

SPARKS

Monthly Newsletter of the Tri-State Amateur Radio Society

Serving the Tri-State for over 70 years

March 2020 - Issue No. 3



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

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

Spring and summer are right around the corner, and that means getting outside to play Amateur Radio. Two of my favorite events every year are the Indiana QSO Party on May 2, and summer Field Day June 27-28th. The club is planning on operating remote stations for both events and we hope you plan to join in on the fun. Whether or not you are a member of TARS you are cordially invited to participate!

Looking back at the past few years, participation numbers at these events has been down. We would love to see more folks joining in the fun. For field day in June we plan to operate 4 or 5 stations- a CW, 2 SSB and 1-2 digital stations. We definitely need more operators to keep the stations busy for the duration of the contest. Given the number of members we have in the club I am puzzled how our numbers at these events is so small. If you have any input or ideas on how we can increase participation, especially for YOU, then I want to hear them.

We are also actively planning for our hamfest- Hamtoberfest- being held on October 17 this year. We will need help. There are several tasks to help with especially during the hamfest to make it run smoothly. Won't you please volunteer to help? With enough folks helping a little the workload is light for everyone!!

See you at the meeting, and the Indiana QSO Party remote stations on May 2. Watch for the announcement of where we will be setting up this year!!

73!

John Van Vorst, N9oL

TARS members:

The Red Cross facility management has informed me that the **Red Cross facility in Evansville is closed and any meetings and functions scheduled there have been cancelled.** This is in response to the COVID-19 crisis. We will be notified when normal schedules can resume.

We will tentatively still plan to hold meetings in April anticipating that the crisis may be behind us at that point, but stay alert for that to change.

Until further notice please do not go to the Red Cross.

If there is an urgent need to get into the radio room please call me.

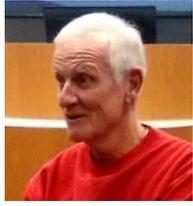
John Van Vorst, N9oL

812-305-4100 cell

PLEASE NOTE: The Red Cross Blood Center is open and everyone is encouraged to donate.

McCutchan Award

Congratulations to Dennis Martin WA2UA on receiving the McCutchan award for 2019. Dennis has stepped up to move TARS forward over the last few years volunteering to chair and assist with events. Dennis was instrumental in the installation of the new HF antenna for TARS radio room at the Red Cross and a major force



behind the club storage shed project. Dennis also headed up and added to a very successful 2nd Hamtober Fest.

The McCutchan award reads:

The strength and progress of Amateur Radio is vested in the hearts and minds of dedicated Amateur Radio Operators who voluntarily give of their time and knowledge.

John McCutchan, a dedicated Amateur Radio Operator was a leader in this respect and is honored by his friend Ellis Carson, who promoted and sponsored this award.

By your dedication and your contributions you have given inspiration and leadership to others, and have brought honor and dignity to your club and Amateur Radio.

As President of the Tri-State Amateur Radio Society I am proud to present this citation and honor to you. May you continue to enjoy the rich experience of serving.

Once again Congratulations Dennis.

Eat'n Before the Meet'n

Due to the coronavirus concerns we will have to see how next month plays out. We will let you know of any changes.

April 9th we will meet in a new place, Salsarita's Fresh Mexican Grill at the corner of Stockwell and Morgan Ave.

Come out and join us for good food, fun and fellowship at 5:30 before the meeting. We will leave with plenty of time to make the meeting.

May - Long John Silvers, Morgan Ave.

June - Mo's.

July - Mission BBQ

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



How the National Bureau of Standards helped make "radio"

This was originally published as "NIST's Role in the Early Decades of Radio (1911-1933)" on the National Institute of Science and Technology's blog, *Taking Measure*.....Dan

Even if you weren't able to watch the recent Super Bowl on TV, you could still listen to the play-by-play commentary on the radio. But radio does more than just broadcasting sporting events or playing music. It plays a major role in emergency response, navigation and science.

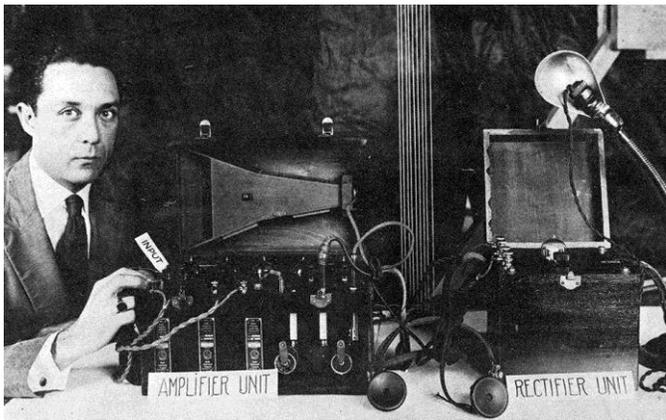
The word "radio," however, didn't become part of our regular vocabulary until 1911, and it happened thanks in part to J. Howard Dellinger, a radio scientist at the National Bureau of Standards (NBS), the agency that became the National Institute of Standards and Technology (NIST). This came about when the second International Radiotelegraph Conference was being planned in London, and a professor sent Dellinger a paper that he was going to present to the conference for review.

At the time, "wireless" was used as the term for radio communication, especially by the British. However, NIST was charged with revising standards in preparation for the conference, and Dellinger suggested that the professor use "radio," which was already becoming a popular word in the U.S., instead of "wireless." The professor agreed, and the word "radio" went on to become the universally accepted term.

Dellinger not only played a role in popularizing the word "radio," but he also played a role in the first radio work done at NIST. A commercial company asked NIST to calibrate a wavemeter, a device developed by one of its engineers that measures electromagnetic waves like those of radio. Dellinger was known as the wireless expert and took on the project of calibrating the first radio instrument at NIST.

A New Type of Radio Receiver

But for radio to become mainstream, it first had to be commercialized, which began with its introduction into households. However, the challenge was building a radio set that used the electrical current, called alternating current (AC), which powered lights, fans and kitchen appliances when plugged into wall sockets. The predecessor to this technology was developed and patented by two researchers, Percival D. Lowell and Francis W. Dunmore, at NBS in 1922. They called their invention the "mousetrap."



The “mousetrap” was a receiver for a radio amplifier that could run on AC. This was considered a breakthrough because at that time radios were only able to be powered by direct current (DC) provided by batteries. These batteries were bulky and heavy, had to be charged from time to time and were considered dangerous because of the acid used in them. The researchers’ prototype meant the radio could be used in homes without causing damage and with the same performance quality.

Lowell and Dunmore filed two more patents together for other innovations, and for the “mousetrap” they sold the rights to the Dubilier Condenser Corporation. Little did they know that, because there was no uniform policy on patents issued to government employees, their actions would result in more than a decade of litigation over who legally had the rights to the patent.

While they were tied up in court, the Radio Corporation of America (RCA) developed its own model of the AC radio in 1926. Its model later became the first AC-powered radio sold to consumers.

Flying by Radio

During the early years of flight navigation, NIST was doing research to assist pilots while they were flying and landing. Pilots needed three things to get their bearings when flying “blind,” meaning it’s foggy, too dark or too cloudy to see. They needed to know the longitudinal position, altitude and speed of the aircraft, which were all achieved by various beacons installed in the plane. The remaining issue was that there were two frequencies the pilot constantly had to switch between the frequency that the Department of Commerce used to send weather information to planes and ships, which sometimes caused interference for pilots, and the frequency the radio beacon operated on, which gave altitude and other information.

Dunmore created a prototype, but Harry Diamond, a radio engineer who joined NIST in 1927, completed the device, called the radio guidance system. Diamond solved the problem by developing a separate device that allowed for voice communication to the pilot without receiving any outside interference from ships’ radios.

A Curtiss Fledgling, a trainer aircraft developed for the U.S. Navy, was equipped with the device, and flight tests were performed between NIST’s experimental air station at College Park, Maryland, and Newark Airport in New Jersey in foggy weather. After a series of successful tests were performed, the device was turned over to be used by the Department of Commerce in 1933.

Praise From a Famous Inventor

While mostly intended for serious users, some of NIST’s journals and publications were popular with the public. One such book, titled *The Principles Underlying Radio Communication*, covered topics such as elementary electricity, radio circuits and electromagnetic waves and was also published as a textbook for soldiers in the U.S. Army. The famous inventor Thomas Edison received a copy from NIST and wrote a letter thanking the first director, Samuel W. Stratton, for publishing it, saying it was “the greatest book on this subject that I have ever read.”

As these and other examples show, NIST had a significant influence on radio research between 1911 and 1933. However, NIST’s radio work didn’t end with the first blind landing. NIST would continue to contribute to the field leading up to and during World War II, and research continues to this day in areas such as 5G, public safety communications and spectrum sharing.

ABOUT THE AUTHOR

Alex Boss is a general assignment writer in the NIST Public Affairs Office and covers standard reference materials (SRM). She has a B.S. in biology from Rhodes College and an M.A. in health and...



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

March

4	WB9KQF
11	KE9YK
18	KB9YWQ NWS TORNADO Drill ~9:15 AM
18	KC9TYA
25	KC9UVG

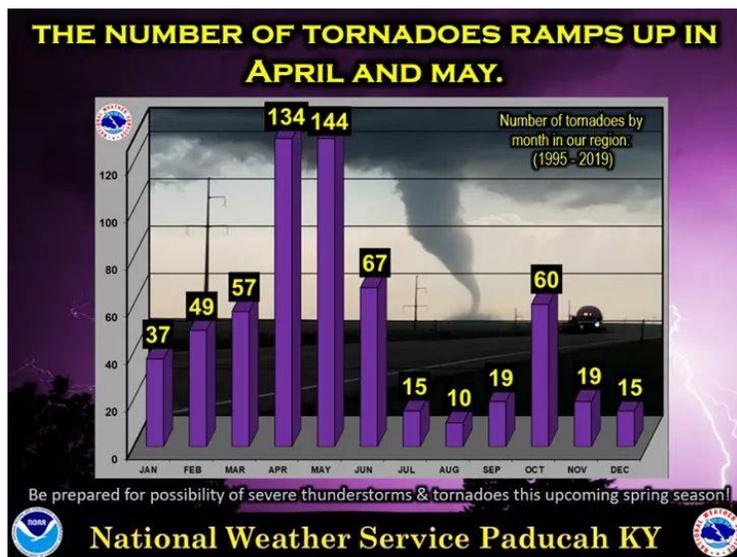
April

1	N9QVQ
8	KB9YWQ
15	WB9KQF
22	KE9YK
29	KC9TYA

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](#).

Mar 16 - 21 Severe Weather Preparedness week in Indiana.



On March 18th at approximately 9:15 am there will a Tornado Drill issued by the NWS Paducah. If you are available please check in to the Weather Net that will be ran by Don KB9YWQ after the Alert is issued. **This has been canceled**



The SKYWARN Spotter classes have been canceled and replaced with webinars. If you would like to attend the webinar you must register online.

SPOTTER TRAINING: ALL ON-SITE CLASSES CANCELLED. WEBINAR OPTIONS AVAILABLE BELOW:

BASIC SPOTTER TRAINING TRAINING WEBINARS:

THURSDAY MARCH 19, 2020 6:00 pm CDT: [Click here to register](#)

TUESDAY MARCH 24, 2020 6:00 pm CDT: [Click here to register](#)

ELITE SPOTTER TRAINING TRAINING WEBINARS:

MONDAY MARCH 30, 2020 6:00 pm CDT: [Click here to register](#)

MONDAY APRIL 14, 2020 6:00 pm CDT: [Click here to register](#)

The latest SKYWARN spotter classes are listed on the Paducah NWS page. <https://www.weather.gov/pah/spottertraining>

VE Testing

2020 schedule

Apr 25, May 30, Jun 27, Jul 25,

Aug 29, Sep 26, Dec 5

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



Reminder the current Extra class (Element 4) **Question Pool** is valid until **June 30, 2020**. After that date you will need to update your study material.

March Birthdays



Rob Furguson	KD9KLI	4th
Dan Kelley	N9WJ	24th
Jay King	WB9ICL	26th
Robert Pointer	N9XAW	2nd
Jenny Washburne	KC9NPA	10th

Dayton Hamvention

The Hamvention Executive Committee has been monitoring the COVID19 pandemic. We have worked very closely with our local and state health Departments.

It is with a very heavy heart the Hamvention Executive Committee has decided to cancel Hamvention for this year.

This decision is extremely difficult for us but with around two months until the Great Gathering we felt this action necessary.

More specific details regarding the closure will soon be posted on our website www.hamvention.org.

Thank you for your understanding in this time of International Crisis.

Jack Gerbs General Chairman HV2020
JackWB8SCT@gmail.com

Brag Rag



KE9YK logging 200 individual POTA locations.

What have you been doing?

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 to have them included in **your** newsletter.

Vanderburgh Co. ARES/RACES

The next Vanderburgh county ARES/RACES meeting will be **April 16th**, 7:00 pm at the Vanderburgh Co. West Side EMA Training Center (WEMA) [1440 Harmony Way](#).



There will not be a meeting in March as this will fall on the night of SKYWARN Spotter training and we hope to see you there.

Chris Lantaff KE9YK
Vanderburgh Co RACES Officer
in82races@gmail.com c: 812.453.1972

Treasurer Report

Budget:

January 2020 (prepared 1/30/2020)

Opening Balance:	\$5,965.68
Receipts:	
Memberships (including extra donations)	\$419.00
Banquet Reservations	\$210.00
Net Income from Auction	\$448.54
Total Receipts --->>	\$1,077.54
Expenditures:	
Thank you card for auctioneer K9HVI	(\$25.00)
Pd Mike Townsend W9KXP for Mesker picnic shelter reservations	(\$107.00)
Total Expenditures---->>	(\$132.00)
Ending Balance	\$6,911.22
Red Cross Fund	\$1,269.82

Secretary Report

The secretary reports were attached as separate attachments with this SPARKS mailing.
Dave Sandine KC9UVG

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

Looking Ahead

2020

INQP 1600Z, May 2 to 0400Z, May 3, 2020

MUSEUM SHIPS WEEKEND June

ARRL Kids Day June

Field Day June 27, 28

13 Colonies Special Event July

National Night Out first Tuesday of August

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

TARS PICNIC Sep 12

Route 66 Special Event September

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

TARS 3rd annual Hamtober Fest Oct 17th 2020

SKYWARN Recognition Day, Dec

2021

Straight Key Night Jan

TARS AUCTION January

ARRL Kids Day Jan

Winter Field Day January

TARS Banquet Feb 6th

Total Solar Eclipse North America April 8, 2024

TARS is an [ARRL](#) affiliated club

ARRL [Indiana Section](#)

Section Manager: **Jimmy Merry KC9RPX**

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

Facebook Group

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

TARS E-mail: info@w9og.net



2020 Club Officers - Board members

President [John VanVorst N9OL](#)

Vice President [Max Wilkinson KD9ABT](#)

Treasurer [Jeff Holt AA9WJ](#)

Secretary [Dave Sandine KC9UVG](#)

Board of Directors

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

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

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

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

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

[Chris Matthews N9JCA](#) (2020-2021)

SPARKS Editor:

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