



SPARK GAP

Vol. 34, Issue 1, January 2017 *MARC - Serving Central Indiana Communities for thirty-four years*

Welcome to 2017!!

Hope everyone had a good Holiday Season and Santa brought you what you asked for. I would like to thank everyone that brought something to eat to our December meeting. All the food was great and I hope that everyone enjoyed the White Elephant exchange. I know I did!

With the New Year we have lots of things that we need to mark on our calendars. We have the weather class in March, Strawberry Fest which is normally the first week-end in June, Field Day is the last weekend in June, and Heartnut the first part of September, the Greenwood Band Contest the end of September and last is the Goblin Patrol on Halloween night. It's going to be another busy year for us.

The officers will be looking at ways that we can bring back old members, work on getting new members and keeping the current members. We will be discussing topics that the club might like to have presented. If you have any topics that you would like to see presented or would like to be a speaker, please see Ron, K9THR or Phil, AE9H and let them know.

With the New Year, Club dues are due. Please see Marlys Barr, KC9BHM, about getting dues current for 2017.

Hope to see you Saturday. The coffee will be on.

Jacki, KI6QOG
President



HAPPY BIRTHDAY !

KD9ALA - Ken Barr
KD9BHM - Marlys Barr
KC9WLF - Jim Busch
KB9BVN - Brian Murrey

The Radio Amateur's Code

The Radio Amateur is

CONSIDERATE...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC...His/[Her] station and skills are always ready for service to country and community.

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928

Thanks, Chris KQ9Y for finding this. ... Ed.

Reflections on Working DX Pile-Ups Bruce J. Tisdale (K9ICP)

One of my favorite parts of ham radio is working DX stations. I think it's the excitement of hearing someone from far away and then making contact. For me at first it was exotic places like Canada, Mexico, or some Caribbean Island. Could I actually be talking to someone so far away? Then suddenly one day out of nowhere I worked a station in Europe. I think it might have been Italy. Man, this DXing is easier than I thought.

All I had to do is listen for the station (country/entity) I wanted, call them and magically they would call me back. This is a piece of cake. There is nothing to it. In fact, I thought going after that coveted DXCC award was going to be easier than I thought. Well, it was easy for a while as I made more contacts in Europe, South America, and even Africa.

When I upgrade my equipment and antenna systems things got even better for a while. The reality started to hit. Sure I could get through to make a DX contact when it was just me and a few others calling, but what about those tough ones being called by hundreds of other hams from all over the world. I was operating with 100 watts of less with a wire antenna. Many of these hams were operating with much greater power and directional beams at 100 + feet. How was I going to get heard or even noticed in a pile up and make the contact?

First of all, let me explain what constitutes a “pile up”. Very simply it’s a number of ham operators all trying to contact a particular station of interest to them at the same time. Well, a few is one thing, but hundreds or even thousands calling at one time is crazy. That also assumes propagation is good on the band you are trying to work. One obvious answer is to turn up the power with the addition of a linear amp and/or get a better antenna system (i.e., a yagi or similar directional antenna).

There is no doubt that more power and better antennas do work. Some more expensive radios have better filtering for better reception and noise elimination (QRN/QRM). However, not everyone can afford that kind of equipment for a hobby.

However, I want to focus here on something much less technical and easy for anyone to implement. What I’m referring to is your technique for calling that sought after DX station during pile ups. First of all, there is no single method that is guaranteed to get results every time. In fact, propagation, pure luck, and persistence can be just as important. However, I have found that there are several things you can do to improve your chances of being noticed in a pile up and making the contact. I have listed these suggestions below in no particular order of importance.

- 1) Listen before you dive into the pile up to make sure you can hear the DX station reasonable well and get their call signal correctly. This is also important to determining if propagation is favorable and if others in your area are being heard.
- 2) Listen and follow any instructions the DX station is giving such as operating split frequency (listen on a different frequency), regional preference (Pacific, South/North America) or call area preferences (0,1, 2, etc. call area). The purpose of this is to help everyone, including the DX station to be heard and have a turn. Cooperation helps everyone!
- 3) Be patient and don’t get frustrated easily after a few minutes. At times, depending on the circumstances, it may take up to as much as an hour or more to get through. During this time propagation may change which may help you be heard.
- 4) Don’t jump right into the pile up to call the DX station when a QSO ends. Pause for a few moments to allow others to clear. By doing so, there is less interference from others. You may also be the last to be heard and will be noticed by the listener.
- 5) Be polite and don’t make calls when others are still talking. It goes without saying that you won’t get acknowledged if you are being annoying.
- 6) Sometimes it helps when giving your full call to emphasize the suffix letter, as they be the only thing the DX station operator hears in a big pile up.
- 7) Take advantage of letting the DX station know if you are operating QRP or mobile. Many times the DX station will give special attention to these stations because of the unique difficulty in being heard. Note: it’s an honor system, so be truthful.

This is obviously a quick list of ideas and is not intended to be all inclusive. However, I hope it will provide assistance to anyone trying to work a pile up for DX contacts.

Remember, the important thing is to have fun! Good Luck!

Winter Field Day is Just Ahead

Field Day is not just for summertime anymore. Winter Field Day, sponsored by the Winter Field Day Association ([WFDA](#)), will take place over the January 28-29 weekend, and it can be a terrific time to prep for ARRL Field Day in June. The annual event's stated purpose is to encourage emergency operating preparedness in the winter, but it's also an excuse to get out of the house and enjoy the great outdoors. According to the WFDA, getting ready for emergency communication in a winter environment is just as important as the preparations and practice that take place each June during ARRL Field Day, and -- let's face it -- it's not cold and snowy everywhere during the winter months. Your local climate could be quite the opposite.

"Don't let those winter doldrums keep you locked up in the house," the WFDA says. "Get out and play some radio!" The WFDA said it believes that maintaining operating skills should not be limited to fair-weather scenarios.

The event, which got its start in 2007, is not restricted to North America. All Amateur Radio operators around the world are invited to participate, and there are three entry categories -- indoor, outdoor, and home. The [rules](#) are similar to those for ARRL Field Day. Operation will take place on all HF bands except 12, 17, 30, and 60 meters, as well as on VHF, UHF, and satellite. The event runs 24 hours. US and Canadian stations exchange call sign, operating category, and ARRL or RAC section.

The WFDA encourages both group and solo operation, and if you're not up for an outdoor winter adventure involving Amateur Radio, you can operate from the comfort of your shack. As the WFDA says on its [Facebook page](#), "The object is winter fun!"



..... *ARRL News, January 2017*

TECHNICIAN LICENSE REVIEW

The Mid-State Amateur Radio Club will be offering a one day review for the technician license, with a question and answer session. The review will be at White River Firehouse #53, 850 S. Mullinix Rd. Greenwood, Indiana.

The license review will be held on Saturday, April 8th, 2017 8am to 12pm

If you would like to attend please contact by email: vicepresident@midstatehams.org

There is no cost to attend this review session, it is FREE.

All students MUST PURCHASE AND STUDY the ARRL HAM RADIO LICENSE MANUAL 3rd Edition (ISBN: 978-1-62595-013-0) before attending the review session.

2017 Club Dues

Please remember to renew your M.A.R.C. membership this month at the club meeting. The dues are still \$ 18.00 per year. See Marlys, KD9BHM at the Saturday club meeting and she can help you with renewing your membership or start your membership with the Mid-State Amateur Radio Club.

M.A.R.C. Christmas Party

It was the season to be jolly. Despite the overnight threat of ice covered roads thirty of our hearty club members joined in the seasonal fun at the annual club Christmas pitch-in breakfast meeting in December.

Club Prez Jacki, KI6QOG quickly took the wraps off any official business and lead the crowd through the REMC kitchen that was filled with lots of breakfast delights. Our Christmas meeting at the new REMC Headquarters community room was festive from the moment you entered the door. There was a Christmas tree and lots of table decorations. All we needed to add was food and fellowship.

Jack, W8ISH entertained the crowd with a 20-minute year end video. It shows the success of our club, members and all the activities throughout the year making us one of the best clubs in Indiana. The real fun came after all the eggs were eaten. The white elephant gift swap was a huge success and provided lots of laughs. The most popular item was a circuit board Christmas tree complete with LED lights. It was picked, swiped, recovered and finally came to rest in front of Rhonda, WS9H. An old scanner, a CB whip antenna mount and spiked shoe covers were some of the other favorites. Despite the bad weather it just goes to show that hams will navigate slick roads to food, fun and fellowship.

-w8ish



National Parks on the Air “A Very Special Event” by Jack W8ISH

In case you didn't already know, ARRL and the US National Park Service agreed to offer the ham radio community a year-long special event during 2016 commemorating the 100th anniversary of the National Park Service.

Approximately 489 sites that are managed by the National Park Service were eligible to be activated by hams during the year. These included national parks, national recreation areas, historical memorials, historical monuments, historical battle fields, military parks, historical trails, national preserves, national rivers/seashores and affiliated areas.

Beginning January 1, 2016 through December 31, 2016 hams could either activate a site by setting up a portable operation at one or more of the many sites or chase sites that were being activated by making contact. A contact involved the normal brief QSO that included an exchange of call signs, signal report, and either a park designator (activator) or state (chasers). The QSO information was all confirmed through Log Book of the World (LOTW).

Unfortunately, I never was able to arrange time during the year to activate a site (Indiana had three: Indiana Dunes Lake Shore, George Rogers Clark Historical Park, Abraham Lincoln Boyhood Home Memorial). However, I did work very hard all year long to chase sites that were being activated. While some sites were frequently activated during the year, others were only occasionally and nearly 30-35 were never activated.

Frequently, activators were using portable equipment at sites including battery or solar power and a variety of quickly assembled antennas. Most stations were operating significantly less than 100 watts output to conserve energy and for efficiency. In order for activators to get credit for their site visit, they needed to obtain at least 10 contacts at a site. This could be done via SSB, CW, or other digital mode on any of the permitted bands.

Needless to say chasing was frequently a challenge (like WAS, DXCC, etc.), but it's been a lot of fun. I also learned a lot about the many parks and historical sites via the ARRL web link to each of the sites. I was very happy to have been able to connect with over 400 of the sites during the year. However, overall the event was extremely successful for all participating. It is hoped that over 1 million QSO will have been made by year end via this event.

There is still time to make a NPOTA contact at one of the qualifying sites before the end of the year. Don't miss this fun event that could also earn you one of the special activator QSL cards commemorating your site contact.

ON THE RECEIVING END

On the receiving end of Bruce's contacts is Steve Carmean-K9DY and Jack Parker-W8ISH. In the past eleven months Steve has Activated eight national parks, memorials or preserves. Two of those were done with me. In late March, Steve and I packed up his Ten Tec Scout, portable batteries, laptop computer, portable vertical antenna and set up camp in the Big Cypress National Preserve in the Florida Everglades. Steve was the first ham to Activate NPOTA designation, PV03 in Florida. We made dozens of contacts in six hours. Back home in May, Steve and I Activated the George Rodgers Clark Memorial in Vincennes, Indiana. Steve worked 20 meters while I worked 40 meters SSB with a new portable antenna and Yaesu Ft-991. It too was a successful day of logging contacts from around the nation.

Since then Steve has Activated parks in Alabama, southern Florida, Kentucky and Tennessee. The man is a portable HF logging machine. At this writing Steve is closing in on 400 park contacts for the year while logging 620 contacts from all his Activations.

The bottom line, Bruce, Steve and I have learned a lot about our National Parks and have enjoyed working multiple pileups while swatting mosquitoes and keeping a wary eye out for approaching alligators in the Florida swamps. Too bad the ARRL can't celebrate a National Parks anniversary every year.

Jack-W8ISH

Steve K9DY with Jack W8ISH in Florida NPOTA



The exact location of where they were operating from.

Noise floor report does not inspire confidence

By Dan Romanchik, KB6NU

Last June, the FCC's Technical Advisory Committee asked licensed and unlicensed users of the electromagnetic spectrum to answer some questions about the noise they were experiencing and whether or not it was affecting their services. Specifically, they asked:

- * Is there a noise floor problem?
- * Where does the problem exist? Spectrally? Spatially? Temporally?
- * Is there quantitative evidence of the overall increase in the total integrated noise floor across various segments of the radio frequency spectrum?
- * How should a noise study be performed?

Well, the results are in, and Radio World recently published a summary of the responses that the FCC received (<http://www.radioworld.com/business-and-law/0009/noise-floor-where-do-we-go-from-here/338242>). The FCC received 93 replies from 73 (great number, eh?) different people or organizations, including:

- * 23 companies/industry organizations
- * 39 RF professionals (broadcast and wireless)
- * 31 licensed radio amateurs
- * 9 responders did not reply to the questions asked

Respondents included the ARRL, the Society of Broadcast Engineers, the National Association of Broadcasters, the National Public Safety Telecommunications Council, ATT, and the National Electrical Manufacturers Association. I found especially interesting comments from the Society of Broadcast Engineers. They include:

- * Increased cooperation is needed between manufacturers of Part 15 devices and users of radio spectrum to identify noise sources and take appropriate remedial action.
- * Radiated emission limits below 30 MHz in the FCC Part 15 rules for unintentional emitters should be enacted. There are presently no radiated emission limits below 30 MHz for most unintentional emitters.
- * Reduced Part 15 limits for LED lights should be enacted to be harmonized with the Part 18 lower limits for fluorescent bulbs.
- * Better labeling on packaging for Part 18 fluorescent bulbs and ballasts to better inform consumers of potential interference to radio, TV and cellphone reception in the residential environment.
- * Specific radiated and/or conducted emission limits for incidental emitters, such as motors or power lines, should be enacted.
- * Conducted emission limits on pulse-width motor controllers used in appliances should be enacted.
- * Substantially increase the visibility of enforcement in power line interference cases.

Other organizations made similar comments.

While the report is encouraging, it won't mean a thing if no action is taken on these issues. Given that

the FCC is cutting back on its field offices, and our president-elect has said that he plans to reduce the number of governmental regulations, I'm not optimistic that we'll see the noise situation get better before it gets worse. What do you all think?

When he's not battling the noise floor at his QTH, Dan blogs about amateur radio at KB6NU.Com, writes the "No Nonsense" amateur radio study guides and teaches ham classes. You can contact him by e-mailing cwgeek@kb6nu.com.

UP – COMING ACTIVITIES AND HAMFESTS

**01/21/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

**02/18/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

**03/18/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

**04/15/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

**05/20/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

**05/19, 20 & 21/2017 – Dayton HAMVENTION new location
Green County Fairgrounds and Expo Center, 120 Fairground Rd. Xenia, OH 45385**

06/10/2017 – White River Fire Department Strawberry Festival TBA

**06/17/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

06/24/2017 – ARRL Field Day, location TBA

**07/15/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month at the Johnson County REMC 750 International Drive Franklin, IN 46131.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

WA9RDF Repeaters:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

WA9RDF Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

Club Officers:

President: Jacki Frederick – KI6QOG
Vice President: Bruce Tisdale -- K9ICP
Secretary: Rhonda Curtis – WS9H
Treasurer: Marlys Barr – KD9BHM
Repeater Trustee - Chris Frederick – KQ9Y

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P.O. Box 836
Franklin, Indiana
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 3rd of the month

