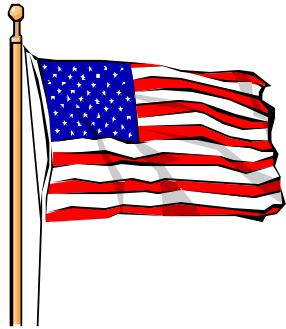


# Sparks

## W9OG



Tulips always remind us that spring is right around the corner. (Sorry snow birds) Warm weather means lots of outside activities for hams.

Monthly Newsletter of the Tri-State Amateur Radio Society

March 2014--Vol. LVII, No. 3

TARS Website: <http://www.w9og.net> Club repeaters: 146.79 and 147.15

Say "Hello" at the weekly Tri-State Emergency Net, 8:00pm Wednesdays on 146.79

Please feel to submit articles or suggestions to

Editor: [ftg2pointer@gmail.com](mailto:ftg2pointer@gmail.com)



### Presidents Corner

John C VanVorst Manager of Systems  
Infrastructure  
Vectren Corporation  
812-491-4100 office  
812-305-4100 cell  
73s. DE N9oL.



N9OL

### Important items:

### Special EMA Volunteer Meeting

A meeting for all Vanderburgh Co. EMA volunteers (this would include ARES/RACES) will be held March 19<sup>th</sup> at 6:15 pm More info in news letter.

## **MAY 3<sup>rd</sup> TARS PICNIC and Indiana QSO Party**

This year's event will be held at the beautiful ranch of Norm and JoAnn on the West Side. The club will provide the meat and drinks. Members are encouraged to bring a covered dish. We will provide driving directions on how to get there and put up some road signs to help you along the way. As usual we will also have talk in on the 146.790 repeater.

In addition to the picnic fun, we will also set up and operate for the Indiana QSO party. The club will set up a field station and you are also invited to bring any field day equipment you want to test or operate with. More info as date draws closer.

## **One Man's Opinion**

In the last few month's two major Dx expeditions have taken place to two rather rare entities on the DXCC list. The first of these was K9W the expedition to Wake Island and the first activity from this rare island in many years. I had worked Wake a few decades ago on 15 meters when we had an active air base on the island. For many years the U.S Air Force restricted this island and no one lands with out the permission of the high brass of the U.S.A.F.

It took several months to secure permission from a group of radio amateurs, the based their reasons for a commemorative operation to honor the forgotten 98. Now if one looks up the history of Wake you will find that 98 Civilians lost their lives on this island during WW2, Their purpose was to build an air strip so the Allies would have a foot hold in the Pacific. These Civilians worked for Morrison/Knudsen company all perished by Japanese forces.

The expedition operated a couple of stations from an old abandoned chapel, the other stations from cinder block buildings. This was by far one of the most efficient operations from Wake Island in many years and I was fortunate to work them on three bands.

Just about two weeks ago another great expedition took place from Amsterdam Island, now this is

remoteness at its finest. Amsterdam is nothing more then a big pile of rocks it is used mostly for a weather station and study of the Ocean currents. France owns Amsterdam Island and if you do not work for the French government forget about going there. This remote island is located about 3000 miles west of Perth Australia.

Again I was fortunate to work them five times twice on 20 cw/ssb plus 10/15 and 40 meters, but with both expeditions you had your collection of twisted minds and operating ethics causing problems for many. It seems that with every major expedition you have those who insist on placing unmodulated carriers on the dx, sending dits constantly, playing music, and making odd obnoxious noises. Couple this with some bootleggers sending the call of the DX at odd times when you know the skip is not favoring you and chaos erupts.

Forty meters was the worst since FT5ZM from Amsterdam was running phone on 7.083 and listening for North America on 7.175 khz. I had good copy and wanted a SSB contact on that band, I settled for a cw contact several days later. It was impossible to work FT5ZM since we had music intentionally played on their frequency apparently from a state side station.

Even when they operated on 7.023 and listened up 5 to 10 khz you had those who constantly provided their nightly antics of deliberate interference. Even with the intentional nonsense I became more determined and gained my 40-meter contact a few nights before the team departed.

I suspect the reasons are some believe they have exclusive rights to a certain frequency and no one else can use it. Of course from a Dxers point of view perhaps the real reason is that of ineptness to operate as a skillful amateur, or perhaps your rig just does not cut it on long haul dx? What ever the reason, or cause they are attempting to prove it is a poor example of how to be a good operator. Personally, these types of characters I would like to see their ham tickets in confetti and any gear they have confiscated.

Perhaps a stiff fine or time behind bars might change the minds of some of these warped individuals? Our next expedition on the list is to

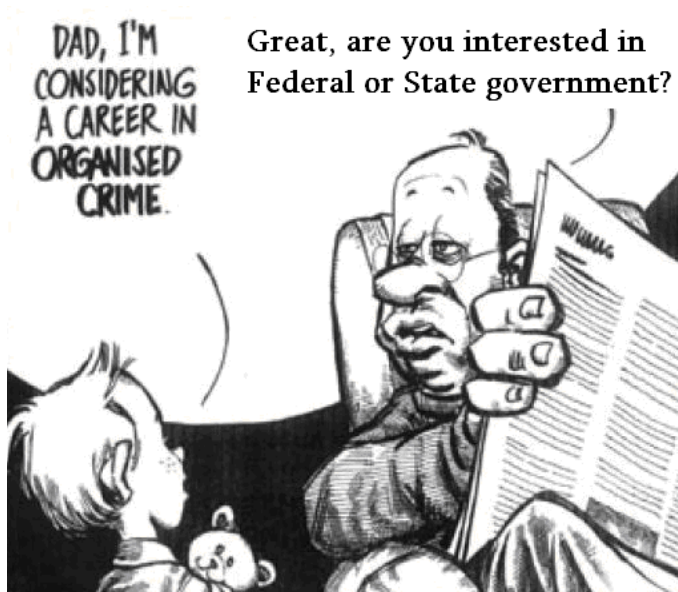
rare Annobon Island, so let's hope we have better behavior on the bands then we did for the last two efforts.

As always my friends this is One Man's Opinion, Bill, K4LRX



© Ron Leishman \* www.ClipartOf.com/442408  
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A little humor to brighten your day



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**May 3:** Indiana QSO party. We will have our spring cook out and picnic that day also.



## Good News

After years of waiting on (The National Forestry Service) everything has come together and the Paducah NOAA Weather Center has direct access to the W9OG repeater through the Williams Hill crossband repeater which is located on one of the Saline County's towers. Right before Sherman was asked to resign we had struck a deal with Saline County and their Ham Radio guys. I know it was a long process but our hands were tied because the tower that we were on was in limbo with the National Forestry Service and of course Lawyers were involved which consumed more time. But I am happy to say that everything is working since we just did a test and it hit the W9OG system just fine. It has a little white noise in it but very readable.

So if you guys want to give NOAA a shout out they will be able to communicate with you directly with no special codes to turn this feature on. I did want to warn you though, they (NOAA) may turn the volume down or completely off during non-emergencies so you guys may want to get some kind of understanding between NOAA and Tars as to how this link is to be used.

James E. Utley KC9EMT

J&S Communications, LLC

*Ed. Note:* It was also discovered that the Paducah VHF station could not hit the Williams Hill site at all. The radio was putting out full power however almost nothing was measured at the antenna. Investigations revealed that the VHF transmitter in the Paducah office was connected with a couple hundred feet of *RG-8 coax*. That meant that at VHF frequencies little or no RF was reaching the antenna.

The feed line was replaced with appropriate type for that frequency and now most of the power reaches the antenna. - good detective work.

Thanks James and the gang for all the hard work.

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## Special EMA Volunteer Meeting

A meeting for all Vanderburgh Co. EMA volunteers (this would include ARES/RACES) will be held **March 19<sup>th</sup> at 6:15 pm**. With Cliff Weaver being the new EMA director this meeting has been set up to renew everyone's volunteer application and meet the leadership at the EMA. Cliff will discuss the move to the new location coming in late April and answer your questions about how the EMA will operate under his leadership. **All volunteers are strongly urged to attend in order to keep you in an active status.**

## Weather Spotter Classes

Wednesday evening, March 19, USI campus  
6pm to 9 pm (may run a little over)

Mark your calendars.

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## Eat'n Before the Meet'n



We will meet for food and fellowship before the regular March 13th TARS meeting for food, socializing, "story tell'n" and whatever else comes to mind, at **Moe's Southwest Grill** 6401

E Lloyd Expressway, in the plaza directly in front of Target. Moe's offers a variety of build your own Southwest/Mexican foods at reasonable prices. As usual we will be monitoring the 146.79 repeater if you need directions or just want to chat on the way.

Meet the group at 5:30 (you can get there sooner if you want) or whenever you can make it. Check in on 146.79 if you need directions or just bored on your drive in. Everyone is welcome.

If you have any suggestions on where you would like for us to meet, contact Chris (KE9YK@arrl.net).

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## Tri-State Emergency Net

Please take a few minutes at **8:00 p.m. Wednesday** evenings on 146.79 and get updated on the latest information.

As we move into the thunderstorm/tornado season, remember to monitor the weather net on 146.79. Anytime there is a severe weather watch issued from the Paducah NWS for Vanderburgh or surrounding counties. Once a warning or severe weather is reported we will go into a SKYWARN net and relay weather reports to the NWS in Paducah.

**If you have not had SKYWARN spotter training in the last 2 years it is recommended that you refresh your skills at an upcoming spotter training class, or an online training session.**

On the Tri-State Emergency net you can hear the latest club information, calendar of upcoming events, topics of general interest and good old-fashioned rag chewing.

## Net Operator schedule

Mar	5	WB9KQF
	12	KC9YIL
	19	KE9YK
	26	KC9TYA
Apr	2	WB9KQF
	9	KC9YIL
	16	KE9YK
	23	KC9TYA
	30	WB9KQF
May	7	KC9YIL
	14	KE9YK
	21	KC9TYA
	28	N9QVQ

Many, many thanks to our net control operators.

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## Presentations and demonstrations

Be thinking about topics for our meeting presentations. Let us know what you want to see or do as a club.

Presentations and demonstrations are a fun part of our meetings. Join us!



**We have several openings for demonstrations or lectures if you care to give one. It doesn't have to be technical or long winded, just something of general interest**

#### For 2014 topics

The event calendar is filling up fast.

If you have ideas for events or presentations, be sure to let us know.

### Trivia Time.

What's a HAM to do?

Which is best for my antenna location? Will a vertical or horizontal antenna work better for me? Unless you live in the country and are blessed with wide open spaces and lots of tall trees (and unlimited funds), we all must compromise on our antennas, but which is the best choice for our given conditions? Is there a best all-around antenna for all occasions?

1. a dipole is polarized
  - a. horizontally
  - b. vertically
  - c. both
2. a vertical antenna is polarized
  - a. horizontally
  - b. vertically
  - c. both
3. A vertical antenna usually requires \_\_\_\_ for best operation
  - a. Four ground radials
  - b. Eight ground radials
  - c. 32 ground radials
  - d. As many as practical for your situation
  - e. You can over do it.

4. Take off angle for a ground mounted vertical is generally
  - a. High
  - b. Low
  - c. Varies with weather
  - d. inverse with frequency (the higher the frequency, the lower the take off angle – known as the Wilsbacher effect)
5. Take off angle of a dipole varies with
  - a. Amount of power used
  - b. Height above ground
  - c. Impedance at the feed point
  - d. Solar activity
6. a vertical mounted above ground level requires \_\_\_\_ radials to be effective
  - a. 4
  - b. 8
  - c. 32
  - d. The more the better for your situation.
7. The ground effect under a vertical ground mounted antenna is significant. For a dipole suspended above the ground, the ground effect is
  - a. Not a big factor
  - b. Frequency dependant
  - c. Depends on the type of soil
  - d. Can be significant
8. Generally, the lower the dipole to the earth, the \_\_\_\_ the take off angle.
  - a. Higher
  - b. Lower
  - c. Really has no effect
9. A vertical antenna resonant on 40 meters can often be used on \_\_\_\_ without a tuner
  - a. 15 meters
  - b. 80 meters
  - c. 10 meters
  - d. 6 meters
10. Which would be the best location for a 20 meter vertical antenna as far as take off angle?
  - a. Just above the water's edge at the beach at sea level
  - b. High on a mountain top
  - c. On top a very tall building
  - d. Height doesn't matter for a vertical antenna, only for a dipole.
  - e. In an open field away from buildings and trees.

11. A vertical antenna IS / IS NOT directional where as a dipole antenna IS / IS NOT directional.
12. A half wave loop antenna is polarized
  - a. Horizontally
  - b. Vertically
  - c. Either way depending on the feed point
  - d. Depends on height above ground
13. Which is more prone to pick up QRN?
  - a. A vertical antenna
  - b. A horizontal antenna
  - c. A loop antenna
  - d. A dummy load
14. For situations of limited space a dipole can be made shorter by employing \_\_\_ in its design
  - a. Traps
  - b. Loading coils
  - c. Capacitors
  - d. Terminating resistors
  - e. Larger diameter coax
15. Some manufacturers offer vertical antennas proposed to operate on several different ham bands and require no radials, so why even fool with radials?
16. Larry has very rocky soil so ground radials are a nightmare to bury. He decides to use a dipole. To enjoy more than one band from a single antenna he can employ \_\_\_ in its design.
  - a. Traps
  - b. Loading coils
  - c. Capacitors
  - d. Terminating resistors
  - e. Larger diameter coax
17. Danielle has put up a nice Log Periodic beam antenna up 70 ft on a new tower. She receives several S9 reports with it. She was disappointed to discover it picks up a lot of QRN that makes working DX difficult. Do you have an antenna suggestion to help this problem?
18. Chris made a 40 meter loop antenna. It shows about 200 ohms impedance at the loading point. He will use 50 ohm coax with it. How can he best match it to the feed line and radio without his tuner dissipating a lot of power in heat?
19. To maximize low take off angle with a half wave horizontal dipole above average ground, height above ground should be:
  - a. 1/4 wave length
  - b. 1/2 wave length
  - c. 3/4 wave length
  - d. 1 wave length
20. To maximize a low take off angle of a vertical antenna over average ground, its length should be
  - a. 1/4 wave length
  - b. 1/2 wave length
  - c. 5/8 wave length
  - d. One wave length

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## Vanderburgh Co. ARES/RACES

The next Vanderburgh county ARES/RACES meeting is **March 20<sup>th</sup>, 7:00 pm** at the Vanderburgh County EMA EOC, 708 Stanley Ave. Our last meeting was preempted by the storms moving through the area, but it was a good time for everyone to see just what goes on at the EOC during severe weather.

Anyone interested in emergency communications in Vanderburgh Co. is invited.

Chris Lantaff KE9YK  
 Vanderburgh Co RACES Officer  
 (ke9yk@arrl.net) 626-0069

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## Emergency Communications Class

An EmComm class will be held at the Vanderburgh County EMA on **Saturday March 29<sup>th</sup>, 8:00–12:00**. The class is open to all area amateurs wanting to learn more about emergency communication. Brian Esche WB9QVR will be heading up this very informative learning experience.

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## Annual Weather Spotter Classes



It is that time of the year again. TARS will again sponsor weather spotter classes. The second class will be on **Wednesday evening, March 19<sup>th</sup> at the University of Southern Indiana.** Rick Shanklin will present an awesome lecture with many audio visual aids.

As we have heard many times, early warning and detection of tornados and other bad weather events saves lives. We also know that well meaning people call in bad reports because every cloud that looks like a triangle is called a tornado.

This causes a distraction of resources and false alarms. Trained weather spotters can and do often make an important contribution that saves lives.

We are also working on another evening class to be presented at USI. We hope this will bring in more younger weather spotters and generate some interest in emergency preparedness. Dates and times will be announced as they are available.

## ELITE SPOTTER TRAINING

For those who have had the basic spotter training.

3/6/2014

The following is a message from the National Weather Service Office in Paducah, KY.

-----  
You are invited to our annual Severe Weather Workshop Tuesday (morning) March 18 in Paducah! For details see <http://www.crh.noaa.gov/pah/?n=severeweatherworkshop2014>

In addition, there are several spotter classes available to you in the coming weeks. The complete listing is

at <http://www.crh.noaa.gov/pah/?n=spottertraining>  
Note also that we have, or will be scheduling, our most advanced spotter training known as our "Elite Spotter Workshops" at the following locations: Sikeston, Mo, Marion, IL, Paducah, KY, Evansville, IN and Owensboro, KY. These workshops are 3 1/2 hours in length and build upon the Spotter Concepts classes plus include considerable radar training and other topics as well.

## Interested in helping our community?

All ARES/RACES members and any Amateur interested in emergency communications are encouraged to participate  
For ARES/RACES announcements you can join the Emergency Comms yahoo group at  
[http://groups.yahoo.com/group/emergency\\_comms/join](http://groups.yahoo.com/group/emergency_comms/join)

Contact Chris KE9YK or John WB9EFH for more information on how you can help out.

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## Trivia Answers:

1. a. horizontally
2. b. vertically
3. c. d. and e. Common practice is 32 radials do great but there is a point of diminishing returns. General rule, lay as many as practical. Poor ground will require more for best performance.
4. b. low but it has a lot to do with ground conditions and proper radials
5. b. its height above ground has a lot to do with it.
6. a. four radials work fine. Example, the familiar quarter wave ground plane antenna.
7. c. dependant on the type of soil and ground composition.
8. a. the higher the take off angle
9. a. A 40 m antenna works quite well on 15 meters.
10. a. an antenna mounted in salt water at the beach is about as perfect a ground as you can get. For DX, the height of the antenna is not as important as many DXpeditions can testify.
11. A vertical antenna IS NOT directional where as a dipole antenna IS directional.
12. c. depends on the feed point location
13. a. vertical antennas are known for having problems with QRN.
14. b. loading coils can shorten a dipole if designed properly and are not hard to make. You can find information on designing loading coils on the internet but it is much easier to google for one already designed and build it from their plans.
15. Multiband verticals that are supposed to not need radials are often compromise antennas. They are usually difficult to tune and may have special mounting requirements as far as height, location and antenna tuner requirements. Still, many hams have used them successfully and have had good luck with them. Another thing is most of them are quite pricy.
16. a. traps can allow a single antenna to operate effectively on several different bands if designed properly.
17. She can use the beam as her transmit antenna and use a loop antenna for receive.

Loops are great for not picking up a lot of QRN.

18. He can make (or buy) a 4:1 balun and install it at the antenna feed point. There are many designs on the internet for making your own fairly inexpensively.
19. c. ideal height above ground is  $\frac{3}{4}$  the operating wave length of the antenna. You can still get pretty good results at  $\frac{1}{2}$  wave length above ground. (on 80 meters that would be about 130 feet high, difficult for many of us to utilize)
20. c, a  $\frac{5}{8}$  wave length antenna provides excellent low take off angle.

So the final answer as to your antenna type has a lot to do with your circumstances, desired results and just how complicated you want to make it.

For many new hams who want to get on the air quickly and have fun almost any antenna is a good antenna, however if you are stuck with typical ground conditions and have to chose just one antenna and desire some long distance DX, a vertical is a good choice until you can find a way to get a dipole up at least  $\frac{1}{2}$  eave length above ground.

Antennas are one area where the average ham can create, build and use something. You can get as simple or elaborate as your imagination desires. Very few new hams can afford to start out with a large tower and beam or an elaborate wire system. With easy to obtain wire and other parts you can usually make a very good antenna. Like any hobby, you start out small and learn and build as you go.

**A note of caution.** At field day or other locations where people are around the antenna do not forget to calculate RF exposure for near uncontrolled environment.

<http://www.arrl.org/fcc-rf-exposure-regulations-the-station-evaluation>

Have fun.

Bp

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## Upcoming Events -- Plan Ahead

### Things to look forward to:

March 29 – ECOM Class

May 3 TARS picnic and Indiana QSO party

June 28-29 Field Day 2014

July Let's make a Dipole at the meeting

Aug. International Space Station presentation

Sept Weather spotting

## TARS Birthdays

March Birthdays:

N9WJ Dan Kelley	24th
N9XAW Bob Pointer	2nd
K1JNX Rob Stewart	13th
KC9NPA Jenny Washburne	10th
KJ4KAF Trent Williams	26th

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## Construction project bonus.

The antenna construction meeting was a huge success. Everyone enjoyed it and came away with a useful project. We would like very much to do that again. If you have suggestions for a simple project, antenna or kit we can build at a meeting please let us know. All ideas are appreciated.



No Achmed, explosives can not be used as part of your project !!

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## Net operators WANTED

TARS is in need of volunteers for net control operators. While we could use a couple more for the regular Wed night nets we desperately need volunteers for Skywarn/Weather nets. We have not recently had consistent weather nets I am working to change that. Weather nets are not only good for local hams to find out what coming their way but the National Weather Service depends on Hams via Skywarn to be their eyes and ears to confirm what the radar data is telling them and find out what they may be missing.

If you are interested in being a control operator contact Chris [KE9YK@arrl.net](mailto:KE9YK@arrl.net) 626-0069. Next time there is a weather event check in on the TARS 146.79 repeater and see what is going on.

\*\*\*\*\*

Many thanks to our award winning Net Control operators.



You provide a valuable service to the club and the community. We often fail to thank you enough for your service. Keep up the good work.

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We have been having a nice turn out on the Wednesday night net. If you haven't checked in, please take a few minutes at **8:00 p.m. Wednesday** evenings on 146.79 and get updated on what is happening. As we move into the thunderstorm season, remember to monitor the weather net on 146.79. Anytime there is a severe weather watch issued from the Paducah NWS for Vanderburgh or surrounding counties, we will have a stand by net active. Once a warning or severe weather is reported we will go into a controlled net and relay your SKYWARN weather reports to the NWS in Paducah.

On the Wednesday night net you can hear the latest club information, calendar of upcoming events, topics of general interest and good old-fashioned rag chewing.

**If you would like to help run the net please Help is always appreciated and it is fun.**

**Net controls:** Please forward a list of your check-ins to [KE9YK@arrl.net](mailto:KE9YK@arrl.net) thanks.

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## VE Test information



### Test dates:

None submitted

Lou Everett, Sr., WA5LOU  
**ARRL** Section Manager, Indiana Section  
**Telephone:** 317-622-1130

Tars mailing address:  
TARS  
P.O. Box 4521  
Evansville, IN 47724

**Don't forget to check out our web page**  
**[www.w9og.net](http://www.w9og.net)**

All ARRL examination sessions will be held at the Evansville Chapter of the American Red Cross. The ARC is located at 29 S. Stockwell Road, at the intersection of Stockwell Road and Lloyd Expressway. Sessions start promptly at 9:00 AM, Evansville time.

Those candidates wishing to earn their first Amateur Radio License, or upgrade their present valid license, need to bring the following:

1. Their original signed and valid FCC Amateur Radio License.
2. Any previously earned CSCE.
3. One copy of the license *and* CSCE.
4. Two forms of Identification, one bearing a recent photograph.
5. The current ARRL testing fee of \$15.00.
6. You **“must”** have your Social Security number or EIN with you.

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## **2013 Club Officers and Board members**

### **2014 Club Officers and Board members**

**President** [John VanVorst N9OL](#) 812-305-4100

**Vice President** [Steve Wilzbacher K4SAW](#) 812-453-6402

**Treasurer** [Leonard Schmitt N9QVQ](#) 812-963-0027

**Secretary** [Ron Hanes KC9OUT](#) 812-568-1168

### **Board of Directors**

[Bob Pointer N9XAW](#) 425-2118 (2014-2015)

[Mark Thienes KC9TYA](#) 812-963-6455 (2014-2015)

[Terry McCraey WB9KQF](#) 812-760-8007 (2014-2015)

[Stevan Wells KC9SOE](#) 812-473-5918 (2013-14)

[Dave Vogel WA9C](#) 812-430-5727 (2014)

**Position Open election in Feb** (2014)