County ARPSC - Training Outline-Meetings and Supplemental sessions

**March Meeting 3/1/2018:** Field Operations

**Goal:** What do we need, Dealing with Served Agencies, understand how activations take place, with an emphasis on paying close attention to email and monitoring net frequencies when pre-emergency conditions exist.

**March Session 3/3/2018:** Digital Saturday-DMR, D-Star, and FLDigi/WinLink

## Committees

### Classes

### Club Station

Wes Busdiecker KC8SKP

### DX Net

### Field Day

Jeff Breitner KA8NCR

### Finance

Paul Trouten W8PI (chair)

Fred VanDaele KA8EBI

Dale Williams WA8EFK

### HamFest

Fred VanDaele KA8EBI

### Hertzian Herald

Fred VanDaele KA8EBI

### Historian

Paul W8PI

### Public Relations

Jeff Breitner KA8NCR

### Scholarship

Fred VanDaele KA8EBI

### School Liaison

open

### Programs

open

### Membership

open

### Planning

open

### Property Custodian

open

## 2018 Lake Erie Muskrat 5K Run

Once again Saturday February 3<sup>rd</sup> the Monroe County ARPSC team, headed up by Lance Charter KE8BYC, provided communications for the annual muskrat run held at Sterling State Park. The team consisted of Lance KE8BYC, Dave AC8SI, Mike N8KUF, Heath KE8EPM, Tom KG8P and Tim KD8KHJ.

The weather was overcast with a strong South-West wind. The determined team dressed in ski masks, wool hats, thick gloves and multiple layers of heavy canvas outer wear to endure a balmy 8-degree wind chill factor and ensure the safety of the group of runners. The runners, by the way, were dressed in light hoodies, gloves and spandex. :-)

There looked to be about 30-40 runners, some hard core and some laid back, run a little and walk a little, but get 'er done type. The runners completed the 3-mile course without any mishaps and were soon searching for a warm spot to recover their frozen bones.

After the Run, Tom KG8P, set up his mobile station to work people in the MSPOTA contest. Fred KA8EBI.

The Rat Patrol





## Ham radio and software.....

23 July 2013 | by Mike VE3WDM | [ve3wdm@hotmail.com](mailto:ve3wdm@hotmail.com)

It would seem that software and ham radio can get along very well and there is an abundance of software out there to choose from. Some software is free other are available for a price, I have both here at VE3WDM. There seems to be some myths about both the free software and the software for a price. Regarding the free software I have read and heard.....

1. It's no good as it's not supported.
2. Since it's free it must be very simple and buggy
3. I am sure it's not updated.

As for the software for a price I have heard and read.....

1. It's way over priced.
2. Why pay when free software is out there?
3. Someone is just trying to make a buck.

I have both free and software I had to paid for and am very happy with both products. My software is not the be all and end all but it's what works for me. There is some fantastic software out there that can make you grow in your ham radio journey. I hope to just excite you to look to see what is out there.

Here is what I use and as most ham I know they love free stuff and here is the free software I use.



1. [DXlabs](#) for my every day radio adventures I am sold on DX Labs! This software has rig control, logging, world map view of DX, QRZ (and many more) look up feature and much more. With this software and with the click of a mouse able to use many features of my K3. At a glance I am able see on a world map DX spots, I am told if I worked this country before....on what band....and what mode. There is a huge amount this free software can do. As for updates it seems that it's almost daily this software is improving. Oh and as a side note updates are a breeze to instal and no need to jump through hoops to get the latest and greatest upgrade. If you are not sure about a feature or if the software does not seem to be doing what it should, support is fast and readily available on the internet.

2. If you are into contesting (like me) then once again the free stuff comes to the rescue. [N1MM](#) seems to be one of the staples for contesting. Again it has rig control features, CW and SSB features, VFO A and B control, spotting networks this is just to name a few things this amazing software can do.

There are regular updates and bugs are very few and far between. Again if you have troubles the support is there and it's fast. Ok lets talk crazy now.....paying for ham software

1. When contesting I said I use N1MM but I also use a rig control program by [N4PY](#) and it's not free but WOW does it enhance my contesting. (now this software is not only for contesting I just chose to use it this way) This program allows me to adjust most of my Elecraft K3 controls with the mouse or keyboard. I can used my [K1EL keyer](#), this program allowed me to use my [Flexcontrol knob](#).

2. Another program I dished out some coin for and never looked back is [MRP40](#) cw decoding program. Now I know what your thinking "there are lots of free CW decoding programs out there" This is true I have tried them and they are good BUT MRP40 is GREAT. In contesting when the speeds get to what I call "crazy speeds" this program has no trouble at all decoding them.

Let's say you want to have multiple programs work together without a hitch.....

3. Then [LP Bridge](#) or [VSP manager](#) come to the rescue. These are free programs and will allow your computer to set up virtual ports thus having multiple programs working at the same time and talking to each other. These programs work like a dream, and as far as my needs go no bugs at all.

4. If you are into the digi modes like I was and in the near future hope to be there is a free program called [Quickmix](#). This program will remember all the audio settings you use for each digi mode, so for example when operating PSK and you want to now switch to WSJT-X which has new audio settings for you PC. You no longer have to remember them Quickmix can in the blink of an eye adjust the sound card to the new settings for the selected digi mode!!

**FYI:** All members of the club that know David Smith W8YZ, if you have any free time please stop out to Wellspring Lutheran Services (The Lutheran Home) 1236 S Monroe St, Monroe, MI 48161. He's in room 132 and would love to visit with friends from the Radio Club. Dave is a past President and a member of the club. He also owns and maintains the 145.31 repeater located in Monroe. I was in his Tech/Gen class back in 1979 at the Monroe Community College. He also has a radio set on the 72 repeater and you can give him a call. KA8EBI

## Raspberry-Pi DVB Transmitter: The Benefits of Open-Source Hardware

By Paul Dillien | Wednesday, January 31, 2018

Is this Raspberry-Pi-based device the world's smallest DVB (Digital Video Broadcasting) transmitter?

I was first alerted to the benefits of open-source some years ago while talking to a couple of very experienced engineers. These guys, who worked for a multi-billion-dollar company with a global footprint, had been asked by their manager to complete a project in a ridiculously short time frame.

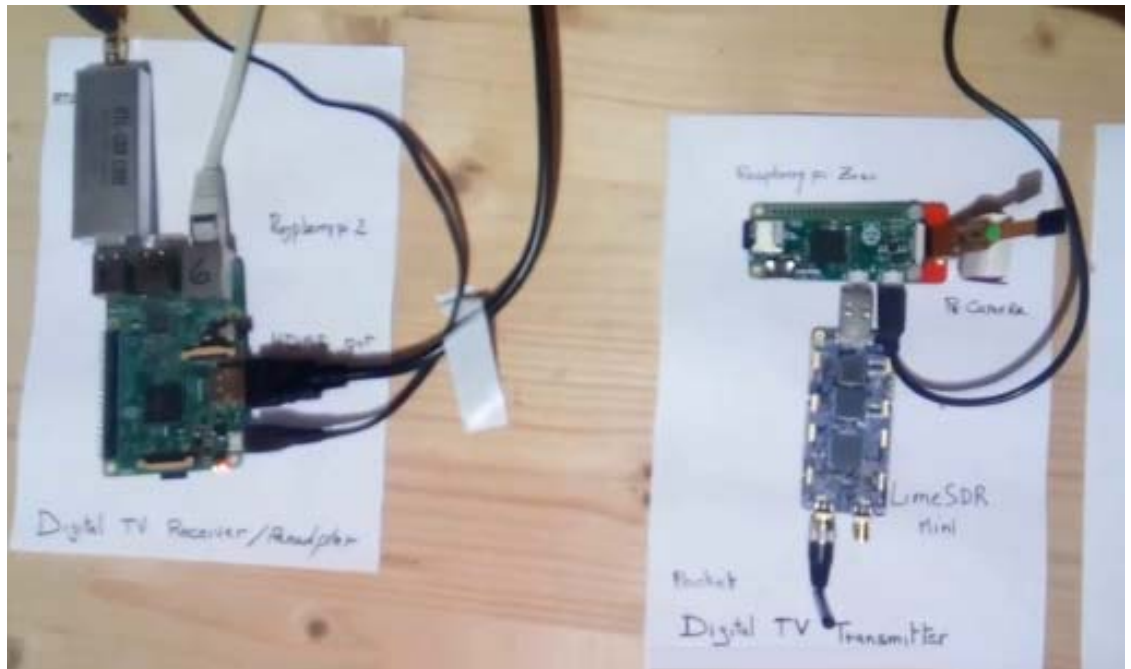
They concluded that their only hope was to use open-source, which was an unusual decision for a company of that size and a bit of a culture shock. Open-source software has a long pedigree, of course, but most companies do not open up their hardware designs.

Lime Microsystems is one company that evangelizes an open-source philosophy and provides full details of its wireless chips. As a result, the open-source community has embraced the software defined radio (SDR) boards from Lime and is creating some exciting applications, which greatly extend the functionality of the device through the use of a natively enabled app store.

This digital TV transmitter, which is based on a combination of a LimeSDR Mini and a Raspberry Pi Zero, provides a perfect example.

This setup processes the camera output into a DVB2 compliant transport stream and onwards to the SDR, while the receiver features a decoder and display chain to drive an HDMI output (it also includes a spectrum analyzer). The demo uses RF tuned to 1.2GHz, which sits within the 10MHz to 3.5GHz range of the Mini.

Designers can download the app to provide a DVB (Digital Video Broadcasting) video link and customize it to their exact requirements.



The open-source community is busy creating a wide variety of wireless applications using LimeSDR products, and then making these applications available for "app enabled" products. In addition to the video example discussed above, there are already designs for narrow and wideband FM transceivers, a spectrum analyzer using a UDOO X86 single board computer, a GSM base station using a Raspberry Pi and — with the addition of a Lime frequency range extender — the LimeSDR transmits and receives LTE signals at 10GHz.

With thousands of Lime SDR boards in the hands of enthusiastic engineers, the number and diversity of open-source applications is set to snowball.

I'm not in a position to comment on the speculation that this is the world's smallest DVB transmitter as some are saying, but it could easily be the fastest (and cheapest) one to design.

<https://www.eeweb.com/profile/paul-dillien/articles/raspberry-pi-dvb-transmitter-the-benefits-of-open-source-hardware>



The American Radio Relay League's round-up of the forthcoming week's DX activity on the amateur radio bands

This week's bulletin was made possible with information provided by The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

**GEORGIA, 4L.** Furkan, TA7AOF and Golkem, TA7AZC are QRV as 4L/TA7AOF and 4L/TA7AZC, respectively, until February 12. Activity is on the HF bands with a focus on various digital modes. This includes being entries in the CQ World Wide WPX RTTY contest. QSL to home calls.

**JAMAICA, 6Y.** Yuri, VE3DZ will be QRV as 6Y2T from February 13 to 20. Activity will be on the HF bands. This includes being an entry in the upcoming ARRL International DX CW contest. QSL to home call.

**THE GAMBIA, C5.** Alan, G4DJX, Jessica, M6LPJ, Polly, M6POG, Morgan, M6MXD and Stan, M6SQO are QRV as C5DX until February 16 while visiting the Senior High School in Farafenni. QSL direct to G4DJX.

**MOROCCO, CN.** A group of operators will be QRV as CN2DF and CN2FR from February 13 to 20. Activity will be on 160 to 10 meters using CW, SSB, RTTY and PSK31 with two stations active. QSL via DL7DF.

**CAPE VERDE, D4.** Henning, OZ1BII will be QRV as D44EE from Praia Santa Maria, Santiago Island, IOTA AF-005, from February 15 to 20. Activity will be on 160 to 10 meters using only CW. This includes being active in the upcoming ARRL International DX CW contest as a Single Op/All Band/Low Power entry. QSL to home call.

**PHILIPPINES, DU.** Dindo, DU1UD is QRV as DX8TT from Tawi-Tawi, IOTA OC-174, and DX8MAP from Cagayan De Sulu Island, IOTA OC-105, during 2018. Activity is on the HF bands in his spare time, and on short notice. QSL via operator's instructions.

**ISLE OF MAN, GD.** Billy, GM0OBX, Jonathan, MM0OKG and Stevie, MM0VPY are QRV as MT0IXD from Scarlett Point on the Isle of Man, IOTA EU-116, until February 12. Activity is on the HF bands using CW, SSB and RTTY. This includes being an entry in the CQ World Wide WPX RTTY contest. QSL via M00XO.

**SARDINIA, ISO.** Simone, ISOAFM is QRV with special call sign IROFOC from Cagliari until December 31 to celebrate the 80th anniversary of the First Class CW Operators' Club, or FOC. QSL direct to home call.

**ST. LUCIA, J6.** Charles, K69N will be QRV as J6/K69N from Saint Lucia Island, IOTA NA-108, from February 13 to 27. Activity will be on the HF bands. This includes being an entry in the upcoming ARRL International DX CW contest. QSL to home call.

**JAPAN, JA.** Special event station 8J3B is QRV until June 26 during the 100th anniversary of the Lake Biwa Rowing Song. QSL direct to JK3IJQ.

**AUSTRIA, OE.** The United Nations ARCDXC will be QRV as 4U0R on World Radio Day, which is February 13. QSL via UA3DX.

**NETHERLANDS, PA.** A group of operators are QRV as PA2018BP until March 9 to commemorate Robert Baden Powell, founder of the Scout Movement. QSL via PA3EFR.

**ANTIGUA AND BARBUDA, V2.** Paul, VA3ZC will be QRV as V26PE from Jolly Harbour on Antigua, IOTA NA-100, from February 13 to 27. Activity will be on 40, 30 and 20 meters using JT65, FT8, and some SSB. QSL to home call.

**BELIZE, V3.** Torsten, D67RO and Alexandra, DO5ALX are QRV as V31TF and V31RU, respectively, until February 25. Activity is on the HF bands using SSB, RTTY and some FT8. This includes being active in the CQ World Wide WPX RTTY contest, and the upcoming ARRL International DX CW and CQ World Wide 160 Meter SSB contests. QSL to home calls.

**TURKS AND CAICOS ISLANDS, VP5.** Pat, K0PC will be QRV as VP5/K0PC from Caicos, IOTA NA-002, from February 13 to 20. Activity is on the HF bands. This includes being active as VP5K in the upcoming ARRL International DX CW contest. QSL to home call.

**VIET NAM, XV.** BJ, WA7WJR is QRV as XV9WJR from Bien Hoa until February 14. Activity is mainly on 40 and 20 meters using primarily CW. QSL direct to home call.

**OPERATION APPROVED FOR DXCC CREDIT.** The following operation is approved for DXCC credit: Palestine, E44WE, operation from March 23, 2017 to March 23, 2018.

**THIS WEEKEND ON THE RADIO.** The CQ World Wide RTTY WPX Contest, YLRL YL-OM Contest, SARL Field Day Contest, Asia-Pacific Spring CW Sprint, SKCC Weekend CW Sprintathon, KCJ Topband CW Contest, Dutch PACC Contest, OMISS SSB QSO Party, FISTS Winter Unlimited CW Sprint, RSGB 1st 1.8 MHz CW Contest and the Balkan HF Contest will certainly keep contesters busy this upcoming weekend.

The ARRL School Club Roundup runs from February 12 to 16.

The 4 States QRP Group Second Sunday Sprint, and CQC Winter QSO CW Party are scheduled for February 12.

The RSGB 80-Meter Club Data Championship, CWops Mini-CWT CW Test, QRP 40-Meter CW Fox Hunt, Phone Fray, NAQCC CW Sprint and PODXS 070 Club Valentine Sprint are scheduled for February 14.

The ARRL International Grid Chase runs during all of 2018.

## Monroe County Radio Communications Association

Dues run from January 1st to December 31st of each year. As a current / Past Member, you are invited to attend our monthly meetings to find out the latest plans for our club. You may pay your dues at any regular meeting or by filling in the form below and mailing it to: **MCRCA, PO Box 237, Monroe, MI 48161**. Your membership and support will help with the continued success of our club. Thank you.

### MEMBERSHIP APPLICATION / RENEWAL FORM

Regular – \$10 — Add'l Family – \$5 each

DATE \_\_\_\_\_ ARRL MEMBER? Y \_\_\_\_\_ N \_\_\_\_\_ RRRRA Member? Y \_\_\_\_\_ N \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

CALL \_\_\_\_\_ CLASS \_\_\_\_\_ E-MAIL: \_\_\_\_\_

ADDITIONAL Family Members: \_\_\_\_\_

Please Circle All That Apply:

Active Bands: 160 80 75 40 30 20 17 15 12 10 6 2 220 440 higher

Modes: CW - SSB – PACKET - RTTY - FM - DX - MOBILE - QRP - SSTV - ATV - EME - SAT

Interests: Traffic - DX - Contests - Foxhunts - Satellites - Nets – Antennas - Computers  
Emergency - ARES/RACES - Skywarn - Classic Radios

Do you plan to upgrade your license? Y \_\_\_\_\_ N \_\_\_\_\_ If yes, what class? \_\_\_\_\_

What kinds of meeting programs would you like to see?

\_\_\_\_\_

Other activities you would like to see the Club offer \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

General Comment's \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



## Amateur Radio Examinations Monroe, MI

Monroe County Radio Communications Association Amateur Radio examinations are held the 3<sup>rd</sup> Saturday of every even numbered month at:

**American Red Cross Chapter Bldg.**  
1645 North Dixie Highway  
Monroe, MI 48161

Walk-ins are always welcome.

### 2018 Schedule:

February 17	April 21
June 16	August 18
October 20	December 15

### TESTING BEGINS PROMPTLY AT 9:00 AM

Applicants are expected to have all forms filled out and be ready to take tests at that time. Coffee and doughnuts are available at 8:30 AM. For more information or to make reservations, call Paul Trouten - W8PI at 734-854-2224

### Join us at the next meeting

February 15th at 7:30 pm  
American Red Cross Chapter Bldg.  
1645 North Dixie Highway  
Monroe, MI 48162

### Local Net

**ARPSC Net** - Every Monday evening on '72-Monroe  
(146.72 Mhz) starting at 8:00pm.

**ARPSC Meeting** first Thursday of every month at the  
EMD office on Raisinville Rd.. 7:00 PM