

# SPARKS

Monthly Newsletter of the Tri-State Amateur Radio Society

**Serving the Tri-State for over 70 years**

January 2021 - Issue No. 1



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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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 for \$25.00 a year. An 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](http://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 contact one of the TARS officers listed in this newsletter or email [info@w9og.net](mailto:info@w9og.net).

## **Reminder TARS dues are due the first of the year**

Attached to the email with this edition of SPARKS you should have a membership application. Please fill out the application for each membership so we can verify that our information on you is up to date. PLEASE note the e-mail address you put on the application will be where SPARKS will be sent.

## **TARS Fox Hunt 9:00am Sat Jan 16<sup>th</sup>**

TARS is holding a Fox Hunt with social distancing. This will be an easy driving type hunt. Look for more information in this issue of SPARKS

## **Silent Key**

It is with deep sorrow to announce the passing of **Howard Aders KD4BXV**.

Howard and his wife Ethel had participated in a number of TARS functions over the years.

Howard Seth Aders, 93 of Princeton, Indiana, passed away on Wed., Nov. 18, 2020, at Solarbron Terrace from COVID-19.

He is survived by his wife of 68 years, Ethel Mae (Lewis); daughter, Debra (Dennis) Eckert; son, Mark Aders; grandchildren, Audrie Aders Manzi, Heath and Jared Eckert; and seven great grandchildren.

The full obituary can be found at:

<https://obits.courierpress.com/obituaries/courierpress/obituary.aspx?n=howard-seth-aders&pid=197175449&fhid=20426>

## **Winter Field Day**

Winter FD is January 30/31, 2021. Look for more information in this issue of SPARKS

## **Special Election**

We are still looking for nominations to hold a special election to fill a vacant board seat for the remainder of the 2021 term. If you are interested in running for the board send an email to [info@w9og.net](mailto:info@w9og.net). The only qualification is that you have been a TARS member for one full year.

## **NWS SKYWARN CLASSES**

Be sure to check out the SKYWARN Spotter classes for 2021 in this issue of SPARKS.

## Beyond the Baofeng

Chris Lantaff, KE9YK

### CONTESTING

Radio contesting, love it or loathe it, is an active part of amateur radio. Some wonder what purpose contesting holds and why operators seem to spend so much time and energy for such a mundane activity. Well actually contesting helps to prepare operators for real world communications where speed and accuracy count. Many times, throughout the years contesting stations have been called into service for assisting during worldwide disasters.

Have you ever come across a contest and wondered what it was about? A good resource is <https://www.contestcalendar.com/> the WA7BNM contest calendar. You can pull up the current 8-day calendar and see what the current activity is, with a short description of the contest and a link for more information from the contest sponsoring group.

The ARRL contest calendar <http://www.arrl.org/contest-calendar> has links to information and all the rules for ARRL contests.

Every once in a while, I will jump in on a contest and make a few contacts just for the fun of it. A couple of weeks ago the ARRL 10m contest was going and I made about 8 contacts even though the band was not very good at the time.

Still beats watching another rerun on TV or spending time endlessly scrolling through Facebook. Need something to pass time on the weekend while the weather is bad, jump in and make a few contacts, it can be fun!

### WINLINK HYBRID GATEWAYS

Ken Johnson, K9KDJ

Many Winlink stations around the world run Gateways. A Gateway is a station that automatically accepts your traffic when you connect to it, forwards it along to a Common Message Server (CMS) via the Internet, checks the CMS to see if any traffic is waiting for you, and, if so, passes that traffic to you. This happens each time you connect to a RMS Gateway. Most of these Gateways will not accept your traffic if their Internet connection is down. When you connect to them, they will let you know that their Internet connection is not active and terminate the session. Some gateways will allow you to choose between proceeding or terminating the connection to try another gateway. If you choose to proceed, they will hold your traffic until their Internet connections restore then pass your messages(s).

A few gateway stations around the world (including K9KDJ, the only one in Indiana) are known as Hybrid Gateways. A Hybrid Gateway runs additional software that automatically passes Radio Only (RO) messages via HF and, if their Internet connections are down, will also move your standard traffic to other HF Gateways to attempt delivery. The additional software examines routes to Message Pickup Stations (MPSs), computes the best HF Gateway to which to forward traffic, changes radio frequencies on our HF radios to match that station, and initiates the connection. This may happen several times, if you send several messages, as the best forwarding station is determined based on

where your traffic should eventually be delivered. All of this done without human intervention! ☺ This really is quite a service.

The other RMS Gateways and especially the other Hybrid Gateway operators and I enjoy offering this capability. We know that in situations where traffic needs to move and Internet connections are disrupted, passing information by HF radio may become our only option. I am proud that we have the only Hybrid Gateway in Indiana operating right here in Warrick County. My HF system constantly scans frequencies on 80, 40, 20, and 17 meters, and my VHF Gateway (K9KDJ-10) runs both Packet and VARA FM on 145.09. Just as a side note, K9KDJ-10 is the only VARA FM Gateway in Indiana, too, so Southwest Indiana continues making our marks in the Amateur Radio Communications world.

With Winlink, you may send messages to regular email addresses and receive from those, too. Why not try it today? If you are not yet using Winlink, come join the crowd!

Ken K9KDJ

Hamshack Hotline Number: 5809

Hybrid RMS HF Gateway: K9KDJ; RMS VHF Gateway w  
Packet/VARA FM: K9KDJ-10 (145.090)

### Fun on the "TOP BAND"

Rick Jackson, K9EXY

A few days ago I was discussing with Dennis, WA2USA the activity on the HF bands and how I had never tried to use the 160 meter frequencies. He suggested I needed to put up an antenna and have some fun exploring the top band and offered to give me a hand (which I readily accepted).

We first tried an end fed half wave but it had to be in the shape of a horizontal "V" due to the layout of my lot and tree location which didn't work because the legs were too close together. And again, due to the size of my lot

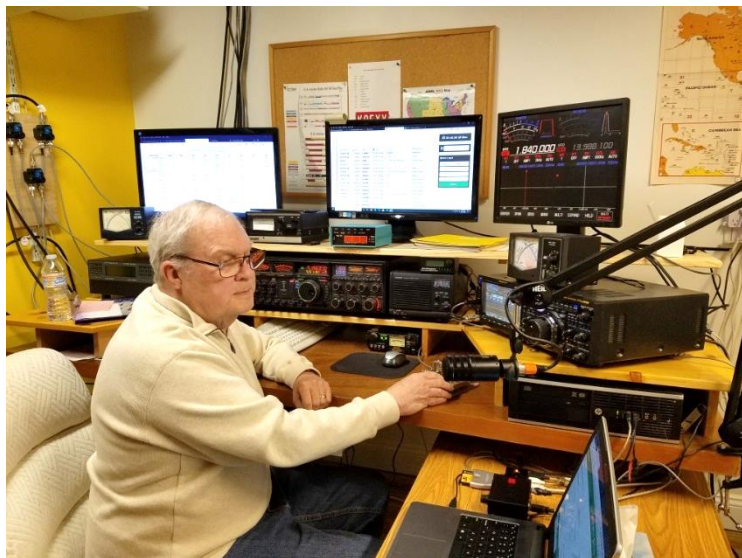


and the location of the trees, there was not enough room to install an end fed half wave without the "V" shape so he

suggested a configuration that he was using which was basically a quarter wave dipole with half laying on the ground and the other half in a vertical "L". The center point and feed was at ground level and the vertical portion ran up the side of my tower about 35 feet before going horizontal to a tree. The antenna is fed with 50 ohm coax and the center insulator is not using any balun or choke. With some minor adjustment to the



length of the radiating element and the ground radial, the antenna would now tune across the entire band with a SWR of less than 2.5:1. Later 3 additional radials were added which did not seem to change the swr but should help make the antenna more omni directional. The next week end the ARRL 160-meter contest took place and it was a ball. I was able to work 45 states and 6 DXCC stations all on 100 watts.



The band normally seems pretty dead during the day but comes alive after dark and the entire band is available for digital, cw and ssb. It is not divided by modes or license class but is restricted to general class and above. I've used all three modes and there is a lot of activity on each one, especially FT8. This was a very inexpensive and easy solution to adding some new frequencies and opportunities.

## Fox Hunt Experience

Jeff Holt, AA9WJ

On December 19<sup>th</sup>, the Ohio Valley ARC sponsored a fox hunt. Dennis, WA2USA contacted me and asked if I would be interested. I sure was! But my homebrew tape measure antenna needed some work and desperately needed an attenuator. I ordered a 4MHz offset attenuator board but it did not arrive in time for the fox hunt. Dennis graciously let me use his Arrow 146-3 3-element Yagi which I used with my FT-60 HT. This is a really nice antenna with a soft handle and was assembled to detect a peak rather than a null in this case. Dennis also had an Arrow attenuator. The sponsor planted three transmitters: two low power and one 5-watt.

I chased the low power transmitter by foot in Vann Park first. Keeping the S-meter peaked, I quickly realized I didn't have the attenuator with me and found myself hopelessly circling the location only to see another hunter pointing it out!

The second low power transmitter was in Friedman Park. No signal was detected so I started experimenting with different directions. No luck. After what seemed like endless walking I ran across a hunter that said the sponsor had changed the transmit frequency. It turns out the sponsor asked for check-ins in the fox

hunt announcement flyer and I would have been informed. Moral of the story: When all else fails, follow the directions!

I started the search for the 5-watt transmitter from Friedman Park. After picking the initial direction and making 4 or 5 more driving stops to adjust the bearing, I switched to using the attenuator. The offset attenuator requires that the receive frequency be lowered by 4 MHz on the HT to allow for proper mixing and has a pot to control the level. After 2 more stops to correct the bearing, I finally arrived at the transmitter location approximately 6 miles from Friedman Park in Indian Hill Overlook Park at the Newburgh Locks and Dam. It was a lot of learning and a lot of fun!

## TARS Fox Hunt and You Are Invited

TARS is holding a Fox Hunt with social distancing. This will be an easy driving type hunt where the fox will be located in public accessible parking lots, parks or other public accessible locations. Current plans are to start the hunt at 9:00am Sat Jan 16<sup>th</sup> in the North West Eastland Mall parking lot.

Coordinates [37.986089, -87.498736](https://www.google.com/maps/place/37.986089,-87.498736)

Please check-in on 146.79 before starting the foxhunt and listen for any changes that might be made.

The fox hunt will start on the national foxhunt frequency 146.565 Mhz.

If you can build a tape measure yagi for the hunt that would be great, but you can also use body fade techniques for the easy type of hunt we will be holding. I am sure after participating once you will want to upgrade to a yagi or other type of system.

We will discuss this on the TARS ZOOM meeting Thursday.

Below you can find links to equipment and information on fox hunting.

A couple of YouTube videos with good information by KB9VBR Tape Measure Yagi Beam Antenna - Ham Radio Q&A

<https://youtu.be/BmHoQrDfw-0>

Fox Hunt! (Radio Direction Finding) - Ham Radio Q&A

<https://youtu.be/yR2cpd0vQdM>

Link to the video we watched during the Dec TARS meeting.

Ham Radio - Riding along on the local club's monthly foxhunt

<https://youtu.be/3RY4gt4oq0c>

## LINKS for Fox Hunting INFO and Equipment

The Art and Science of Radio Direction Finding (RDF)

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

Tape measure beam optimized for radio direction finding

[http://theleggios.net/wb2hol/projects/rdf/tape\\_bm.htm](http://theleggios.net/wb2hol/projects/rdf/tape_bm.htm)

SDF-1 Antenna by Rainbow Kits

<https://www.rainbowkits.com/kits/sdf-1p.html>

Handi-Finder by Northern Ohio Amateur Radio Development

<http://www.handi-finder.com/>

Handi-Finder mods <http://www.homingin.com/hfinderfix.html>

## Winter Field Day

Winter FD is January 30/31, 2021.

Since we will not be doing WFD as a club we can enter under the club/group score. You may operate outdoors or from the warmth of your home, but make sure to check the rules closely. All information is at: <https://www.winterfieldday.com/>

When submitting your log use **TARS EVANSVILLE** as your club name.

**ONLY TARS EVANSVILLE as EVERYONE MUST USE THE EXACT SAME CLUB NAME when submitting their score for it to count towards the club score.**

Since we aren't out in the field this year and I won't be fixing my bean soup for the group, the recipe is below for your enjoyment. You can scale it back to a convenient size for you, or it freezes very well and you can enjoy it all winter long.



### The KE9YK almost World-Famous Bean Soup

Compliments of [Gabtown Grill!](#)

Ingredients:

- 2 lbs. Dry Navy Beans
- 2 lbs. Dry Great Northern Beans
- ~4 lbs. Ham hocks/shanks or ham bone and trimmings etc.
- 2 med onions diced
- 2 Cups shredded carrots, about 3 large carrots
- 1 tbsp Lawry's Season Salt
- 1 tbsp White Pepper
- 1 tsp Garlic Powder
- 2 Cups Ketchup, I prefer Red Gold
- 2 tbsp butter
- 1 tsp liquid smoke (optional)
- 2 ¼ Gallons water

Instructions:

Rinse and soak beans overnight.

In a LARGE pot add butter and diced onions, sauté until translucent. Add 2 quarts of the water, ham hocks, carrots, season salt, white pepper and garlic powder.

Bring to a hard boil for 10 minutes.

Drain the beans that have been soaking and add them to the pot along with the additional 7 quarts of water.

Bring back to a boil then turn down to a very slow boil and simmer for 2 hours or so stirring frequently to prevent scorching.

Once the beans have started breaking down to your liking add the ketchup and liquid smoke, let simmer for another 10 minutes.

Serve with a side of sweet cornbread or like I do put the cornbread in the bowl.

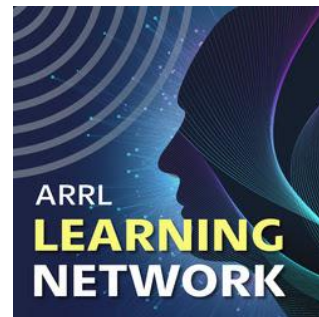
Optional serving suggestions.

Add a spoon of Cha Cha (Chow Chow) or Sweet pickle relish.

To kick it up a notch add your favorite hot sauce.

### ARRL Learning Network Webinars

Visit the [ARRL Learning Network](#) (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions. The schedule is subject to change.



#### VHF/UHF Contesting and SOTA; A Perfect Match: Brian Betz, W7JET

Explore the challenge of VHF UHF contesting and the success of the large-scale participation of SOTA Summit activators in Arizona for the January VHF contest.

**Thursday, January 14, 2021, 12:30 PM PST / 3:30 PM EST (2030 UTC)**

#### Emergency Communications: Why Train? North Texas Section Emergency Coordinator Greg Evans, K5GTX

Why should we train? Utilizing amateur radio operators in an emergency communication situation is a key function that can save lives. We must be able to respond to the needs of our served agencies quickly and responsibly. Topics covered include: Incident Command System and its relevance; building on consistent training; interoperability with multiple communication providers; interoperability with VOAD and partners, and Mission One: Get the information delivered.

**Thursday, January 21, 2021, 12:30 PM PST / 3:30 PM EST (2030 UTC)**

## Contest University to Host Propagation Summit



Several radio propagation experts will share their knowledge during a Propagation Summit via Zoom, sponsored by Contest University (CTU). The event is scheduled for **January 23, 2021**. The presentation schedule includes: "Update on the Personal Space Weather Station Project and HamSCI Activities for 2021" with Nathaniel Frissell, W2NAF, at 11 AM EST (1600 UTC); "Solar Cycle 25 Predictions and Progress" with Carl Luetzelschwab, K9LA, at noon (1700 UTC); "Maximizing Performance of HF Antennas with Irregular Terrain" with Jim Breakall, WA3FET, at 1 PM EST (1800 UTC), and "HF Ionospheric Propagation" with Frank Donovan, W3LPL, at 2 PM EST (1900 UTC). [Registration](#) is free. An Icom IC-705 will be raffled off as a door prize. The winner must be present on Zoom to win. -- Thanks to CTU Chair Tim Duffy, K3LR

## Update on LoTW slowdown

This note is in response to concerns about functioning of Logbook (LoTW) in the wake of slow processing after record participation in last weekend's CQ WW CW contest.

ARRL is aware of the slowdown. Though some have expressed concern about the slowdown, it does not indicate a problem. The system is purposely built to handle normal loads, but not to respond instantly to peak loads. This approach was deliberately chosen in an effort to be most efficient with members' dollars. The system will work through the backlog, as it has on numerous occasions previously following busy contest weekends.

At the same time, ARRL understands that the community's expectations may have changed over the years, as has the available technology. Accordingly, we are going to review the options available for cost-effective updates to Logbook to improve its peak handling capacity. Though changes have already been suggested, data have not yet been analyzed to identify the exact nature of the performance bottleneck. It would be inappropriate to begin making changes in Logbook's systems until their performance has been understood.

Meanwhile, users of Logbook should not be concerned that their submissions are being properly recorded and will be properly confirmed if appropriate.

73,

Greg Widin, K0GW  
2020 Chair, Logbook Committee

## Upcoming ARRL Section, State, and Division Conventions

Many conventions and hamfests have been canceled or postponed due to the coronavirus pandemic. Check the [calendar of canceled events](#) on the ARRL website.

- February 13 - 14 -- [Orlando HamCation Special Edition](#) (online)
- March 13 - 14 -- [QSO Today Virtual Ham Expo](#)

Find conventions and hamfests [in your area](#).

## DAYTON HAMVENTION

ARRL Letter for December 3, 2020

"The Gathering" will be the theme for the 2021 [Dayton Hamvention](#)<sup>®</sup>. Hamvention General Chair Rick Allnutt, WS8G, said the theme reflects what has been missing from our lives most of this year. "We have spent the last 6 months being bound to our houses and small groups," he said. "We are very optimistic that when May arrives, we will be allowed to get together." Allnut, a medical doctor with a master's degree in public health, said Hamvention management is closely following the coronavirus situation and believes it will improve enough by May that government restrictions on travel and large groups will be relaxed. The Hamvention team will continue to follow developments. Hamvention 2021 will be held May 21 - 23 at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.

## 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

### January

6	KC9TYA
13	KC9UVG
20	N9QVQ
27	KB9YWQ

### February

3	WB9KQF
10	KE9YK
17	KC9TYA
24	KC9UVG

If you would like to be a Net Control Operator for the Wednesday Night Net or learn how to run a SKYWARN net.

Contact: [Chris Lantaff KE9YK](#).



### Spotter Training Classes now scheduled for 2021

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

SPRING SPOTTER TRAINING WEBINARS: Click to register

Tuesday [January 26, 2021 6:00pm CST](#)

Tuesday [February 2, 2021 6:00pm CST](#)

Saturday [February 6, 2021 9:00am CST](#) (Morning class)

Thursday [February 11, 2021 6:00pm CST](#)

Thursday [February 18, 2021 6:00pm CST](#)

Monday [February 22, 2021 6:00pm CST](#)

Tuesday [March 2, 2021 6:00pm CST](#)

Thursday [March 11, 2021 6:00pm CST](#)

Wednesday [March 17, 2021 6:00pm CDT](#)

Saturday [March 20, 2021 6:00pm CDT](#)

Thursday [March 25, 2021 6:00pm CDT](#)

Monday [March 29, 2021 6:00pm CDT](#)

## Monthly TAILGATE

### Icom IC-718

IC-718 along with a LDG AT-200Pro Auto tuner. Both clean, in great shape without any marks, and from a non-smoking home.

**Only selling them together.**

\$625 for both. Cash on local pickup.

Ken K9KDJ

[k9kdj.ham@gmail.com](mailto:k9kdj.ham@gmail.com)

### BAOFENG UV5R HT \$20

I have two new Baofeng UV5R 144-148/420-450 MHz handheld transceivers for sale at \$20 each. These are new, in the box, units. They've been unwrapped enough to make sure they work and include all original packaging. I bought them in 2019 and never used them.

Ross M. Cecil KC9JOV

812-573-1625

[rmcecil@gmail.com](mailto:rmcecil@gmail.com)

If you have something you would like to list for sale in the Monthly TAILGATE, send an e-mail to [sparks@w9og.net](mailto:sparks@w9og.net) with all information on the item, pictures are helpful and your contact info.

## Brag Rag

Do you have something you would like to submit for the Brag Rag? Send your QSLs, special event certificates, awards, interesting photos, projects etc. to [sparks@w9og.net](mailto:sparks@w9og.net) to have them included in your newsletter.

## VE Testing

Watch for the 2021 schedule to be posted.



## Vanderburgh Co. ARES/RACES

All Vanderburgh Co ARES/RACES in person meetings are canceled until this COVID-19 emergency has passed and currently using ZOOM.

Our meetings are the third Thursday of the month starting at **6:00pm**.

Watch your email for details. If you would like to participate and are not

currently a Vanderburgh Co. ARES/RACES member contact us for the log-in information.



Feel free to check in to the Vanderburgh Co ARES net **each Tuesday at 8:00pm** on the 146.790 repeater.

### Vanderburgh County Auxcomm

Chris KE9YK [IN82RACES@gmail.com](mailto:IN82RACES@gmail.com)

Vanderburgh Co RACES Officer

812.453.1972

Len N9QVQ [len.n9qvq@gmail.com](mailto:len.n9qvq@gmail.com)

Vanderburgh Co ARES EC

812-963-0027

## Warrick Co ARES/RACES

Meetings...

The Warrick County ARES/RACES group meets on the second Monday of each month. The meeting begins at 6:30pm and generally is completed by 9:00pm. The meetings are held on the third floor of the Court House in the EMA Conference room. Anyone needing additional information concerning meetings or location contact: Chris L. Owen at [KC9CLO@gmail.com](mailto:KC9CLO@gmail.com).

## January Birthdays!!!

Kelli Land	KD9COS	8th
Betty Lantaff	KC9VDA	27th
Charlie Martin	WB8LDV	28th
Leonard Schmitt	N9QVQ	12th
Brian Walker	KC4FIE	19th
Max Wilkinson	KD9ABT	1st
Steve Wilzbacher	K4SAW	17th



# Happy Birthday!

## Secretary Report

The secretary reports were attached as separate attachments with this SPARKS mailing.

Dave Sandine KC9UVG

## Treasurer Report

Budget:

November 2020 (prepared 12/2/2020 )

Opening Balance:	\$4,242.26
Receipts:	
Memberships	\$40.00
Total Receipts --->>	\$40.00

Expenditures:

Indiana Farmer's Mutual liability insurance	(\$414.00)
Total Expenditures---->>	(\$414.00)

Ending Balance \$3,868.26

Red Cross fund \$1,283.82  
Funds Available to TARS \$2,584.44

Jeff Holt AA9WJ  
TARS Treasurer

**DON'T BE A Cap'n Kerchunk**

The proper method for kerchunking is to key the radio and say your callsign, followed by the word "Kerchunking." This method identifies your station and simultaneously indicates the purpose of your transmission.

## Looking Ahead

2021

**TARS AUCTION January TBD**

ARRL Kids Day Jan First Saturday

**Winter Field Day January 30-31 2021**

**TARS Banquet TBD**

**INQP 2021** 1600Z, May 1 to 0400Z, May 2, 2021

MUSEUM SHIPS WEEKEND June

ARRL Kids Day June Third Saturday

**Field Day June 26-27**

[13 Colonies Special Event](#)

National Night Out first Tuesday of August

International Lighthouse and Lightship Weekend (ILLW) third full weekend of August

Light Up 2 Meters Night August

**TARS PICNIC Sep TBD**

Route 66 Special Event September

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

**TARS 3<sup>rd</sup> annual Hamtober Fest 2021**

SKYWARN Recognition Day, Saturday, December

Straight Key Night January 1 from 0000 UTC through 2359 UTC

[Total Solar Eclipse North America April 8, 2024](#)

## 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 25<sup>th</sup> of the month.**

**Most any document format is acceptable.**

**Photos or graphics of your subject are welcome.**

**Send your article to: [sparks@w9og.net](mailto:sparks@w9og.net)**

TARS is an [ARRL](#) affiliated club

ARRL [Indiana Section](#)

Section Manager: **Jimmy Merry KC9RPX**

[kc9rpx@arri.net](mailto:kc9rpx@arri.net)



**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)**

**Facebook Group**

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

**TARS E-mail: [info@w9og.net](mailto:info@w9og.net)**

## 2021 Club Officers - Board members

**President [John VanVorst N9OL](#)**

**Vice President [Dennis Martin WA2USA](#)**

**Treasurer [Jeff Holt AA9WJ](#)**

**Secretary [Dave Sandine KC9UVG](#)**

**Board of Directors**

[Herb Alvey KB9MZH](#) (2020-2021)

[Don Land KB9YWQ](#) (2020-2021)

OPEN (2021)

[Mike Townsend W9KXP](#) (2021-2022)

Scott Hibbs KD4SIR (2021-2022)

Charlie Martin WB8LDV (2021-2022)

**SPARKS Editor:**

Chris Lantaff KE9YK

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