



## ARRL Midwest Division Newsletter March 2019



### **Making a Good Hobby Better**

By Tim Busch, NØCKR

In November 2014 I began a series of One-Day Amateur Radio Technician Classes. “One-Day” is a bit of misnomer, because the attendees are provided a book and study guide to prepare for the class one to two weeks in advance of the class.

The classes have been well-received. Thirty of these classes produced 347 new Technicians and one upgrade class produced 11 Generals. The first-time pass rate runs about 90%. I have another Technician class in Cedar Rapids March 2<sup>nd</sup>, with 12 candidates working toward their Technician class licenses. With all these new hams, I immediately began receiving requests for upgrade classes and “how-to” activities.

Immediately after becoming licensed, we encourage all our new hams in the area to check into our Sunday evening “New Ham Net”. On the net, new hams have an opportunity to learn the phonetic alphabet, establish communication, compare notes with other hams, and ask questions of more experienced operators. The Net has been so successful that we’re talking about expanding our one hour time slot to accommodate more check-ins.

We’ve also had excellent participation at the Get On The Air (GOTA) station at Field Day. GOTA operation is a giant leap toward eliminating mic fright. At our club’s (Cedar Valley Amateur Radio Club (CVARC) big Field Day event in 2015 (Category 19A), we had 30 new hams stop by the GOTA station.



Beyond these activities, I am putting together a series of mini-classes. Each segment of this new program teaches specific skills related to ham radio. Here is a partial list:

- Programming Radios and Getting on the Air
- Soldering 101
- Multimeter 101
- Build and Use a Roll-Up J-Pole Antenna
- Build and Use a Satellite Antenna
- Fox Hunts
- Operating Digital Modes
- Remote Operation
- Software-Defined Radios
- Transitioning from VHF/UHF to HF Operating
- Chasing Awards
- Learn CW
- Contesting
- Build Projects

Each class is intended to be no more than two hours at a setting, so they can be held before a monthly club meeting. The variety of topics allows many club members to get involved in leading each topic. Material kits are prepared in advance so students walk away with useful items they can use at home.

I am still in the development stage of several of these sessions, but each of them are not a major undertaking and they can be distributed among club members.

The best promoters of amateur radio are the newest members of the hobby. Keeping them interested and excited will be a nice growth engine for your club. This enrichment program is a great way to encourage more club activity.

I am happy to help others set up classes or answer questions about this program. Drop me an email at [N0CKR@ARRL.net](mailto:N0CKR@ARRL.net) for more information.

Bio: Tim Busch, N0CKR is an Extra class ham and was first licensed in 1974.



## Welcome to Ham Spotlight

by Matt Anderson, KA0BOJ, Nebraska Section Manager

One of the things that I have been working on is trying to bring more attention to the hams within the Nebraska Section. I have decided to have a weekly spotlight on a ham from across the state. The "Ham Spotlight" will highlight one ham per week, with a short bio and a picture. The hope is to show the diversity of hams that we have. From our more seasoned veterans to the new ham that just got their Tech ticket. I simply put out a request on the section e-mail and I have received enough to get through the first 6 months. While most hams prefer to remain out of the spot light, I felt it was time that we come front and center state. So, far it has been well received.

Here is the section website: <http://www.arrl.org/sections/view/nebraska>

I will be "Spotlighting" 52 hams this year who have been active in contributing to Amateur Radio. You will see young and experienced hams and get a chance to get to know them. As you see each one, please take a moment to drop them a line so you can get to know them as well. Now, introducing this weeks' ham.

**Augustine Terneus, KE0TRN**, a 13-year-old home school student in Bellevue, earned his Technician's license in November. He was introduced to amateur radio during a Boy Scout Radio merit badge class taught by local hams. Afterwards, Augustine immediately began looking into the requirements to earn his license.

He teamed up with his dad (WB0BEE) so they could earn their licenses together. Augustine is a faithful participant on the weekly Scout net and has been actively introducing his fellow Scouts/friends to the world of radio via guest operator traffic. Additionally, Augustine helped run a station for the January Kids on the Air event in Bellevue.

He operated via a handheld attached to a 2m dipole made from a Boy Scout popcorn tin! Augustine's other interests include beekeeping with his dad, camping, mountain biking, and reading.

Please congratulate this young ham on this weeks' spotlight.





**Fred Eriksen, KBØLF** – Each of the past seven years Fred has annually supported Mid-America Council Radio Scouting events by demonstrating CW to scouts and providing "Elmer" advice to the other operators working the events.

Fred brings his mobile rig, sets up a sign and lets the sound of CW lure scouts and adults alike to the demo. He will skillfully put the visitor in the seat with key in hand to get some immediate feedback on CW operation. Fred takes the opportunity to demonstrate the skills of proper CW operation that builds interest.

He believes that the Ham community must reach out to the public in order to promote Amateur Radio. Fred holds the Extra Class license and is a great ambassador for Amateur Radio. Fred can be found many times being a rover around the state and the Midwest helping those to get that "new" or "rare" country or grid.

**Ed Holloway KØRPT** came upon the ham scene in 1991. Ed like a lot of hams came out of the CB craze and expanded his horizons with Amateur Radio. Ed has always had an eye for electronics, which he has proven time and time again with his repeater work. Having built and maintained a number of repeaters throughout the state Ed has helped to maintain the club's repeater KØKKV for a number of years, including when it was up on the 10/11 tower at Beaver Crossing. His many tales of riding up the elevator and working on the repeater and watching planes as they flew underneath him would take your breath away.

Ed is very active in the Nebraska ham community. Having served as the Lincoln Amateur Radio Club's president in the past and now currently, he has also served on the LARC board in various capacities. He upgraded his license in 2003 to General where he enjoys working DX and rag chewing around the country.

Ed also serves as the Emergency Coordinator for Lancaster County and also serves as the Section Emergency Coordinator for the State of Nebraska. This in addition to his duties as Club president of the Lincoln Amateur Radio Club, keeps his plate full.

Ed is a good ambassador for Amateur Radio and talks frequently on the local repeaters as he drives throughout the Midwest.

And as busy as he is, you will see that in this weeks' picture it includes his wife Kathleen, who supports Ed not only in his activities as a ham but also in all that he does for his family.

Please congratulate Ed Holloway KØRPT as this weeks' recipient of Ham Spotlight.





## Stories from the Ham Shack

by Art Zygielbaum, K0AIZ, Vice-Director Midwest Division

Ham radio contributes to bettering the world in many ways. We all talk about emergency communications and how we are able to make friends with people around the world. There's another side, though. We also benefit as people. Let me share some memories. Add yours. This is a remarkable hobby.

When I was a teenager (in the '60s) my high school days began at about 4 am. I'd get up, pull on some jeans and a shirt and head to my ham shack in the garage. It could be as cold as, say, 60 degrees or so in Southern California. But it was worth the suffering. I met my friend from Japan on 40 meter CW. For a half hour or so, we talked about everything – from science to girls (clean and socially appropriate, of course). After school, I would get on 40 meter 'phone and talk with a ham in south Los Angeles. He was a teenager with cerebral palsy. Our conversations were very painful at first. Over time, I began to be able to understand him easily. His patience and friendliness gave me a connection with someone who had significant challenges. It opened a world of understanding, I think, for both of us.

I was a member of the Radio Amateur Civil Emergency Service. It was run by the Los Angeles County Sheriff's Department. I helped during forest fires, earthquakes, and public events. That gave me a connection to people and an understanding of how to communicate with the public. We once had a practice exercise to try to find a missing person in the Mojave Desert. I was assigned to a relay station on top of one of the San Gabriel Mountains. My job was to link Sheriff's headquarters with the search site in the desert. Things were going well except that no one had found the hidden dummy after 5 or so hours. Then all of a sudden the call came in, "This is not a drill. We have found a body. Let HQ know. Here is the location." Yup, they had found a real missing person. A helicopter was dispatched. Fortunately, the body turned out to be the bones of a settler who had died over a hundred years earlier. How many hobbies allow a teenager to help an emergency response by a major law enforcement agency?

Years later, while I was working at NASA's Jet Propulsion Laboratory, I made contact with a ham in Cuba. I sent him my QSL card with a picture of one of our tracking stations. He sent back his card with a very tightly folded note in the envelope. The note



expressed wonder at the things we were doing in space. He told me that he had been trained as an electronic technician in the U.S. Unable to get technical magazines or information in Cuba, he used his training and trial and error to build a large yagi for his television. This allowed him to receive Miami television and be one of the few people in Cuba who watched Neil Armstrong step on the moon. I gained an appreciation for living in a place where freedom is a way of life.

Those were heady days. JPL's amateur radio club, W6VIO, was a pioneer in slow scan television. During the Voyage planetary encounters, we would slow scan images of Jupiter, Saturn, and their moons to the world. People all over the world shared our excitement. They asked questions about the missions and what they were finding. We got the answers if we didn't have them. An 8 hour shift during the events was incredibly rewarding.

I don't really need to talk about gaining technical skills. But ham radio gave me an understanding and appreciation of electronics that became the foundation for my work at JPL and later at the University of Nebraska-Lincoln. But I will relate one story where I learned that safety requires that you keep thinking, no matter what. My high school friend Steve, WA6CDU, gave me a modulation transformer at a surprise birthday party. Now I could update my homebrew transmitter to high level AM modulation. So I built the modulator with two 807 tubes. These tubes had plate caps with 800 volts, as I recall, applied to them. I didn't have any ceramic insulated plate caps. Mine were simple spring clips with fully exposed metal. Carefully using an insulated plastic screw driver, I was adjusting the tube bias voltage while talking to my friend Joe, K6KW (sk). I had a grounded metal case Shure microphone in my right hand. As we talked, I noticed a spider crawling up the side of one of the 807's. It perched on the plate cap. Without thinking, I took my left hand and flicked the spider off the cap – immediately applying 800 volts across my body from the plate cap to the grounded mic. I was thrown back 5 or 6 feet and onto the floor – luckily. The mic was swinging from the edge of the bench. Joe was wondering why I had suddenly gone quiet. The spider was never to be seen again. All of these events, and many more, connected me with people. That contributed to my skill set and my success in life. While ham radio gives to others, it gives something good to each of us. Great hobby.

73, Art K0AIZ



## Antenna Safety.....yes once again! - THIS IS IMPORTANT!

by Chuck Kraly, K0XM

As we all know, this winter took a toll on many antennas with the snow, ice and high winds. And since spring is around the corner, and everyone is biting at the bit to get out and hang new aluminum, or wires, or even some fiberglass - let's remember how things work in the electrical power world so everyone remains ALIVE.

I have been in the power utility field since July of 1980. Yes I am not working in that field at the present time, but I have not forgotten what I learned over all those years.

We have to remember, that putting up an antenna needs to meet some strict requirements. And not one of those that "your significant other" puts down, but the basic principles of electricity and power systems.

In your neighborhood somewhere there is a power substation. And in the Metro KC area, it converts the generation voltage (either 345 KV, or 161 KV, or 69 KV phase to phase or wire to wire), and steps it down to a lower voltage level so it can be run safely through neighborhoods. That voltage is USUALLY around 7KV per wire.

Now, we need to become aware WHERE those overhead or underground power lines are (underground in the matter of digging that base for the tower or vertical antenna). Yes you need to LOOK. OR call 811 and get a dig check.

I recently heard at a meeting that if you place a piece of PVC pipe, for whatever reason, into a high voltage line you should be fine. I had a chill up my spine like I had not had in years. Why? Because the material we use every day is DRASTICALLY different than what we see the utility guys sticking near the high voltage lines. It has a test value and a Maximum Voltage Allowed sticker on it. Yes it has to be tested, and often. If it fails the test, it is NOT USED. The PVC at Home Depot or Lowes is NOT.



Also there is a thing called "M.A.D." That is "Minimum Approach Distance" That is a value for TRAINED, QUALIFIED personnel to follow. And it varies dependent on the voltage level. I have not had training for a year or so (or re-certification), so I am basically like non-utility workers, in that my MAD distance (even being qualified in the past ) IS NOT ANYWHERE CLOSE to the line. And I have been all around them for almost 40 yrs. So think. And remember. The line going through your back yard is protected by an "over current relay" which will detect a fault and trip the circuit, BUT there is also a device called a recloser which will AUTOMATICALLY turn it back on. So let's not trip it in the first place. ANY antenna, even fiberglass ones can cause a flash over and if you are holding it, the current will pass through YOU and to the ground. Also remember that the theory of "Magnetic Lines of Force" come into play- and that's where the MAD comes in. So PLEASE look, and if unsure - DON'T.

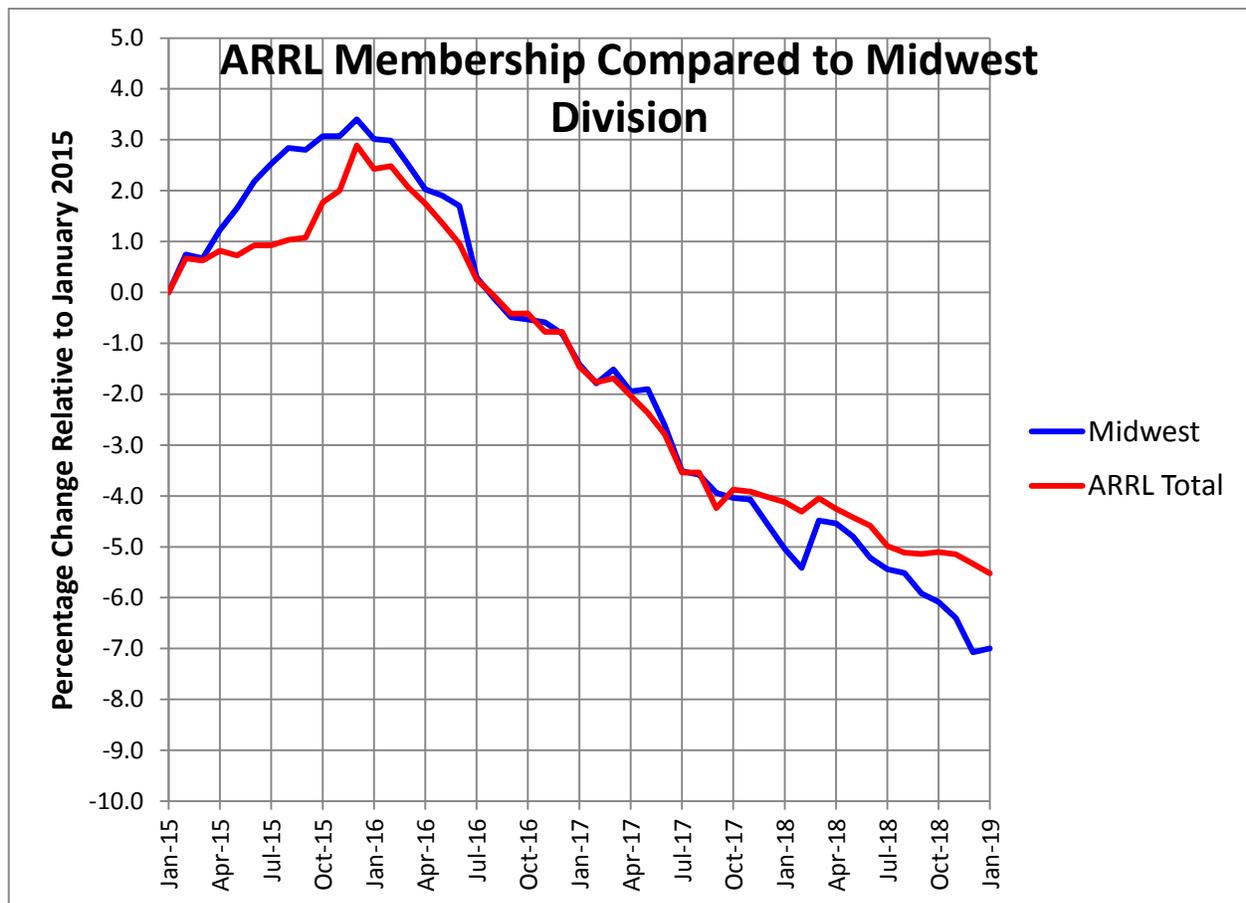
I have lost a few friends over 40 years and usually it was because someone was careless or arrogant, or just did not know. Stay safe, don't ASSUME, and be around for that next QSO.



## ARRL Membership Trends

by Rod Blocksome, K0DAS

Below is an updated graph of ARRL membership percentage change by month for the last four years. It is interesting to see how the data for the Midwest Division compares to all of ARRL. As I mentioned in my article last month, we are now at the end of the 3-year period of predicted decline due to the membership dues increase that took effect Jan. 1, 2016. The first month of data after the 3-year period was Jan. 2019. The good news is we see a small up-tic in the Midwest Division but ARRL as a whole continued a slow decline. As the winter weather gives way to spring hamfests, club meetings, and activities such as field day, I would encourage everyone to invite new hams and prospective members to these events and encourage them to join ARRL. Let's continue to push this graph upward. Thanks & 73s.





## **Around the Midwest Division**

**New Section Manager Elected In Iowa** - Lelia Garner, WA0UIG, of Robins, Iowa was recently elected to a two-year term starting April 1st. Lelia currently is the Iowa Section Traffic Manager and co-founder of the Linn County New Ham Net. She will succeed Bob McCaffrey, K0CY, who served as Section Manager for the past 6 years and decided not to run for another term. Please welcome Lelia as she steps into her new ARRL leadership position.

### **Ham Radio Classes Forming Now!**

Amateur Radio Association of Nebraska will be holding a 4-week course where you can learn everything you need to earn your Technician (entry level) FCC **Amateur Radio License**.

**The Technician license is your gateway to the world-wide excitement of Amateur Radio ... and now you do NOT need to learn Morse code!**

**Classes begin on Thursday 4/4/2019, at 7pm at Lincoln Park Fire Station – 1145 S Hastings Ave, Hastings, NE**

Registration is required. There is no fee for the course. Taking the Test is \$15. You will be required to purchase "ARRL Ham Radio License Manual 4th Edition" at a cost of 29.95. We will have some available or you can purchase them directly from the [arrl.org](http://arrl.org)

To join, contact:

Allen Harpham WD0DXD

402-462-4624 or go to <http://w0wwwv.org/tech-training-class-in-april/>

### **St Louis and Suburban Radio Club**

Friday, March 1 is the final "Back to Basics" meeting of the 6 sessions that started in October 2018. Look for them to begin again in October 2019. Kyle AA0Z will explore EVERYTHING ELSE about amateur radio that sometimes doesn't get talked about in great detail:

- Working QSO's over satellites
- APRS (Automatic Packet Reporting System)
- QRP operating
- WSPR (Weak Signal Propagation Report)



- Contesting
- SDR (Software Defined Radio)
- Mesh Networking for Amateur Radio
- SOTA/POTA (Summits On The Air, Parks On The Air)
- Digital Modes (PSK31, RTTY, JT65/JT9 and FT8)

If you are an expert in any of these operating modes or specialties, come join in the discussion and help share some knowledge.

For “newbies” there is no question not worth asking!

Hope to see you there!

Missouri Baptist Hospital  
Goldfarb School of Nursing  
Rooms 419-420  
7 PM

PS: April 5 begins the “Mentoring Workshops” so look for more details as we get closer.  
Submitted by Cliff Rozar, KC0SDV

## **Speaker’s for Club Programs**

Last month I introduced the idea of creating a list of speakers in the Midwest Division who were willing to provide a program to another amateur radio club either in person or remotely using Skype or similar application. Our division web mister, Steve Schmitz, W0SJS, has been working on an easy-to-use form linked from [www.arrlmidwest.org](http://www.arrlmidwest.org) where folks willing to do this can indicate their topics or program titles and capabilities to travel and/or electronically do the presentation.

A listing of speakers and topics would then be available on the Midwest Division Web site where club program chairs can shop for interesting presentations for their future club meetings. We hope to have this all up and running later this month.

Rod Blocksome, K0DAS



## Midwest Division ARRL Hamfests & Conventions

### **03/02/2019 | Southwest Iowa ARC Hamfest**

**Location:** McClelland, IA

**Type:** ARRL Hamfest

**Sponsor:** Southwest Iowa Amateur Radio Club

**Website:** <http://www.swiradio.org>

### **03/09/2019 | Nebraska State Convention**

**Location:** Lincoln, NE

**Type:** ARRL Convention

**Sponsor:** Lincoln Amateur Radio Club

**Website:** [www.lincolnhamfest.org](http://www.lincolnhamfest.org)

### **03/16/2019 | Marc 31st annual swapmeet**

**Location:** Oskaloosa, IA

**Type:** ARRL Hamfest

**Sponsor:** Mahaska Amateur Radio Club

### **03/23/2019 | OARS Springtime Hamfest**

**Location:** Mt. Vernon, MO

**Type:** ARRL Hamfest

**Sponsor:** Ozarks Amateur Radio Society

**Website:** <http://w0oar.com>

### **04/05/2019 | OzarkCon**

**Location:** Branson, MO

**Type:** ARRL Convention

**Sponsor:** Four State QRP Group

**Website:** <http://www.ozarkcon.com/index.php>

### **04/06/2019 | Heartland Hams ARC Hamfest**

**Location:** Glenwood, IA

**Type:** ARRL Hamfest

**Sponsor:** Heartland Hams Amateur Radio Club

**Website:** <http://www.heartlandhams.org>



**04/06/2019 | Spring Cleanup 2019**

**Location:** Bellevue, NE

**Type:** ARRL Hamfest

**Sponsor:** Bellevue Amateur Radio Club

**Website:** <http://bellevuearc.org>

**04/20/2019 | Ararat Shrine Hambash**

**Location:** Kansas City, MO

**Type:** ARRL Hamfest

**Sponsor:** Ararat Shrine Radio Club

**Website:** <https://www.hambash.com/>

**04/27/2019 | DMRAA Hamfest**

**Location:** Des Moines, IA

**Type:** ARRL Hamfest

**Sponsor:** Des Moines Radio Amateurs Association

**Website:** <http://www.dmraa.com/hamfest>

**05/31/2019 | 3900 Club Hamboree 2019**

**Location:** Boone, IA

**Type:** ARRL Hamfest

**Sponsor:** 3900 Club

**Website:** <http://www.3900club.com>

**06/08/2019 | SWIARA Swap Meet**

**Location:** Creston, IA

**Type:** ARRL Hamfest

**Sponsor:** Southwest Iowa Amateur Radio Association

**07/25/2019 | 53rd Annual Central States VHF Society Conference**

**Location:** Lincoln, NE

**Type:** ARRL Convention

**Sponsor:** Central States VHF Society

**Website:** <http://www.csvhfs.org>

**08/11/2019 | St Charles Amateur Radio Club Hamfest**

**Location:** O'Fallon, MO

**Type:** ARRL Hamfest

**Sponsor:** St Charles Amateur Club

**Website:** <http://wb0hsi.org>



## **Midwest Division Special Event Stations**

### **05/04/2019 | Lewis & Clark 1804 Expedition Old Baldy (AKA) The Tower**

**May 4-Oct 14, 0500Z-0500Z, N0HWJ**, Lynch, NE. N0HWJ. 14.325 14.245 3.970 3.950. QSL. Don Lallier, N0HWJ, P.O. Box 303, 610 Windom St., Orchard, NE 68764. I ran this last year from my Cabin about 200 yards from Old Baldy next to the Missouri River in Holt County. I am usually on during the weekends and some weekdays in the summer months. Lewis and Clark noted The Tower in their Journal and the finding of the Black Tailed Prairie dog that they captured and brought back alive to the president of the US. donaldlallier@gmail.com or [www.grz.com/db/n0hwj](http://www.grz.com/db/n0hwj)

### **05/18/2019 | 3rd Annual William Becknell Heritage Days Special Event - Founder of the Santa Fe Trail**

**May 18-May 19, 1400Z-2200Z, WB0SFT/KC0VYS**, Overland Park, KS. William Becknell Santa Fe Trail Heritage Days. 21.365 14.265 7.265 3.865 1.830 SSB/CW/FT8. Certificate & QSL. See website for, information on receiving, certificate. See website for information; certificate and QSL available via website after the event. [www.wb0sft.org](http://www.wb0sft.org)

### **07/06/2019 | World War 1 Centennial**

**Jul 6-Jul 7, 1500Z-2100Z, WW1USA**, Kansas City, MO. National World War 1 Museum and Memorial. SSB: 21.250 14.250 7.200; CW: 21.057 14.057 7.057; FT8: 14.074 7.200 7.074. Certificate & QSL. WW1USA, National World War 1 Museum and Memorial, 2 Memorial Drive, Kansas City, MO 64108. We will be commemorating the 100th anniversary of signing of the peace treaties ending World War 1. Our operation will be on the south lawn of the Museum. All local and visiting hams are invited to come visit. [ww1usa@theworldwar.org](mailto:ww1usa@theworldwar.org) or <https://www.theworldwar.org/amateurradio>

### **Midwest Division News and Photos Wanted!**

If you have news and photos about events or activities from the Midwest Division, email them to Director Rod Blocksom K0DAS at [rod.blocksom@gmail.com](mailto:rod.blocksom@gmail.com).

## ARRL Midwest Division Leadership



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**Vice Director: Art Zygielbaum K0AIZ**

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**Iowa Section Manager:** Bob McCaffrey, K0CY

**Kansas Section Manager:** Ron Cowan, KB0DTI

**Missouri Section Manager:** Cecil Higgins, AC0HA

**Nebraska Section Manager:** Matt Anderson, KA0BOJ

**DX Advisory Committee:** John Yodis, K2VV (MO)

**Contest Advisory Committee:** Glenn Johnson, W0GJ (IA)

**Midwest Division Volunteer Counsel:** Craig Long, K0CSL (IA)

**Division Legislative Action Chair:** Mike Edwards, WB9M (MO)

**Legislative Action Coordinators:** Nick Critelli, K0PCG (IA); Bruce Frahm, K0BJ (KS & NE); Mike Edwards, WB9M (MO).

**Assistant Directors (Missouri):** Paul Haefner K0JPL, Dave Propper K2DP, Kent Trimble K9ZTV, Roger Volk K0GOB, Cecil Higgins AC0HA, John Frederick N8GOU, Eric Zust W0TT, Randy Schulze KD0HKD, and Ron Lowrance, K4SX.

**Assistant Directors (Kansas):** Mike Albers K0FJ, Jim Andera K0NK, Bill Henderson K0VBU, Charlie Hett K0THN, Richard Johnson K0RCJ, Rick Tucker W0RT, and Jon Jones N0JK.

**Assistant Directors (Iowa):** Tim Busch N0CKR, C.W. Pantel K0IIR, and Jim Spencer W0SR

**Assistant Directors (Nebraska):** Matt Anderson, KA0BOJ, Joe Eisenberg K0NEB, Allen Harpham WD0DXD, and Todd LeMense KK0DX.

**Midwest Division Webmaster:** Steve Schmitz W0SJS email: [w0sjs@arrl.net](mailto:w0sjs@arrl.net)

**Midwest Division's website:** <http://www.arrlmidwest.org/>