

# SPARKS

Monthly Newsletter of the Tri-State Amateur Radio Society

Serving the Tri-State for over 70 years

June 2019 - Issue No. 6



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 call or email one of the TARS officers listed in this newsletter.

## Presidents Corner:

Happy June everybody! Wow what a wet spring we had. But summer is here and what a great time for Ham Radio! Yeah the bands aren't real great right now, but that doesn't mean we can't have fun right?!

Thanks to everyone who participated in the 2-meter simplex contest last month. It sure was fun. I have several of you send in your logs for scoring, many have not. So don't forget to do that. At the end of June we will announce the winner so get those logs in!

We are just a few weeks away from Field Day 2019! We are going to have a ton of fun- I hope you are planning to come out to the Red Cross and join the fun! We will operate the full 24 hours so we need operators to keep our stations going. Especially at night! If you are a night owl then definitely come out at night or overnight and make some contacts.

Hope to see you there, and 73!

*John N9oL*



ARRL Field Day is the most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

**Field Day is June 22-23  
Evansville Red Cross**

## Beyond the Baofeng

Chris Lantaff, [KE9YK](#)

Field Day June 22-23 2019 is the premier club contest/emergency communications preparation event. EVERYONE is welcome to come out to the Red Cross, get on the air and make contacts, including the general public that may have an interest in amateur radio. TARS will have 4 stations set up for 24 hour operation making SSB, CW and digital contacts along with a separate GOTA [Get On The Air] station for new hams, inactive operators and anyone unlicensed. The GOTA station will have coaches there to assist and teach how to make contacts and operate the radio. We always need operators overnight for the late shifts, so if you can do that it will be greatly appreciated. If you can only come out for a couple of hours make sure and get with one of the station captains and let them know you would like to operate. Do not just stand around and wait for someone to ask as most will be busy trying to keep the contacts rolling in. Please be proactive if you would like to operate.

## TRANSMISSIONS

Cory Davis [KD9MHB](#)

Greetings Earthlings! Hailing you from the Mothership is KD9MHB. It's officially Summer and tornado season is here. Just last week, my old home state of Ohio was hit with 14 tornadoes. One third of Dayton was destroyed. Thankfully, the casualty rate was kept in the single digits. In fact, only one person died. Over this message, I'd like to encourage you to start a new summer project with me. A lot of times as HAM radio operators, we can't get to our radios because of work, life and other obligations. After doing some digging on the internet, I found an old technology called POSCAG (Post Office Standardisation Advisory Group) which is the protocol that transmits data to pagers. HAMS across the world have reverse engineered this technology so that we can utilize beepers from the 80s and 90s to help keep each other informed. You can find more information by going to Google and typing in DAPNET (which stands for Decentralized Amateur Paging Network). I'd like to see us come together and put up this system here. I've been given permission to install an antennae and computer on a 200 ft, FM radio tower. Now we just need some other pieces to get it going. Would you be interested in helping? I hope so. Wouldn't it be nice to get an alphanumeric page saying to get on XYZ frequency because SHTF and were busy with life? I think so too. For even more information and to get started goto <https://hampager.de/dokuwiki/doku.php>

"There are no strangers in HAM Radio, only friends who haven't met yet"

Until Next Time~  
73s de KD9MHB

## Learning about batteries

By Dan Romanchik, [KB6NU](#)

I often say that getting an amateur radio license is as much getting a license to learn as it is getting a license to operate on the amateur radio bands. Lately, I've been learning about batteries, LiPo batteries to be exact.

It all started when I purchased a Morserino (<http://morserino.info/>). The Morserino is a Morse Code learning aid that has a number of unique features. For example, in addition to helping you learn the characters, it's also supposed to help you learn how to copy in your head. It also has a built-in touch keyer function, and a LoRa interface that lets you send and receive code from other Morserino units.

I'll be writing more about the Morserino in a future column, but let's get back to batteries. The kit did not come with a battery. Instead, it was suggested that one purchase a 600 mAh LiPo battery commonly used for powering drones. I found this [battery on Amazon](#), and purchased a six pack of them, thinking that I'd find uses for the other five in some project or another.



Well, sooner than expected, I did find another application for one of the batteries. I'm building a little Arduino project for a client, and I reckon that this, or one with more capacity, will make a great power source for the project.

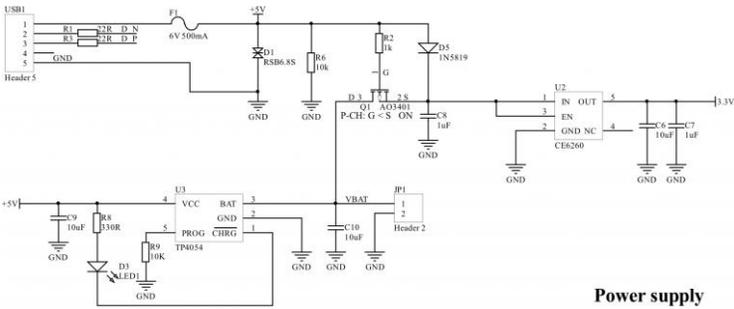
Now, I have two immediate challenges:

1. Figure out how to charge the battery.
2. Figure out how to connect it to the Arduino.

On the Morserino, the battery plugs directly into a connector on the bottom of the computer board (the white board with the LED display). I knew that connecting the 5V line from the USB connector directly to the battery was a no-no, but I'd lent out the Morserino to a friend, and I didn't have the schematics for the board. So, how they managed to charge the battery from the USB port was a bit of a mystery.

I emailed Willi, OE1WKL, the designer of the Morserino, and he sent me a wealth of information. There actually is a battery-management IC, the TP4054, on the board:





Power supply

He also gave me the part number for the battery's mating connector. He said, "The mating connector for the Molex connector on the battery is a Molex 51006. It is sometimes referred to by vendors as 51005 female, but 51005 is the connector on the battery." You can, of course, buy pre-made cable assemblies on Amazon (<https://www.amazon.com/gp/product/B07P54QTR8>).

You can also buy lithium battery charging modules (<https://www.amazon.com/gp/product/B01LZSC7I8>). These modules have a TP4056 on them, which is similar to the TP4054. It's amazing to me that you can purchase ten of these things for less than seven bucks.

So, that's where I'm at right now. Once I get the modules and cables, I'm going to hook it all up and get the Arduino system running from the battery. The next step will be to integrate a small solar panel and run the whole thing from solar power, hopefully.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and one of the hosts of the No Nonsense Amateur Radio Podcast (NoNonsenseAmateurRadio.Com). He often wonders if he can learn things fast enough.

## Eat'n Before the Meet'n



Mission BBQ 11/2017

June 13<sup>th</sup> Eating Before the Meeting will be at Mission BBQ in Evansville.

Drop by for good food, socializing, "story tell'n" and whatever else comes to mind.

Join the group at **5:30**, or whenever you can make it. Check in on 146.79 if you need directions, or just get bored on your drive in. Everyone is welcome to join us.

If you have any suggestions on where you would like for us to meet, contact: [Herb Alvey KB9MZH](mailto:HerbAlvey@KB9MZH) c: 812.431.1037

## Brag Rag

Some POTA activity from our members.

TARS has worked 20 parks from the INQP activation.



Mike K9GPV has 75 parks.



Chris KE9YK has 100 parks.



Raymond W9KHP has 25 park to park contacts.



### What have you been doing?

Send your QSLs, awards etc. to [sparks@w9og.net](mailto:sparks@w9og.net) to have them included in your newsletter.

### Announcing the SKCC Slow Speed Saunter

Beginning on July 1st, 2019 the SKCC will run a monthly slow speed CW operating event named "Slow Speed Saunter" on the first day of each month.

This 24 hour operating event is open to ALL licensed Amateurs.

The Slow Speed Saunter will run concurrent with the SKCC SKN from 0000 utc to 2359 utc to encourage new CW operators and those of us who enjoy operating at slower speeds to get on the air independent of sprints, contests, or special events, and improve our CW skills in a friendly relaxed environment.

Please join us on the first day of each month starting on July 1st  
Complete details can be found at [HTTPS://SKCCGROUP.COM](https://skccgroup.com)

*The Straight Key Century Club (SKCC) is the fastest growing group of mechanical-key CW operators in the world. First organized in January 2006, our club has grown rapidly to include thousands of licensed amateur-radio operators from all corners of the globe.*

*Here's how it works:*

*-- Membership is free.*

*-- SKCC numbers are issued for life. Once you get it, it's yours.*

*-- Exchange numbers using a straight key, bug, or side-swiper.*

*You can find the details of our key policy [here](#).*

### FACEBOOK Musings

Museum Ships on the Air is a fun event sponsored by the USS New Jersey every year. Over a hundred museum ships around the world participate in the event. Amateur radio operators on or at the museum ships make contact with other amateurs during the week end event. Making contact with 15 or more museum ships will earn you a nice certificate. Many operate from the ship's radio room while others may operate near the ship's

location. The CSS Neuse - a civil war ironclad gunship did not have a radio room. ;-)

Other museums, lighthouses, also participate.

This year our ship [LST-325 - WW2LST] made contact with 36 other ships or stations. We also made contact with many amateurs working the event.

Several said they had visited our ship and were very impressed. Others wanted to know when we would be coming to their city.

The fact that we are the only WWII configured museum ship that actually travels to different cities makes us a great addition to the log books of many amateur radio operators.

Bob Pointer N9XAW via Facebook

### Simply elegant, Morse code marks 175 years and counting

May 21, 2019 7.36am EDT



Eddie King

Ph.D. Student in Electrical Engineering, University of South Carolina

The first message sent by Morse code's dots and dashes across a long distance traveled from Washington, D.C., to Baltimore on Friday, May 24, 1844 – 175 years ago. It signaled the first time in human history that complex thoughts could be communicated at long distances almost instantaneously. Until then, people had to have face-to-face conversations; send coded messages through drums, smoke signals and semaphore systems; or read printed words.

Thanks to Samuel F.B. Morse, communication changed rapidly, and has been changing ever faster since. He invented the electric telegraph in 1832. It took six more years for him to standardize a code for communicating over telegraph wires. In 1843, Congress gave him US\$30,000 to string wires between the nation's capital and nearby Baltimore. When the line was completed, he conducted a public demonstration of long-distance communication.

Morse wasn't the only one working to develop a means of communicating over the telegraph, but his is the one that has survived. The wires, magnets and keys used in the initial demonstration have given way to smartphones' on-screen keyboards, but Morse code has remained fundamentally the same, and is still – perhaps surprisingly – relevant in the 21st century. Although I have learned, and relearned, it many times as a Boy Scout, an amateur radio operator and a pilot, I continue to admire it and strive to master it.

[Read Full Article here](#)

## Vanderburgh Co. ARES/RACES

The next Vanderburgh county ARES/RACES meeting **June 20th**, 7:00 pm at the Vanderburgh 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](mailto:in82races@gmail.com) c: 812.453.1972



## Warrick County ARES/RACES

### May 2019 Update

#### Upcoming Events:

ARRL Field Day	June 22nd & 23rd
Newburgh Fire Works	July 5th
Warrick County 4-H Fair	July 15th – 20th
National Night Out	August 6th
Other events to be announced.	

#### A.R.E.S./R.A.C.E.S. Repeater:

Due to intermittent problems with the KC9SOC repeater dropping out, the power level on the transmitter has been lowered to 20 watts. A site inspection showed that the equipment within the building is operating correctly. Presently, discussions are ongoing with the EMA to provide a drone to inspect the antenna and securing permissions to access the tower if repairs are required. The possibility of needing to add additional filters to the repeater has also been investigated.

#### Auxcom Trailer:

On May 5th Mike Koester (KA9VKO) and Raymond Edge (W9KHP) prepped the exterior of the trailer for the installation of the decals. They have completed approximately 60% of the work.

A scheduled workday on May 11th was held for the AuxCom trailer. During the workday event the Network cables were landed. This work was completed by Dennis Slow (KC9SPF), Brian Esche (WB9QVR), and Steve Connaughton (K9SRC).

Steve Connaughton (K9SRC) will be manufacturing brackets for the UHF and VHF antenna mounts. These brackets will locate the antennas above the roofline on both sides of the trailer.

The Generators purchased for the Auxcom trailer have been listed on a recall. Both generators are being sent in for repair.

Solar power for the Auxcom trailer was discussed and will be mapped out regarding the power requirements for approximately one hour of operation during the initial setup process. Dave Woolen has requested that a parts list be submitted to him for review and possible purchase.

Work is ongoing on the trailer. If anyone wants to work on the trailer on a non scheduled day contact Steve ([sconnaug@gmail.com](mailto:sconnaug@gmail.com)) to make arrangements to get into the trailer.

#### Warrick County ARES/RACES Webpage:

A webpage for the Warrick County ARES/RACES group is under construction. Raymond Edge (W9KHP) and James McWhorther (KF4LXS) are working on the website and will have it up and running soon. Give it a look and watch the progress... <http://warrickaresraces.org/>.

A bullet list has been compiled of things that members would want to see on the site. This list contains items pertaining to Calendar of Events, Newsletters, Active Weather Alerts, Repeater Lists, Information on becoming an A.R.E.S./R.A.C.E.S. member, Building "Go Kits", Information concerning Training and Events, and lots of Pictures of A.R.E.S./R.A.C.E.S. functions.

#### ARRL Field Day 2019:

June 22nd and 23rd are the dates for the ARRL Field Day. In preparation for the event, Brian Esche has requested that anyone planning on setting up at the event bring their radio equipment, laptop and mesh node to the Ohio Valley Amateur Radio Club June meetings. The equipment will be set up to operate on the network to reduce the preparation time for activation.

The location of event will be at Boonville City Park. Setup will begin at 10:00a.m. Saturday and activation will start at 13:00. Saturday the operations will be from the small shelter house and on Sunday from the large shelter house. The trailers will house the contesting radios for the event and UHF VHF radios will be utilized at the shelter house for public display.

Some new things this year will be the use of a Tri-plexer on the 80 or 160 Meter loop. This will allow radios to utilize 20M, 40M and 80M at the same time. There will be a 6M beam. A dedicated CW station will be set up for activation and training. The MEOC trailer will have a stable wireless internet access. The club may have access to the MEOC and the Auxcom trailers for radio activity.

Additional new items may include a mobile tower, a tri-band beam antenna, and a designated educational demonstration.

#### July 4th Fireworks and Evening in the Park:

Volunteers are requested to assist with monitoring the crowds at the 2019 July 4th Fireworks and Evening in the Park event on July 5th. The event will be held at the Old Newburgh Lock and Dam Park. The times for volunteers will be 3:00p.m. to 9:30p.m. Anyone wanting to volunteer will need to contact Steve ([sconnaug@gmail.com](mailto:sconnaug@gmail.com)).

#### Red Cross Contact:

Raymond Edge (W9KHP) met with Rick Thompson on May 20th to discuss a different type of partnership between the Warrick County A.R.E.S./R.A.C.E.S. group and the American Red Cross. This partnership will provide for more of an interaction between the

two groups. Examples given would include routine drills to make each of the groups more aware of what happens in an emergency and how to compliment each others' specialized abilities. Rick also mentioned involvement with the Civil Air Control and training on how to use their equipment.

### Amateur Radio Testing:

The Ohio Valley Amateur Radio Club and WCARS are holding testing at the Warrick County EOC. The next testing will be...

June 8th at 9:00 a.m.

At the Old Boonville Courthouse

3rd Floor

Entrance will be through the North lower level doors

Signs will be posted guiding the way

The cost for the test is \$10.

### WHAT TO BRING WITH YOU TO THE AMATEUR RADIO TEST

Two forms of identification, including at least one photo ID (Drivers license, Employer's identity card, or a Student ID)

A calculator

Your FCC Federal Registration Number (FRN)

Information here:

<https://www.fcc.gov/wireless/support/universal-licensing-system-uls-resources/getting-fcc-registration-number-frn>

### Upgrade Exams:

Your current Original License and a photocopy

Any original "Certificate of Successful Completion of Examination" (CSCE) and a photocopy.

Your FCC Federal Registration Number (FRN)

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

#### June

5	N9QVQ
12	KB9YWQ
19	WB9KQF
26	KC9TYA

#### July

3	KE9YK
10	KC9UVG
17	N9QVQ
24	KB9YWQ
31	WB9KQF

## Hamfest Calendar

**07/12/2019** | [Indianapolis Hamfest](#)

**08/17/2019** | [Alabama State Convention, Huntsville Hamfest](#)

**09/07/2019** | [Greater Louisville Hamfest 2019](#)

**10/05/2019** | [8th Annual Vette City Hamfest](#)

**10/26/2019** | [Hamtober Fest](#)

### Location:

Lynnville Community Center  
416 West Street, Road 68, IN-68  
Lynnville, IN 47619

**Website:** <http://hamtoberfest.com>

**Sponsor:** Tri-State Amateur Radio Society - TARS

**Talk-In:** 146.790 (PL 88.5)

**Public Contact:** Dennis Martin , WA2USA

5577 Victoria Court Newburgh, IN 47630

Phone: 812-598-8333

**Email:** [wa2usa.ham@gmail.com](mailto:wa2usa.ham@gmail.com)



If you are attending an area Hamfest, fliers are available to distribute. Contact: Dennis WA2USA

## VE Testing

### 2019 Schedule

Jan 26	Feb 23
Mar <b>No TEST</b>	Apr 27
May 25-	Jun 29
Jul 27	Aug 31
Sep 28	Oct 26
Nov <b>No TEST</b>	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 N9OL](#) c: 812.305.4100

## 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.

A code oscillator will be set up to check the operation of the keys.

The fun started in March and the next installment will be at the **July** meeting with **Bug or Cootie Key** competition.

### The rules have been kept simple.

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

The schedule is.



**July** - Bug or Cootie Key

**September** - MacGyver Key / Rube Goldberg Key

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.

**Winner** of the May home brew paddle key was Dennis WA2USA.

## Secretary Report

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

## Treasurer Report

Budget:

April 2019 (prepared 5/1/2019)

Opening Balance:	\$4,345.21
Receipts:	
Memberships	\$50.00
VE Room Rental	\$21.00
Total Receipts --->>	\$71.00
Expenditures:	
None	\$0.00
Total Expenditures--->>	\$0.00
Ending Balance	\$4,416.21
Red Cross funds:	\$1,143.82

Jeff Holt AA9WJ  
TARS Treasurer

## June Birthdays

Rick Jackson	K9EXY	13th
Debbie Julian	KB9AXD	1st
Dave Julian	WB9YIG	10th
Chris Lantaff	KE9YK	9th
Jerry McIntosh	WB9ONU	5th
Mervin Nolt	N9AFC	13th
Susie Schmitt	KC9BLZ	30th

## Amateur Radio Resources

Dave KC9UVG ask everyone at the Aug meeting for ideas on Amateur Radio Resources that we could publish for anyone looking for information.

If you have any suggestions send them to [sparks@w9og.net](mailto:sparks@w9og.net).

### Books:

The Man Who Caught the Storm by Brantley Hargrove:

The life of legendary tornado chaser Tim Samaras, 2018. EVPL Call # 921 SAMAR HARG

Facebook Magazines NASA Tech Briefs – [www.techbriefs.com](http://www.techbriefs.com)

Nuts & Volts [www.nutsvolts.com](http://www.nutsvolts.com) and at Barnes & Noble

### Podcast:

Neil Rapp WB9VPG – Ham Talk Live!

[www.neilrapp.com/hamtalklive](http://www.neilrapp.com/hamtalklive)

Ham Radio Workbench – [www.hamradioworkbench.com](http://www.hamradioworkbench.com)

Amateur Radio Newsline – [www.arnewsline.org](http://www.arnewsline.org)

W5kub Live ham show every Tuesday night 8:00 PM Central Time (0200 UTC Wed) - [www.w5kub.com](http://www.w5kub.com)

## 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)

## Looking Ahead

### 2019

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

### 2020

Straight Key Night Jan

ARRL Kids Day Jan

Winter Field Day January

TARS Banquet Feb

INQP May

Total Solar Eclipse North America April 8, 2024

MUSEUM SHIPS WEEKEND June

TARS is an [ARRL](#) affiliated club

ARRL [Indiana Section](#)

Section Manager: **Jimmy Merry KC9RPX**

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



### 2019 Club Officers - Board members

President [John VanVorst N9QL](#)

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)

#### SPARKS Editor:

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