

SPARKS

Monthly Newsletter of the Tri-State Amateur Radio Society

Serving the Tri-State for 72 years



The SPARKS Newsletter is published monthly by the Tri-State Amateur Radio Society as a source of information about Club activities, and general news items of interest to the Amateur Radio community.

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Complimentary issues of the SPARKS Newsletter are available to amateur radio clubs on a newsletter exchange by e-mailing your request to sparks@w9og.net.

E-mail subscriptions are provided to all regular TARS members.

News contributions and letters/emails to the editor are always welcome.

TARS regular membership is open to all licensed Amateur Radio operators at \$25.00 a year. Associate membership is also available to those who are interested in Amateur Radio but do not currently hold a license.

Associate membership is \$25.00 a year. Student memberships are also available for \$12.50 a year.

Membership information is available at www.w9og.net

The Tri-State Amateur Radio Society meets the second Thursday of each month at the Red Cross, 29 Stockwell Rd, Evansville IN, at 7:00 p.m.

Family and visitors are always welcome to attend.

For more information, please call or email one of the TARS officers listed in this newsletter.

President's Corner:

Well, the winter doldrums have set in – I am so ready for spring. BUT- we have some winter left so we have no choice but to make the best of it! What better way to that than have a banquet!! I hope all your reservations are in and you are planning to join us at the Log Inn for a great night of good fun and good food. Then we have some great meetings planned for the coming months to take us into spring! Please join us for our meetings and events, and make it your club!

I wanted to remind everyone that our club station is working very well, and the antenna we added last June is a huge improvement. If you haven't tried it out you need to. We have an Icom 746Pro as well as a Kenwood TS2000 and either of those can be used. Remember to connect the antenna to the rig you wish to use and don't forget to disconnect it when through! If you are new to or unfamiliar with operating on the HF bands, there are club members who would be happy to sit with you and help you get on the air. Just ask!

Now for some exciting news! Thanks to some individuals who wish to remain anonymous, the cost of the storage barn for the club has been covered! The club now has a yard barn on the lot behind the Red Cross in which to store supplies, tents, feedline, antennas etc. That allows us to clear much needed space in our radio room which was very much needed. It also allows the club to store its equipment and supplies in one location and control it better. In the coming weeks we will add some shelving and final touches to maximize the space, and move our supplies into it. Thank you to all who donated to this project and made it happen!

Lastly, thanks to all who came out to Wesselman Park on Winter Field Day! It was great to see familiar faces as well as a few new hams. It was great day. Thanks to all who brought food to enjoy too. The bean soup, corn bread, meatballs, oh my! We had a great time. And it is great to see how popular Winter Field Day is becoming. Many stations calling CQ Field Day on all the bands all weekend! I even heard W1AW calling CQ Winter Field Day!

That's it for this month. Be sure to join us for all our club meetings and events coming up. And we are always happy to hear new ideas and suggestions for making our club better.

See you at the banquet!

John N9oL

Beyond the Baofeng

By Chris Lantaff, [KE9YK](#)

Getting on HF. The technician class license is an entry level license that is supposed to entice operators to upgrade looking for more operating privileges. While a great way to experience HF operation is by actively participating in one of the club operating events such as Field Day, Winter Field Day or the soon to be POTA operations, technicians have a few HF privileges they use on their own.

If you remember from your tech study guide.

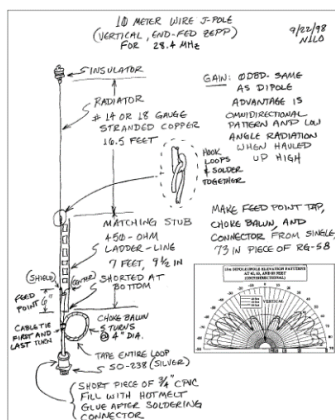
Band	Freq (In MHz)	Modes
40 meters	7.025 – 7.125	CW
15 meters	21.025 – 21.200	CW
10 meters	28.000 – 28.300	CW, RTTY/data
	28.300 – 28.500	CW, phone

Most think the 10 meter band is not any good with where we are currently in the sun spot cycle, BUT. Back in Dec during the ARRL 10m contest I was able to work multiple stations in 10 states and 1 Canadian province along with Argentina, Brazil, French Guiana, Puerto Rico and Uruguay in just a couple of hours.

If you have an HF rig all you need is an effective antenna. The best antenna would be a multi element Yagi beam but you can get by with something much cheaper and simpler that you can build yourself.

One of the simplest antennas being a ½ wave dipole and if you use it in an inverted Vee configuration it will have omnidirectional properties rather than a more bi-directional coverage.

Another antenna that might be easier to erect and works well is the ZEPP antenna, which you most likely know as the J-pole. This antenna is easy to build and only needs one point to attach and pull it into a tree or other support structure.



<https://www.qsl.net/n1lo/10mjpole.pdf>

A few weeks back after the regular Wednesday night net several of us got on 10 meters to test the coverage we could get in the area. Most of us could hear each other on ground wave but the biggest issue was that we were not all using the same polarization. The loss from cross polarization is about 20db so it is quite significant.

I have heard that a few of the locals have a call channel on 10 meters, so if you are interested there are some out there to talk to.

While on the topic of antennas here is a link to a very good book on the basics of antennas.

**Understanding Antennas
For The Non-Technical Ham**

<http://www.hamuniverse.com/basicantennas.pdf>

And a link to more antenna information than you will ever want, unless you are an information junkie like me.

<http://www.hamuniverse.com/antennas.html#Category3>

If you are looking for antenna designs Google is your friend, but remember to always take it with a grain of salt, because I have seen some farfetched ideas that don't hold water.

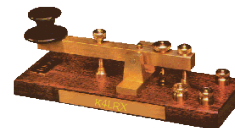
Club Code Key Contest

This contest is a just for fun event and will have certificates awarded for various categories.

Judging will happen in the time between the meeting program and the business meeting.

We will have a code keyer set up to check the operation of the keys.

We are starting in **March** with **STRAIGHT KEY** competition.



The rules are very simple.

- You must have built the key **YOURSELF**.
- It may be a **KIT** or Homebrewed.
- It must **WORK**.

The schedule is.

March - Straight Key

May - Paddle Key

July - Bug or Cootie Key

September - MacGyver Key

*MacGyver key is taking any object and using the parts to turn it into a key with a **minimum of tools**.

E.g. - an old toaster or t.v. remote. I am sure you have some piece of junk laying around, use your imagination.

Even if you don't work CW, this can be a fun contest just to get everyone up and doing something. Perhaps we could even get a CW learning net on the air and put them to use.

U.S. Islands Awards Program 25th anniversary

USI is offering a special, 25th Anniversary award for both chasers and activators running from January 1 to December 31, 2019.



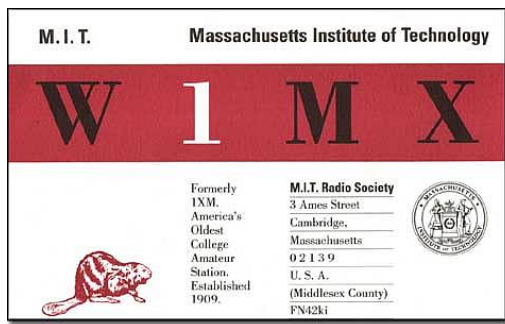
Chasers: Confirm 25 islands during 2019, as a club or individual.

Activators: Qualify or Activate a total of 25 islands in any combination. A minimum of 15 QSOs must be made for both a new island qualification and an island activation to be considered for this award. This can be issued to a club call, (multiple members under one call) or individual.

All the USI rules and awards can be found at usislands.org

Lectures on Radio Technology, History, and Applications

- MIT Radio Society IAP 2019



The Massachusetts Institute of Technology Radio Society (W1MX) and the Department of Electrical Engineering and Computer Science (EECS) are presenting a series of radio-related lectures covering a wide array of topics.

The public lectures are announced at:
<http://student.mit.edu/iap/ns313.html>

Lectures are streamed live and archived [on YouTube](#).

Some of the current archived lectures are:

- An Introduction to Radio Experimentation, Technology, and History
- Software Defined Radio
- The Ionosphere, Shortwave Radio, and Propagation
- Experimental Radio Astronomy

- The Final Frontier: Unveiling the Low Frequency Universe Through Space Based Radio Astronomy
- Principles of Radar
- Space Weather Observations and Phenomena
- 5G, Cellular Communications, and the Future of Radio

Heads Up

Special event station this summer.

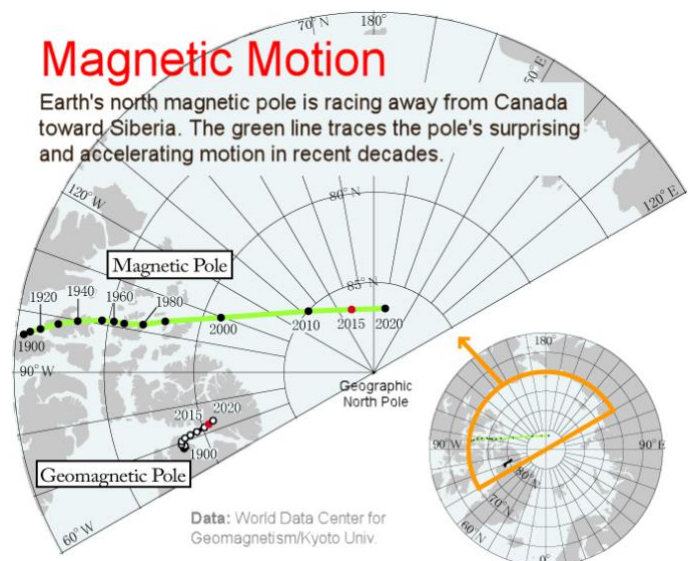
Info can be found at: <https://www.nwrs.info/special-event-station.html>



Earth's Shifting Magnetic Pole May be Confusing Your Cell Phone

Jan. 16, 2019: <https://spaceweatherarchive.com/>

Pick up your cell phone and look at it. That rectangular marvel of modern technology contains thousands of lines of code. Among them is the World Magnetic Model (WMM)—a program that helps your phone navigate. And it's in a bit of trouble. Researchers have announced that the WMM needs an emergency update because [Earth's magnetic field](#) is changing. [READ MORE](#)



Amateur radio (illegally) aiding yacht racers

By Dan Romanchik, [KB6NU](#)

The Golden Globe Race (<https://goldengloberace.com>), a 30,000 mile, non-stop solo yacht race to celebrate Sir Robin Knox-Johnston's historic 1968/9 world first solo non-stop circumnavigation. There are 18 sailors in the race, which started on July 1, 2018 from Les Sables-D'Olonne, France.

Amateur radio is at the heart of the latest controversy surrounding the race. Scuttlebutt Sailing News reported (<https://www.sailingscuttlebutt.com/2019/01/21/maintaining-information-barrier/>) on January 21, 2019 (day 205 of the race):

"Sailors have been making use of the Amateur Radio net (ham radio) for decades, and while National telecommunication authorities have often turned a deaf ear to unlicensed operators using made-up call signs while at sea, warnings from a National regulator to Golden Globe Race skippers has created intrigue into an exciting finale for race leaders.

"Modern navigation and routing tools are restricted from use in the 2018-19 contest, limiting GGR skippers to the type of equipment available for the inaugural Sunday Times Golden Globe solo non-stop round the world race in 1968-69. That includes Amateur Radio.

"The skippers have been using this free communication system to gain weather forecasts and maintain contact with their teams, which is allowed under the Race Rules. However, it is the responsibility of each skipper to ensure that they abide by National and International regulations which Jean-Luc Van Den Heede and Mark Slats, in first and second in the race, have not been doing. [[Neither Van den Heede or Slats have valid amateur radio licenses...Dan]]

"Said the warning, 'You use an amateur callsign and are making connections with amateur radio operators. The call sign letters are not registered, and thus illegal. I ask you to stop. If you have a legal amateur callsign then I urge you to present it.'"

As a result of this warning, Slats is considering dropping out of the race, even though the race is nearly complete. Yachting Monthly reports (<https://www.yachtingmonthly.com/boat-events/golden-globe-race/golden-globe-race-slats-considers-quitting-comms-row-68574>):

"Mark Slats, who is less than 50 miles from Golden Globe Race leader Jean-Luc Van Den Heede, has announced he is thinking about retiring from the race after being banned from broadcasting on the Ham Radio Net.

"Race organizers said the Dutch skipper does not have the required license, and has been warned by the Dutch authorities to stop broadcasting, which has left him unable to communicate with his shore team.

"Under the rules of the race, all of the entrants are able to use this free communication system to gain weather forecasts and maintain contact with their teams, but, it is the responsibility of each skipper to ensure that they abide by national and international regulations."

It's not only the yachters that are flouting the rules, it's the amateur radio operators who are communicating with them. According to Yachting Monthly, OFCOM, the UK regulator issued the following warning:

"Fair warning both to unregistered GGR skippers and to legitimate Ham radio operators communicating with them. In Britain, the Ham Radio net is controlled by OFCOM, which recently revoked more than 500 licenses for non-compliance. This includes communicating with unregistered Ham radio operators. The maximum penalty is 6 months in prison, a £5,000 fine and loss of their license."

This is a fascinating story, and I wish that I'd found out about this sooner. It would be interesting to listen in on some of these communications. One question I have is why these guys failed to obtain a valid amateur radio license? The Golden Globe Radio website notes, "[The race] will be sailed under the auspices of the Royal Nomuka Yacht Club in the Kingdom of Tonga. His Royal Highness, Crown Prince Tupouto'a Ulukalala is Patron of the Race." They probably could have issued valid amateur radio licenses to all the racers.

If any of you have heard the communications or know any more about the technical details, I'd love to hear from you.

Hint:

*If you have an elusive state needed for WAS,
look up the state QSO party date
and work a few stations.*

WWV Centennial Celebration and Special Event Amateur Station September 28 – October 2, 2019

NCARC WWV Committee

Fort Collins, Colorado:

FOR IMMEDIATE RELEASE – JANUARY 11, 2019



WWV building in Fort Collins, Colorado (photo courtesy: NIST)

The Northern Colorado Amateur Radio Club (NCARC) will operate a special event amateur radio station in conjunction with the WWV Centennial Celebration, a tribute to radio station WWV, the oldest continuously broadcasting radio station in the world, as it turns 100 years old on October 1, 2019.

Operating from alongside the historic and scientific long wave (WWVB) and short wave (WWV) radio stations, the NCARC effort will use 4 simultaneous operations on a variety of amateur shortwave bands. The goal is to contact as many amateur radio stations in the world as possible during the 5-day operating period, September 28 through October 2, 2019, using a variety of operating modes (Morse code, voice, and data).

The National Institute of Standards and Technology, NIST, (US Dept of Commerce) lists the official 100th celebration on their events calendar from 8am until 7pm, October 1, 2019.

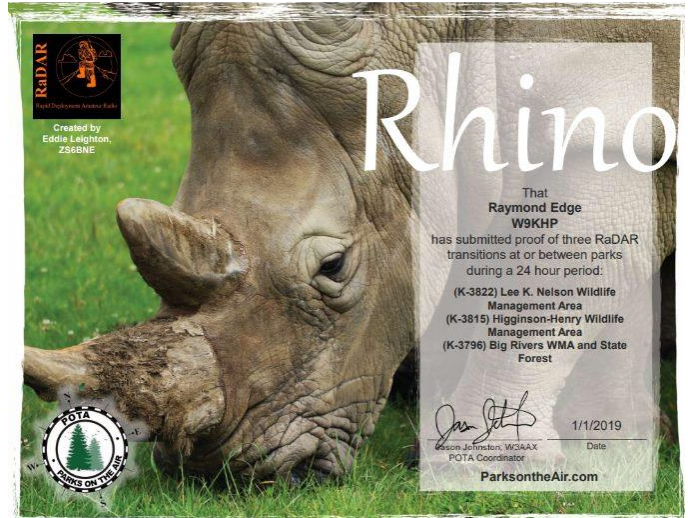
(<https://www.nist.gov/news-events/events/2019/10/nist-radio-station-wwv-100-year-anniversary>).

For more information, please visit the WWV Centennial Celebration website, WWWV100.com.

BRAG RAG

Congratulations Raymond W9KHP.

Raymond is already planning for the next level activation.



Congratulations Chris KE9YK

Already on the way to the next certificate and can't wait for the weather to warm up to can activate a few parks.



Vanderburgh Co. ARES/RACES

The next Vanderburgh county ARES/RACES meeting February 21st, 7:00 pm at the Vand Co. West Side EMA Training Center (WEMA) [1430 Harmony Way](#). Anyone interested in emergency communication in Vanderburgh County is invited.



Chris Lantaff KE9YK

Vanderburgh Co RACES Officer

in82races@gmail.com c: 812.453.1972

WARRICK COUNTY ARES/RACES

January 2019 Update

Welcome to 2019...

Winter Field Day...

Winter field day will have come and gone by the time this update is published. WFD will be held with the members of the Ohio Valley Amateur Radio Group. The event will be located at the Alcoa Clubhouse. The Auxcom trailer will be set up and utilized during the contest. The trailer will be tested for operation and capabilities.

ARES/RACES Work Area Renovations...

The ARES/RACES group is back home! Work on the 3rd floor area of the EMA offices and EOC is completed. During the renovations the old judges bench was removed which opens up the space and provides additional work area. A doorway has been added so you can now move between the EOC and the EMA office without going into the hall way. The restroom for the EOC has also been upgraded to include a shower. LED lighting and individual HVAC controls in each of the office areas provides a very significant improvement. Work will continue into the future adding to the redundancy and workability of the Old Courthouse facility.

Warrick EMA/EOC Renovations...

A survey was done on the radio room to determine the best routing of the coax and power cables to each of the radios. A few options were discussed of the best route for the cables and made a determination to utilize a piece of channel to conceal the cables. Dave is going to obtain a piece of channel used in the building remodeling process to help blend in the additional part.

Simulated Emergency Test Review...

We discussed the results of the Nov. SET. Dave (KC9UVG) talked about his findings when tasked with setting up a relay at the Newburgh plaza to get communication into/out of Newburgh. He tried both mobile and handheld and discovered he needed to fix some programming in the radios. We also discussed a few other issues he discovered.

This led to a wider discussion on the preparation at specific sites, mostly at the fire stations. We discussed that it would be good to have antennas and coax installed at these locations. Some may have old antennas that may be able to be used. Dave indicated that he had some money that could

be used for this. He is going to try to get us into one of the chief's meeting to discuss this idea with them.

Power from the Sun...

Dave Woolen presented the ARES/RACES Group with a solar panel and charge controller for the Auxcom trailer. He also was able to get a matching Solar Panel and charge controller for the MEOC.

Chris L Owen (KC9CLO)
Public Information Officer
Warrick County ARES/RACES group



Tri-State Emergency Net

8:00 p.m. Wednesday nights on 146.79 pl 88.5

If you haven't checked into the Tri-State Emergency Net, please take a few minutes at 8:00 p.m. Wednesday evenings on 146.79 and get updated on what is happening, the latest club information, calendar of upcoming events, topics of general interest and from time to time good old-fashioned rag chewing.

Net Operator schedule

February

6	KB9YWQ
13	WB9KQF
20	KC9TYA
27	KE9YK

March

6	KC9UVG
13	N9QVQ
20	KB9YWQ
27	WB9KQF

April

3	KC9TYA
10	KE9YK
17	KC9UVG
24	N9QVQ



The 2019 Thunderstorm/Tornado season is just around the corner, remember to monitor the weather net on the TARS 146.79 repeater anytime there is a severe weather watch/warning issued from the Paducah NWS for Vanderburgh or surrounding counties.

Anytime severe weather is anticipated we try to have a stand-by net up and once a warning or severe weather is reported we go into a SKYWARN net and relay weather reports to the NWS in Paducah.

2019 NWS SKYWARN Spotter Training

So far there is not any Spotter Training listed for Evansville but 2 online classes are listed.

Registration **must** be completed on-line to attend training.

<https://www.weather.gov/pah/spottertraining>

Current NWS SKYWARN training for PAH

- February 11, 2019: NWS PADUCAH WEBINAR
- March 2, 2019: Carterville, IL (Williamson County)
- March 7, 2019: NWS PADUCAH WEBINAR
- March 26, 2019: Bremen, KY (Muhlenberg County)
- February 19, 2019: Mt. Vernon, IL (Jefferson County)
- February 19, 2019: Murray, KY (Calloway County)

February Birthdays

Donald Land	KB9YWQ	10th
Keith L. MaCurdy	KC9GNM	10th
Larry Rudolph	KB9KVX	2nd
John D. Small	W9FHA	14th
Jerry Washburne	WD9GXI	9th

If your birthday isn't listed please make sure we have it on file by filling out the membership application when renewing. This also helps to make sure we have your current contact information.

Silent Key - Eric Bailey, KC9MEW



Our condolences to the family. I am sure many of you had heard Eric on the air and checking into the local nets. Eric M. Bailey, KC9MEW, 38, of Princeton, passed away Monday, January 7, 2019 at his home in Princeton. He was born on December 8, 1980 in Evansville.

Eric was a ham radio operator and enjoyed working on car stereos and electronics. He also built computers. He was a patient and loving father and also loved animals. www.colvinfuneralhome.com/notices/Eric-Bailey

VE Testing

2019 Schedule

Jan 26	Feb 23
Mar No TEST	Apr 27
May 25	Jun 29
Jul 27	Aug 31
Sep 28	Oct 26
Nov No TEST	Dec 28



All examinations will be administered at the American Red Cross, Evansville Chapter, located at 29 S. Stockwell Road, Evansville Indiana 47714. Examinations will start at 9:00 AM Central time.

We have no pre-registration, and examinations are administered on a walk-in basis.

All the details can be found at:

<http://w9og.net/ve-testing>

Or for more info contact:

[John VanVorst N9QL](mailto:John.VanVorst@N9QL.com) c: 812.305.4100



Secretary Report

The Secretary report was attached as a separate PDF file.

Treasurer Report

December 2018 (Prepared 1/1/2019)

Opening Balance:	\$3,810.70
Receipts:	
Memberships plus donations	\$250.00
VE room rental	\$56.00
Total Receipts --->>	\$306.00
Expenditures:	
Pd US Post Office box fee	(\$96.00)
Pd Dave Sandine KC9UVG for network components for presentations	(\$61.37)
Total Expenditures---->>	(\$157.37)
Ending Balance	\$3,959.33
Red Cross Available Funds	\$1,066.82

Jeff Holt AA9WJ
TARS Treasurer

Looking Ahead

2019

Straight Key Night Jan 1

ARRL Kids Day Jan

Winter Field Day January 26/27

TARS Banquet Feb 7

INQP May 4 - 5

MUSEUM SHIPS WEEKEND June

ARRL Kids Day June

Field Day June 22-23

13 Colonies Special Event Jul 1-Jul 8, 1300Z-0400Z

National Night Out Aug 6

International Lighthouse and Lightship Weekend (ILLW)

Third full weekend of August 16-17

Route 66 Special Event September 7-15

Jamboree-on-the-Air Third full weekend in October

SKYWARN Recognition Day Dec 7 2019

Your input is important.

Sparks is **YOUR** information source for club activities and local Amateur radio information.

In each issue we ask for submissions from club members. Tell us about your station, projects you have made or are making, anything interesting the TARS membership might be interested in.

Submission deadline is the 25th of the month.

Most any document format is acceptable.

Photos or graphics of your subject are welcome.

Send your article to: sparks@w9og.net

TARS is an [ARRL](#) affiliated club

ARRL [Indiana Section](#)

Section Manager: **Jimmy Merry KC9RPX**

kc9rpx@arrl.net

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TARS

P.O. Box 4521

Evansville, IN 47724



Don't forget to check out our web page www.w9og.net

Facebook Group

<https://www.facebook.com/groups/TARSw9og>

TARS E-mail: info@w9og.net

2019 Club Officers - Board members

President [John VanVorst N9OL](#)

Vice President [Max Wilkinson KD9ABT](#)

Treasurer [Jeff Holt AA9WJ](#)

Secretary [Dave Sandine KC9UVG](#)

Board of Directors

[Mark Thienes KC9TYA](#) (2018-2019)

[Len Schmitt N9QVQ](#) (2018-2019)

[Herb Alvey KB9MZH](#) (2019)

[Rick Jackson K9EXY](#) (2019-2020)

[Dennis Martin WA2USA](#) (2019-2020)

[Mike Townsend W9KXP](#) (2019-2020)

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